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SPIRITUAL CULTURE:—THE LAW OF SELF-RENOUNCEMENT.

"UNLESS above himself he can erect himself, how small a thing is man!" In these quaint words of an old English poet we are taught a valuable truth—not only that we are little, but that to be great we must rise out of ourselves, above ourselves,—or as a later poet puts it "on stepping stones of our dead selves"—to higher things and the attainment of a nobler self. The desire of a higher and purer life has been felt by this generation in all its intensity, and uttered in all its variety. *Culture* is a leading word of our modern literature. "Culture," we are told, "is a study of perfection"; and perfection is defined to be a "harmonious expansion of all the powers which make the beauty and worth of human nature." With this we do not quarrel. These words of a brilliant sceptic are indeed a homage to Christianity. The fifth chapter of Matthew's Gospel—itself a gospel in miniature—beginning with its beatitudes, ends with the words "ye shall be perfect, as your Father in heaven is perfect." And there too perfect means full-grown, the complete and harmonious development of the soul. It is agreed then that perfection is the goal. And let us not quarrel with the name culture, given to the pursuit; let us rather seek to understand it aright.

Spiritual culture is our subject. This is not the whole of culture, but it is culture in the highest sense, and embraces so much that we need not now inquire what lies outside of it. And for the present we shall concern ourselves with one principle only—what we have

called the law of self-renouncement. "Whosoever would save his life shall lose it, but whosoever shall lose his life for my sake the same shall save it."* It is a law of wide application; used even by its author in a wider sense than we here intend. In its interpretation we shall follow Him as our guide. Mr. Arnold, the modern Apostle of "light and sweetness," whose words we have quoted above, bids us study literature, especially Greek and Hebrew literature, where we shall find the best and wisest thought that language has ever clothed. Yet in this matter, in its deeper bearings at least, we have little to learn from the Greeks. There is One, Whom, whatever our faiths, we must acknowledge to be supreme as a teacher and pattern of moral life. To Him then let us turn.

We must begin by recognising the fundamental evil in the spiritual history of man—the great fact of sin. The universal prevalence of sin Jesus assumed. It was unnecessary for Him to prove or even directly to state this truth. Is it not equally unnecessary now? Does not the consciousness of sin belong to all lands and ages, and belong most to the men that see farthest and feel deepest? Neither was it necessary for Him to discuss philosophically the nature of sin. Two words he used, one of which originally meant *failure*, the other *lawlessness* or *disobedience*. The one is sin viewed from the human side, the other from the divine side. Sin is in the religious what wrong is in the social world. Its awful importance is that it is wrong-doing towards God—a violation of the Eternal Law of the Author of our lives. If any soul ever knew what sin was, ever felt its darkness and its woe, Jesus did. It was the sin of the world that He came to conquer, and it was by that sin, on account of that sin, and for the conquest of that sin that He died. Yet the power of sin, He testified, "hath nothing in Me."† As one that has known nothing but health recoils from the touch of the leprous, so might the soul of Jesus have shrunk from the polluted hearts of men. How did the holy Jesus deal with sinful man? Herein we shall see His grace and truth.

He does not trifle with sin, does not ignore or evade or minimise the facts. Some rash disciples when they heard the message of Eternal Love and realised the dawn of a New Era rushed to the conclusion that the moral law was now repealed, that the heart of man was emancipated from all authority without. "Think not,"

* St. Luke ix. 24. † St. John xiv. 30

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said Jesus, "that I am come to destroy the law. I am not come to destroy but to fulfil."* Nothing does He proclaim more unequivocally than the permanence, the eternity of moral law. And in His unfolding thereof what new heights and depths and breadths are seen! How it penetrates from the life to the heart, searching the motions of the soul—motive, impulse, desire, intention! How it lifts us to the serene mountain heights of snow-white purity, of celestial calm, of divine communion! What new conceptions of love and sacrifice and brotherhood! It is in Christ, in his words and ways and works that we first know moral life. Truly in Him is the Righteousness of God revealed; Righteousness robed in austere loveliness, in unblemished beauty.

Yet as Jesus surpasses men in purity, so does he also in sympathy with the erring, in love for the sinner. He could afford to do so since he himself was sinless. How then would this all-sympathising Friend redeem man from the power and the guilt and the misery of sin? How would He restore the health, the beauty and the nobility of life?

By the creation of a Higher Life. He set before us a Divine life—the Kingdom of God in the soul. While he taught that One only was good, he called upon us to strive to be perfect as He the Father in heaven is perfect. A new affection for holiness and truth and love, a new consciousness of grace and beauty, a new sense of the dignity of man as the Child of the Most High—by means of these man might, in the power of God, erect himself above himself; might rise from the pettiness and wretchedness of folly and sin and strife into the serene beauty and strength of the Kingdom of heaven. The higher life begins with a great moral change. Four words describe aspects thereof—repentance, conversion, self-renouncement, a New Birth. Repentance does not mean penitence merely but a change of mind, as Conversion is a turning of the life. Self-renouncement is a dying to the old, as Regeneration is a living to the new.

Let us seek to understand this. Jesus felt as he looked on human life, that men seeking to save, were really losing their souls. Priests were content with insincerity and form. Unreality was everywhere. Various men, by various roads, were in quest of riches, or pleasure, or position, or power. Love had perished beneath selfishness. A multitude of motives actuated men. It is the old story of the reign

* St. Matt. v. 17.

of evil. The life of God was nowhere. Jesus accounted for it by the human heart. In an address on Purity He stigmatised the source of evil. "Out of the heart proceed evil thoughts, murders, adulteries, fornications, thefts,"* and the long catalogue of sins. How in the garden of the soul, thus overgrown with weeds deep-rooted, is the pure flower of Love to grow? It cannot unless the weeds are rooted out. The natural life must be forsworn. Self-renouncement is necessary. New aims, new motives, new endeavours must supplant the old. The breath of a higher life must quicken and sustain the soul. Life thus begins with a disowning of the sinful as a false and unreal self. But the soil that sustained the weeds can nourish the true flower. The rush of passion may flow in a new channel where all is clearness and purity. The heart, Christ tells us, follows our Treasure. The decisive step is the choice of our treasure. He commends to us the Kingdom of God as a pearl of great price, and a treasure that will not wax old or dim. For it all lesser aims may well be sacrificed. On it, if it is our paramount aim, our desires and affections will centre. Thus if the right bent is given, if reason and conscience are supreme, high passions are no hindrance but a help. Sense is subordinated to spirit, self-control is won, and out of it grow the Christian graces of patience, long-suffering, meekness, endurance, each a vassal unto love. The soul escapes from the slavery of sin, and in new spiritual freedom enters on the life of God.

So taught Jesus. To that old world the words seemed new and strange. But they were the secret of victory. Many a fine spirit has since testified that only by self-renouncement does life become worth the living. The greatest of the modern men of culture that have kept aloof from Christ—the German Goethe—wrote this sentence:—"Die and re-exist, for until this is accomplished thou art but a troubled guest upon an earth of gloom."†

* St. Matt. xv. 19.

† "The way to self-realization is through self-renunciation, *i.e.* through renunciation of that natural and immediate life of the self, in which it is opposed to the not-self. Spiritual life is not like natural life—a direct development and outgoing of energy, which only at its utmost point of expansion meets with death as an external enemy, and in it finds its limit and its end. On the contrary, the life of a spiritual being as such is, in a true sense, a continual dying. Every step in it is won by a break with the immediate or natural self—the self which is opposed to the not-self; for only as this self dies, can the higher self which is in unity with the not-self be developed. And on the other hand just for this reason there is for the spiritual self no absolute death. Because it is capable of dying to itself—because it cannot live but by some kind of dying to itself—it cannot in any final sense die. As it can make that which most seems to limit it a part of its own life, it has no absolute limit; it takes up death into itself as an element, and does not therefore need to fear it as an enemy. * * * * The individual must die to an isolated life—*i.e.* a life for and in *himself*, a life in which the immediate satisfaction of desire as his desire is an end in itself—in order that he may live the spiritual life, the universal life which really belongs to him as a spiritual or self-conscious being. * * * * 'More life and fuller, that we want.' But by a law that cannot be defeated this fuller life is possible to us only through the sacrifice, renunciation or death of the immediate or *natural self*—the self which is opposed to the not-self and which seeks a good for itself which is not a good *for others*. For it is only in breaking down the boundary that separates our life from the life of others that we can at the same time break down the boundary which prevents their life from becoming ours. * * * *

The moral principle that we must lose our lives in order to save them has its counterpart and complement in a law of the universe according to which all the evils and sorrows that belong to the development of the spiritual life contain in them the 'promise and potency' of a good in which they are not merely compensated, but taken up and transcended. It is this belief which constitutes the Christian optimism that 'all things work together for good.'"—(*Caird on Hegel.*)

But is it only at the beginning, when the mind is first turned God-ward, that this law holds? It is a lifelong discipline. Without perpetual culture the weeds will reappear, will twine round the roots or choke the flower. It is a discipline; but every new victory is won easier than the last. It becomes a discipline of Love.

Observe what it means, this death of the old nature, this perpetual self-renouncement. It is not the abandonment of life, of energy, of hope. It does not mean a gradual extinction or absorption, a loss of personal existence swallowed up in the infinite. On the contrary the aim is fuller, richer, more abundant life. To that end it is held to be the means decreed in Nature. Natural life is developed by full and free external effort. But even here there is qualification. Weeds are rooted out and boughs are cut, that gardens may bloom in beauty. Lower lives in the animal world are yielded for the support of higher lives. And in the development of form, beauty and proportion are attained by patient and persistent effort. In mental discipline however this law is far more imperative. Our minds are trained by the perpetual correction of mistakes. Rules are written on them by the painful consciousness of repeated violation. The productions of the mind have to be criticised, pruned, and often cast away, before a mastery is attained of the art of clear thinking or correct expression. But it is by such discipline that the mind grows. It is so too in the public and important business of life. By indignities, as Bacon said, we rise to dignities.

In the moral world the tendency to error is greater because the senses mix, the passions assert themselves, various motives, such as

desire, ambition, pride, act powerfully on the will. We are in a region at once higher and lower. The occasions not merely of error, but of grave mistakes, of serious falls, are more numerous. The heights to be reached of spiritual calm and power are much more difficult of attainment. And a long process of painful discipline is needed to build the philosophic soul and make the will *inviolable*. Hence the duty of renouncement, as often as selfish inclination can be formed, however painful it may be.

Let us here recall some portions of the teaching of Jesus. In His exposition of moral law he warns us that it is not violence and gross outrage that are to be feared. Anger, hatred, impure desire—these in the heart, he tells us, are as fatal to the higher life as is the overt act of crime. Jesus certainly does not deny high passions. He means his followers to feel deeply. The passions that are evil are however not simply to be guarded against or guided aright. In their first beginnings they are to be crushed. In their place are to grow up passions of another kind, an enthusiasm of goodness. Hence such a command as to love our enemies—nay to love them with a never-despairing, all-sacrificing love. Thus *no retaliation* is allowed, no spirit of revenge. He that is struck on the one cheek is to turn the other also. For all personal injuries a spirit of forgiveness is to be cherished; and if the offender repents he is to be forgiven till seven times, or even until seventy times seven. Forgiveness means the suppression of desires that are natural; but it more than atones by the creation of love.

Take again ambition, an evil passion which manifested itself even in the Apostolic group. Twice by a symbolic act Jesus reproved this vice. Once He placed a little child in their midst to teach them the spirit by which the Kingdom of God is entered. Again at the close of His career he performed a menial act, adding "I am among you as he that serveth."* "The disciple is not above his Master."†

Thus, in a variety of aspects, Jesus seeks to build on the ruins of the evil heart, the new heart by which moral perfection is attained, substituting for the natural inclinations *the supreme* passion of holy Love which purifies, refines and ennobles the soul. But before Love can grow, or moral power be won, evil must be abandoned without compromise. The most cherished *object* must be sacrificed if it militates against the higher good. "If thy right eye offend thee, pluck it out, and cast it from thee."‡ Better to enter into life

* St. Luke xxii. 27. † St. Matt. x. 24. cf. St. John xiii. 16. ‡ St. Matt. v. 29.

maimed than utterly to perish. To those on the threshold of life this may seem strange teaching. But the experience of mankind has confirmed the wisdom of Christ. As in the intellectual sphere, so in a still higher degree in the moral and spiritual is power thus attained.

The soul, which Tennyson pictures for us as living in a Godlike isolation with the great and wise and despising the multitude below, was at last moved by the riddle of the painful earth, and became filled with dread and loathing, and self-scorn. It had sought beauty and knowledge without goodness and love. And so around us the seeker after pleasure finds it is only a shadow, a shadow cast from other things that he has passed by. He that seeks what he *deems to* be a good for himself while he knows it not to be a good for others, ends in weariness or despair. Self becomes a burden which he ceases to respect. On the other side there is found to be an 'interest' from tears, a wisdom out of sorrow, a sweetness and a potency in pain. Devotion to the higher good produces reverence for humanity. Consciousness of living for others ennobles one's conception of self. Such a *one* feels in sympathy with the Sovereign Will of the universe, with a power not himself that 'makes for righteousness.' He becomes conscious that he is fulfilling the true end of his being; and not in quest of self, but of the general good, he attains to a higher, worthier, and nobler self.

> Self-reverence, self-knowledge, self-control,
> These three alone lead life to Sovereign power,
> Yet not for power, (power of herself
> Would come uncalled for) but to live by law,
> Acting the law we live by without fear.
> And because right is right, to follow right,
> Were wisdom in the scorn of consequence.

Herein then we see the optimism of Jesus, and the rich depths of His Gospel. He believed in Redemption and more glorious life. He looked with undying hope over all the sin and misery of life and had a full and *joyful consciousness* that his work of restoration would triumph. Some men, some peoples, have shirked the problem and shut their eyes to the facts of life. Others have faced them and ended in despair. The dream of *Nirvana* has been made a goal. Jesus taught both Sin and Salvation. Not merely did he, with the winnowing fan of Divine righteousness, separate the good from the bad, the true from the false, and bring home to man the consciousness of sin in all its heinousness and deformity; not merely did he

teach the necessity of regeneration, the perpetual duty of self-renouncement; but he wrote in the hearts of his followers the truth that in this self-renouncement there is hope and joy; that this is the royal road to power, to peace, to blessedness. The power of self-denial, the beauty of humility, the preciousness of suffering, the sanctity of sorrow, the happiness, the blessedness of righteousness—these for all ages the Christ revealed.

Once more. As sin is rebellion against God and the enthronement of self instead, as its essence is *selfishness*, so the life of self-renouncement is accompanied with loyalty to the true Sovereign of the soul. This is the Kingdom of God which was the key-note of Jesus' message. Not only does Christ reveal the glory of the true and the good, the holy and the beautiful. If Truth and Beauty were far-off abstractions, the mind that had a dim consciousness thereof would be moved by an insatiable longing, the sense of a painful void. But Christ leads us to One who is the source of all, a Power in whom these are absolute and who is to us a Friend and Father; a living and enduring Will that (in the words of our Poet-Laureate) can rise in the "Spiritual Rock" of our better humanity, "flow through our deeds and make them pure." The Kingdom of God in the soul is the spiritual life of man quickened and controlled by the life of God. It is the harmony of heaven and earth.

Unselfishness, self-denial, self-sacrifice on the one side: faith and hope and love on the other. Faith and love are loyalty. We live (Wordsworth tells us) by Admiration, Faith and Love, and our greatness is in proportion to the measure of our possession of these. Oh! that our eyes were purged that we might behold the King in His beauty, and that *our hearts might* follow Him with admiring love. For of all the impulses that stir our bosoms this loyalty is the supreme passion in its power, not only to deliver from the base and the unworthy, but to rear a noble manhood, in purity, in calmness, and in strength.

ROBERT SCOTT.

"WHERE IS NOW THY GOD"?

By faith we understand that the worlds were created by the word of God, so that the phenomena of the universe are *not the cause* of its existence. So taught our Aryan ancestors, in the wilderness of Sinai, and on the banks of the Ganges. And yet, at the present

day, the question of questions is not so much, "Who," or "Where is now thy God"; but whether there is any God, or any need of God in the universe. Some eminent men of science can only go the length of *admitting* that such a being, for aught we know, may exist; while they assure us that they find in nature no reliable evidence of his presence. We accept their admission, and recognise the fact that we cannot by searching find out God; we cannot find out the Almighty to perfection. "No man hath seen God at any time." "The world by wisdom, knew not God." Neither has any man *seen* the living energy that enables us to devise means to send our thoughts to the opposite side of the world; or so bottle the vocal expression of them that it may be heard by our grand-children fifty years hence; and yet we should not regard as a very sapient philosopher, any one who should say, it is only a contact here, and another there; and defy us to prove that there is anything else, or any need of anything else in the 'evolution,' or the preservation of telegraphic or phonographic messages. To Scientists and students of nature, we certainly owe a debt of gratitude for our emancipation from many crude, and even mischievous, dogmas of theologues, cosmologists, and mythologists of ancient and of modern times; but we would respectfully ask them to tell us, if they can, what really does exist. The assurance of the deaf that they have never been able to detect any beauty in the sweetest melody, would not go far to convince the hearing ear that music has no charms. All things are not equally visible to all living creatures. It is highly probable that certain animals have sensations and discernments that others have no conception of. I, says man in the pride of his heart, I do not perceive it; therefore it is not. If I cannot, how can any other being perceive it? One opines that we have only to postulate matter, force or energy, and some theory of evolution, in order to account for all the phenomena of the universe, without the intervention of any providential purpose or arrangement. But is not the postulate, unusually extravagant? The ancient Hindu philosophers, postulated *soul*, or mind and energy, and denied the existence of matter, save as a convenient designation of the evolving energy of the eternal 'One-without-a-second.' Have our advocates of accurate science established their right to reverse this order, and disown the existence of the ancient 'Three in one,' 'Being-thought-joy'*; or to assume that life, or mind is, in every case, merely a function of an accidentally evolved conglomerate of

* "Sat-chit-ánanda."

material points, atoms, or affinities, as '*aquosity*' is of oxygen and hydrogen? Matter, Force, Evolution! Glorious trinity! But what, we have still to ask, is Matter? Has any one the faintest conception of what it is? I, whatever that may mean,—Englishmen always write it large—am resisted by it, and say I feel it. Its particles, molecules, atoms, or points stick together. I strike it; and if it cannot move with perfect freedom in the direction of my stroke, it seems to quiver; and when, through the air, that quivering is communicated to a certain membrane of the aforesaid conglomerate, I call the consequence to myself *sound*, or, perhaps less accurately, a sensation of sound. Strike harder; the mass moves from its place, with exactly the force you put into it. Suddenly arrest it. Is the force you gave it gone? Lost? No; but now the cohesive force or energy is modified; the quivering is intensified, and we call the phenomenon *heat*. Increase the heat. Now the cohesive force seems to disappear, or to give way to a disintegrating energy, and the volume of the *quiddity* is enormously increased. Heat it yet more; and now we have two or more *quiddities*, say oxygen and hydrogen; dissimilar in some respects, but each of them intensely energetic. What are they? Atoms? Or points of force? Who can tell? To us, heat, sound and light are but varied forms of kinetic energy variously affecting us. All space, moreover, seems to be pervaded by, if not to consist of, some such atomic radiant energy. This we might perhaps imagine to be the primordial *chaos, nudis indigestaque moles*, the dark etherial waste, over which the energy of the spirit of the eternal "I AM," the Almighty, brooded, and the word came forth, "Let there be light." What we call matter, the mother of the creation of God, primordial atomic energy, may be the form in which it has pleased Him who alone can say "I AM THAT I AM," to exercise His omnipotence in the evolution and construction of the phenomena of the universe. Nothing can exceed in sublimity the ancient Hindu idea, that the world owes its existence to the expansion of the divine AHAMASMI, I AM. The WORD of God is the principle of cohesion throughout the universe. In Himself, "He makes it a *cosmos* instead of a *chaos*."* It is quite supposable that the universe may consist of atoms of energy variously combined and modulated. What can differ more in appearance than carbon, graphite, and diamond? And yet we know that they are the same allotropic substance. But when we are asked to believe that a universe of such material

* Lightfoot.

points, atoms, or molecules, unaffected by any plasmic, thoughtful interposition, was the whole *quiddity* out of which all mineral, vegetable, animal, mental and moral existence accidentally became evolved, we simply say, we cannot, no one can, believe or imagine it. In that case, why postulate force or energy of any sort? Atomic matter was, and the world became.

But if that is incredible or inconceivable, is not the existence of mental phenomena without mind, equally so? Science has to deal with material phenomena, force and the dissipation or degradation of force; and it assures us that "no portion of matter, however small, has ever been known to go out of existence, or come into existence in any operation whatever."* The same may be said of force or of energy. It may be transferred, or transformed, but can never be exhausted. The multiform forces of cohesion, gravitation, electricity, magnetism, heat, motion, may all at last be reduced to one; and the material universe become one solid block, and remain eternally in that condition, cold, dark and immovable. Or, should atomic repulsion be the fittest survival, then the universe would be omnipresent radiant—what? POSSIBILITY. One cannot imagine the uncaused evolution of complicated phenomena, which manifestly tend to dissipation. The force of gravitation tends to solidity of form, absolute rest, in which it shall cease to be apparent. Some force, not inherent in itself, must therefore have given to matter its present state of multiform activity. "As the dissipation of energy is able to lead us by some steps of deductive reasoning to the necessary future of the universe; necessary, that is, if physical laws remain for ever unchanged; so it enables us distinctly to say that the present order of things, has not been evolved through finite past time, by the agency of laws now at work; but must have had a distinctive beginning, a state beyond which we are totally unable to penetrate; a state in fact which must have been produced by other than the now visibly acting causes."†

Mere matter and force, singly or combined, cannot account for the phenomena of a world like this, any more than the rebound of a ball from the rock it strikes, can account for the stroke. The existence of force in a variety of forms, no one will dispute. It may be kinetic, magnetic, electric, calorific, or what it may; but motion, magnetism, electricity, heat are only indications of its existence, behind which it baffles the most cunning Scientist to detect itself.

* Tait's Recent Advances in Physical Science. † Tait.

Omnipotence is revealed in the phenomena of the universe—Omnipotent Being. Can less be said of life? Is it not as much a reality, as any other form of energy we are acquainted with? No plausible account can be given of its origin, unless, as in the case of all other energy, we seek it in the same omnipotent LIVING BEING.

This much, it seems necessary to grant, that some one Being either originated, or has the full possession and absolute control of all the force, and modifications of energy pervading this universe, as well as those vast regions of immeasurable space, where as yet molecular attraction has not apparently prevailed to any great extent.

Of late, we have heard a great deal of the struggle for existence; and the general belief seems to be that the fittest to live, shall survive. But the question that most concerns us now, is, how, where, and by what did the struggle begin? Be it that animals are a sort of magneto-electric machines; surely there is room enough in the universe for any number of them. If they have come to exist without any cause external to themselves,—no matter how long ago,—the pressure to exist has been in action, and has prevailed. Why then should there be any struggle to remain in existence? Again, it is held that the fittest to live, shall live. This fitness must, one would suppose, include some degree of harmony between the nature of each one's being and its environment. Why should the orchid continue to live? The struggle to exist must there have been very severe, seeing it contains in itself, "a natural provision to prevent self-fertilization, by rendering it impossible that the pollen of a plant should fall on the seed of that plant."* Without foreign assistance, its struggles would be utterly inadequate for its preservation. For that, the pollen of one plant must fall on the seed of another of the same kind. "It is hardly an exaggeration," says Mr. Darwin, "to say that nature tells us, in the most emphatic manner, that she abhors perpetual self-fertilization." How then is the transference of its fertilizing energy to another of its kind to be effected? Bees are employed to effect this. Induced to enter the flower by the attractions of form, colour, scent and honey, the bee or other insect presses its head into the flower, and, with no thought of its own for the success of its liberal benefactor in the struggle for continued existence, carries the pollen and deposits it where it shall fertilize another plant of the same kind. In certain cases, it seems necessary that the assistant insect should remain

* Calderwood's "Science and Religion."

some time in the flower, and, *in that case,* it is detained by having to bore holes in order to reach the honey. "If," says Darwin, "this double relation is accidental, it is a fortunate accident for the plants; but I cannot believe it to be so; and it appears to me one of the most wonderful cases of adaptation that has ever been recorded."

Regarded from the atheistic stand-point, our own nature is not quite in harmony with our surroundings. Manifestly something has gone wrong. We need something that the material world does not supply. We aim at something far above all that, as an animal, man can ever need. Behold the little busy bee! It would fare ill in the struggle for continued existence, if no honey were to be found in the gardens and fields within its reach. No sooner is it qualified to gather it, than, without any hesitation, away it goes direct to the distant fields and mountains. Every working bee does so. No one has ever heard of a dull, stupid work-bee that had to be taught that the flowers of the field, or distant forests, furnish exactly the sustenance its nature requires. Its instinct, and untaught propensity to seek it in the flowery fields, must, one would think, be accepted as evidence that such food and building material as its welfare demands, are existent, and to be found there. Can less be affirmed of the universal tendency among men to seek after God? True we are deranged to some extent, as bees never are. We recognise the prevalent evil, and devise measures to meet and remedy it; and nothing has ever prevailed to make us what we feel we ought to be, like the honest recognition of the Almighty living God. Mentally and morally constituted as we are, possessing a sense of responsibility of which we cannot divest ourselves, we are unable to enjoy life as other animals enjoy it, without some clearer recognition of what we are and whither we are going, than the, so-called, material universe supplies. Cosmic arrangements may suffice to secure all that is essential to the temporary well-being of irrational animals; but they do not meet the nature, the craving and capacity of intelligent, thoughtful, conscientious men. It is not enough to tell a generous, warm-hearted, foreboding man, struggling against evil within and without him, that all the mental and moral phenomena of his being, his intelligence, his love, his joy, his hunger and thirst after righteousness and hatred of iniquity, are but freaks of whimsical energy, unintelligent forces seething and whirling and reeling throughout boundless space, all to be before long—for what are a few billions of years or of ages to eternity!—forgotten as a dream when one awaketh.

BEHOLD THE MAN! It is important to observe that we speak not here of all merely intelligent beings, but of those who, like Adam, were made in the image of God. We have no desire, nor occasion to quarrel with those who assure us that they have found something very like human bones that must have belonged to animal structures, resembling our own, that lived and died long before the living God breathed into Adam the breath of life, and he became in a higher sense a "living soul," the image of his Maker, that he might know and love Him. Like many depraved and degraded Adamites now, who seem utterly dead to the beauty of holiness, and know nothing of the lovingness and righteousness of God, the pre-Adamite anthropoid animal might have had intelligence of no mean order. Doubtless too much stress is sometimes laid on the capacity of the skull, when we seek to estimate the mental powers of its owner. It might be that the so-called anthropoids, man-like apes, "approach nearer to man in bodily structure, than do any other animals; but when we consider the habits of ants, their social organization, their large communities, and elaborate habitations; their roadways, their possession of domestic animals, and even, in some cases, of slaves, it must be admitted that they have a fair claim to rank next to man in the scale of intelligence."* Had our knowledge of them been derived chiefly from the capacity of their "brain-pans," if they have such convenient structures, we should hardly deem ourselves honoured by their alleged proximity to us in mental power. Yet "when we see an ant hill tenanted by thousands of industrious inhabitants, excavating chambers, forming tunnels, making roads, guarding their home, gathering food, feeding the young, tending their domestic animals—each one fulfilling its duties industriously and without confusion, it is difficult to deny to them the gift of reason; and the preceding observations tend to confirm the opinion that their mental powers differ from those of men, not so much in kind, as in degree."† The brain of the ant, seems to refute the notion that the intelligence of man, or of apes, is derived from their superior bulk of brain. No relics of any pre-Adamite race are more indicative of reason than are the habits and doings of bees and ants.

Nevertheless, judging from the way in which, without any natural armour, tusks, teeth, claws, or stings, he was able to hold his own in the struggle for life against such competitors as the wolf, the elephant, the lion, the tiger, which would seem sometimes to have

* Lubbock's Ants and Bees. † Ibid.

abounded in his neighbourhood, his intelligence cannot be disputed; though, allowance being made for superior thought, it can hardly be said he has left more evidence of mental power than we see in the actions and polity of a respectable ant-hill. MAN, Adamite man, has made more progress in the last five thousand years than his so-called anthropoid predecessors—we say not *ancestors*—seem to have made in myriads of ages. Why? Man looks upward and forward, to the distant in space and in time. Mental capacity might not, of itself, in every case constitute its possessor such a responsible moral agent as Adam was. "By law is the knowledge of sin." Adam, whatever his progenitors, if he had any, may have been, was elevated to the higher platform of moral responsibility, when Jehovah "breathed into his nostrils the breath of life"; and, in the garden prepared for him, distinctly put it before him to choose whether he would have this higher life continued to him, on the very reasonable condition that he should trust his Maker, and abide by His judgment as to what is good, and what is evil. More intelligence, as we see it in the habits of ants and bees, may enable a man to determine what is true and reasonable in certain, not in all, circumstances; but when it has to encounter the urgencies of animal propensities, the desire of the flesh, the desire of the eye, and the pride of life, backed by the power of darkness, and the wilfulness of self-conceit, it is sure, at one time or another to be overborne, and to imagine evil to be good and good evil. Led away by the blinding allurements and fascinating blandishments of self-will, the captive yields to the tempter, desire gives birth to sin, and sin when it is perfected brings forth death.

Can any description more accurately or more vividly depict the condition of man as we see him now in the world, than does the parable of the Prodigal Son? There we see him self-willed, taking good to be evil, and evil to be good, leaving his father's house, recklessly wasting his substance in riotous living, and now by the swine's trough, desiring to fill his belly with the husks which they are eating. Are men in such a condition in harmony with their environment? Do not their heart, and soul, and mind cry out against them? Can men in such a condition ever be regenerated? On the principle of the "survival of the fittest," we can neither account for their continuance in the world, nor imagine their attainment of well-being. Survival of the fittest, indeed! How came it to pass that one of the noblest of the race could say of himself, "The good that I would, that I do not; but the evil that I would not that I do.

Ah wretched man that I am"! Why, that wail of agony from Gethsemane, "My soul is exceeding sorrowful, even unto death"?

The question is of supreme importance to all mankind. Can we now trust the living God, our Maker, and be happy in His presence? How is it possible unless we are made to see that He is good and upright, and yet lovingly disposed towards us, seeing us just as we are? The outer world, as we experience it, is severe, rigid, inexorable, relentless. Whatever a man sows, that he shall there reap. Does that, *in all cases*, indicate the character of its Framer, Whose will none can gainsay, or with impunity resist? If the transgressor repent and return, will he, can he be received graciously and loved freely? Granted that we cannot by searching, find out God, or learn what His purposes may be regarding us, is it, *a priori*, altogether unlikely that he can, or ever will adopt some method to manifest his righteousness, and rightening power, and lovingly bring them to bear upon us that we may live and not die. Is it inconceivable that the loving Father should think of his rebellious prodigal son, and seek his return to his heart and home? Did it ever enter into the heart of man to invent or imagine such a transaction as that we read of in the third chapter of the Book of Genesis; and to represent the offended Almighty God, as therein, seeking and calling the disobedient skulking sinner? "Adam! where art thou"? See we not here a sublimity of divine philanthropy, such as never entered into the heart of any mere man? The good news is that He has come, seeking the lost that He may save them. "God so loved the world that he gave his only begotten Son, that whosoever believeth in him should not perish but have eternal life." "Observe facts," says the philosopher. We do observe them; and therefore we believe that He who alone can say of Himself absolutely, "I AM," the living God, has spoken to us by His Son, the out-spoken revelation of Himself, His mind and will regarding us. That God is love, it is of supreme importance that the whole universe should know. Sin denies it: the Gospel of Christ affirms it. The reality and depth of a father's love are not most manifest when he is rejoicing in the midst of a loving, well ordered and happy family; but when, heart-broken, he is looking out for the return of a profligate son, who for himself would "know good and evil," and, having spent his all in riotous living, is now feeding swine, whose husks, he fain would share. When Scientists who can see nothing in the Gospel of Jesus Christ but cunningly devised fables, assure us that *they* find no reason to believe that the worlds were framed by the

word of God, we need not be much disturbed. When they trace the origin of the universe to an infinite and eternal expanse of radiance, or radiant something, and then ask us to believe that out of that, the worlds, all matter, life, and thought grew by sheer accident, we fairly meet them when we simply say, WE CANNOT. The supposition that the origin of the world, including this active, living, thinking being, may have been a mere freak of thoughtless, lifeless, aimless energy, seems to contradict the first axiom of all philosophy. Why blame any one when your casket of jewels has disappeared? Can you prove that its disappearance must have had a cause? Yesterday it was; to-day it is not. You can only say, I *cannot* believe otherwise than I do. No more can any rational man believe that a million of millions of years ago, this world came into existence without the allied agency of life, and thought, and power.

But what we have now chiefly to deal with is the mysterious fact felt by all, that throughout this vast world there is at work, a stupendous power of darkness, opposed to holiness and love, with which all the schools of philosophy, science and theology have failed successfully to grapple. We have to do, not with the origin of this gigantic evil, which probably we shall never be able to trace; but with the undeniable fact of it; and the assurance we believe we have, that the Almighty has revealed His purpose to overthrow it. "God so loved the world that he gave his only begotten Son, that whosoever believeth on him should not perish, but have eternal life." Can we not believe this without calling the Almighty to account for the great love wherewith he loved us? "He that believeth has the witness in himself;" and the lives and the deaths of myriads of such, martyrs of whom the world was not worthy, have been a thank-offering of testimony that, believing in Jesus, they had passed from death into life, from the power of Satan into the presence of the Living God.

JOHN HAY.

JAMES CLERK MAXWELL.

II.

The second part of the life of Clerk Maxwell is devoted to a popular account of his scientific work and is written by William Garnett who was his assistant at Cambridge and so had very special opportunities of becoming acquainted with his method and work. This part of the book is, of course, chiefly of value to the Physicist, but it will be found that some parts at least of it are perfectly

intelligible to the general reader who takes any interest in such subjects. We think, however, that Mr. Garnett has hardly succeeded in striking the happy mean and producing an account of the scientific work as a whole which all will be able to read with pleasure; in parts it is too elementary and too detailed, and in parts just the reverse. Of course the task of popularizing such work as Maxwell's is very difficult, and there are very few men who could do it well, yet if it was to be done at all we think it ought to have been done by a master hand.

We shall attempt to do nothing more at present than describe some of the more important parts of Maxwell's work in as popular a manner as possible, and point the reader who may wish to know more, to the original sources. We have already referred to some of his early papers written while he was still a student, and though others of the same date are well worthy of notice, we prefer to pass them over and glance at those by which he is most likely to be permanently remembered.

While at Aberdeen he gained the Adam's prize at Cambridge for his essay on the stability of the motion of Saturn's rings. This was a very important piece of work and drew for him high praise from the Astronomer Royal who wrote "...it is one of the most remarkable applications of Mathematics to science I have ever seen." Saturn, as is well known, is not only attended by a number of moons or satellites, but is also surrounded by a series of rings which are quite separate from the planet, and the question Maxwell had to solve was what must be the nature of these rings in order that they may be stable. The question is greatly complicated by the mutual attractions between the several rings and between the rings and satellites, and though several able Astronomers had previously taken up the question none had completely solved it. Laplace, indeed, had already shown that a uniform solid ring could not permanently revolve about a planet but must necessarily split up in course of time. This was the point at which Maxwell took up the question. He first calculated what amount of want of uniformity would produce stability, and found that it was such as was quite inconsistent with the observed state of the ring. He next examined the case of a liquid ring and showed that that form also could not long exist, for the waves set up in it would go on increasing under the action of the mutual attractions already spoken of till the rings split up. Finally, he showed that the only tolerably permanent form of ring was one made up of a large number of separate masses each revolving round the planet with a

velocity dependent on its distance from the planet. It can easily be shown that such a mass of separate particles would present all the appearances of a solid ring, much more solid for instance than the tail of a comet, which has probably a very similar composition. Even this form of ring however, as he showed, cannot be really permanent, for it tends to spread out both towards the planet and away from the planet, the change on the inner side of the ring being probably much greater than on the outer. This theory is quite in accordance with the results of all the more recent observations.

As mentioned in the first part of this article, Maxwell devoted a great deal of time to experiments on colour. The results of these experiments were considered so valuable that the Royal Society voted him the Rumford Medal in 1860 as a mark of its appreciation of his work on this subject. Young had suggested long before that there were three primary colours by mixtures of which all other colours could be reproduced, but he did not establish his theory on the only firm basis, viz., experiment. In recent years Maxwell and Helmholtz have each investigated the subject with great skill and perseverance, and, as a result, we are now able to say definitely that, as Maxwell would have put it, any colour can be *matched* by mixtures of three other colours X, Y and Z taken in certain definite quantities a, b and c. This he expressed in the form of a "colour equation" thus—

$$C = aX + bY + cZ$$

The three colours chosen as primaries by Maxwell were vermillion, ultramarine and emerald green of such strength that when mixed in equal proportions they produced a neutral grey. The chief interest of all these observations lies in the light they throw on the question of our perception of colour. Young had already guessed that our colour sensation was three-fold, but Maxwell was the first to prove it by actual experiments. Maxwell's chief experiments on the subject were carried out either with his 'colour top' or his 'colour box,' in the former of which he used coloured papers, and in the latter coloured lights derived from a pure spectrum. The colour top takes advantage of the principle which has been familiar to most of us since our nurses amused us in our childhood by rapidly moving sticks with a glowing end so as to form circles of fire. That this is possible arises from the circumstance that visual impressions remain on the retina for some time after the exciting cause has been removed. If then we place a disc, coloured in sectors, on the flat upper surface of a rapidly rotating top we shall see not the individual colours, but only

that which results from the mixture of all the colours. Maxwell so arranged his top that three different colours might be mixed in any required proportions on the outer part of its surface while two others with which he wished to obtain a match were mixed on the central part, the proportions being varied till the observer was unable to detect any difference between the inside and outside. The result of the experiments was that for normal sight a match could always be obtained with five discs as described above, and hence showed that the normal eye possesses three colour sensations. But this was not all. There are persons who are unable to distinguish all the colours and who for instance, cannot tell red from green. These are said to be colour-blind, and Maxwell showed that in their case one of the three colour sensations is wanting, for with them a match could always be obtained by means of four discs on his colour top, instead of five as required for the normal eye. The sensation which is absent in most cases is the red, but in some cases it is one of the others. By the method he used, Maxwell was able to determine the exact colour of the missing sensation, and his results have quite recently been fully confirmed by observations made in the case of a man who was colour-blind in one eye, but possessed normal sight with the other. We have taken up so much of our space with this part of the subject that we cannot say more about his colour box than that he was able by its means to mix any three spectral colours and compare the resultant colour with those of the pure spectrum.

In electrical science Maxwell has done more than any recent worker with, perhaps, the single exception of Sir William Thomson whose writings he took as his model in early life: but large and important as his contributions to this science were, it is impossible even to summarize them here without either dealing with technicalities not intelligible to the unscientific reader, or else extending our remarks far beyond the limits of this article. We must be content then with a few very general remarks on this part of the subject. The main object of his work, as expressed by Professor Tait,* was "to do away with 'action at a distance' so far at least as electrical and magnetic forces are concerned, and to explain these by stresses and motions of the medium which is required to account for the phenomena of light." This he did mainly by working on the lines of 'Faraday's Experimental Researches,' and expressing Faraday's ideas in mathematical language. In this he was very successful, for,

* Proc. R. S. E., Vol X, p 335.

to quote again, "There can be little doubt that Maxwell's theory of electrical phenomena rests upon foundations as secure as those of the undulatory theory of light."

Perhaps the most important experimental work that he did in electricity was in connection with the determination of the British Association electrical standards. The extension of telegraph cables brought into great prominence the need of some definite system of units by which electrical quantities could be measured and the measurements made at one place compared with those made at another. The subject was taken up by the British Association and in 1862 a Committee was appointed to prepare a set of standard units. These units were to be what are called 'absolute units' involving, not the properties of any particular substance, but only the fundamental units of length, mass, and time. Of this Committee Maxwell was a leading member, and the success attending its labours was largely due to him. An idea of the thoroughness of the work may be got from the fact that the British Association units have now been adopted with very slight modifications as an international system.

Maxwell published his theories of electricity in an epoch-forming work "A Treatise on Electricity and Magnetism," a work which would have rendered his name immortal even had it stood alone. It is, however, a book for the Mathematician, or rather for the Physicist, who has a considerable acquaintance with mathematics. Another subject on which Maxwell made a splendid series of investigations was the Kinetic Theory of Gases. This theory looks upon gases as being composed of a very large number of particles flying about amongst each other in all directions and with enormous velocities. Each particle moves in a straight line with uniform velocity till it collides with another particle when it moves off in a new direction till its next 'encounter,' and so on. The pressure of a gas, on this hypothesis, is due to the impacts against the sides of the containing vessel, and heat increases this pressure inasmuch as it increases the velocity of the molecules. Some very important researches had been made on this subject by Joule Clausius and others before Maxwell took up the subject; but he, by introducing a new principle into the method of treatment employed, greatly extended the theory. This principle was what Maxwell called the statistical method which takes account not of individual molecules, but of groups of molecules. Clausius had considered that in any gas the velocity of all the particles would be the same at the same temperature and

pressure, but this evidently cannot be the case, for supposing that at any given instant the velocities were all the same, the result of the impacts would be to increase the velocity of some of the molecules and decrease that of others. If, however, we consider two groups, each containing some millions of molecules, the *average* velocity of the molecules of one group will be the same as the average velocity of the molecules of the other group, and the actual distribution of velocities in any group can be obtained by applying what is known as the law of errors. Maxwell not only showed that the leading properties of gases could be deduced theoretically from the kinetic theory, but even calculated the numerical values of many of the constants. Thus he found that in hydrogen at the standard temperature and pressure, the 'mean free path'—that is the average distance that a particle moves between two encounters—is about the $\frac{1}{350000}$ of an inch, while the average velocity is about 6,055 feet per second, or about 70 miles per minute, and every particle has, on an average, to endure 17,750 million encounters in a second. The number representing the number of particles in a cubic inch of air is 3 with twenty cyphers after it, a number so vast as to be almost beyond our powers of imagination. These numbers do not, of course, claim to be strictly accurate, but there can be no doubt that they are very close approximations to the truth. There is just one other point in Maxwell's investigation upon gases to which we can refer, and that is a very curious one. It is a well known principle in the doctrine of energy that it is impossible to obtain work by cooling a body below the temperature of surrounding bodies. This principle, as Maxwell showed, is true only on account of the coarseness of our faculties. Maxwell illustrated this, by imagining the case of a quantity of gas all at the same temperature and pressure in a vessel divided into two parts, A and B, by a partition full of small doors without mass, each door being in charge of a being—named, by Thomson we believe, Maxwell's *demon*—with faculties acute enough to distinguish molecules that are moving with velocities above, from those moving with velocities below, the mean velocity. If now the demon opens the door when he sees a fast moving particle in A approaching and lets it pass from A to B, and similarly when he sees a slow moving particle in B lets it pass from B to A, in course of time the mean velocity of the particles in B will be greater than the mean velocity of the particles in A, consequently the temperature of B will be greater than that of A, and work might be done by means of this difference of temperature. This of course is a perfectly ideal case, and no

method can be devised by which, in practice, the dissipation of energy can be avoided.

We have left ourselves very little space to speak of Maxwell's other work, and so we will content ourselves by referring briefly to his two published works on 'Heat' and 'Matter and Motion.' Each of these belongs to a series of elementary text books, but certainly neither of them is elementary. The former of these books is certainly one of the most valuable English works on the subject, but, as we have said, by no means merits the title elementary. In writing of it, Professor Tait says, "One of the few knowable things which Clerk Maxwell did not know, was the distinction which most men readily perceive between what is easy and what is hard. What *he called* hard others would be inclined to call altogether unintelligible. In the little book we are discussing there is matter enough to fill two or three large volumes without undue dilution (perhaps we should rather say with the necessary dilution) of its varied contents."

Maxwell's other writings are scattered through the publications of different learned Societies, and are to be found chiefly in the transactions and proceedings of the Royal Societies of London and Edinburgh, the Quarterly Mathematical Journal, the Philosophical Magazine, and the ninth edition of the Encyclopœdia Britannica. They are about to be collected and published as a memorial edition, and we can only wish that this had been done during his life, so that they might have had the advantage of a personal revisal as in the case of the writings of Sir William Thomson and Professor Stokes which are now being published.

We cannot close this very imperfect article better than by quoting the concluding words of the obituary notice read before the Royal Society of Edinburgh.

"I cannot adequately express in words the extent of the loss which his early death has inflicted, not merely on his personal friends, on this Society, on the University of Cambridge, on the whole scientific world, but also, and most specially, on the cause of common sense, of true science, and of religion itself, in these days of much vain-babbling pseudo-science, and materialism. But men of his stamp never live in vain; and in one sense at least they cannot die. The spirit of Clerk Maxwell still lives with us in his imperishable writings, and will speak to the next generation by the lips of those who have caught inspiration from his teaching and example. Scotland may well be proud of the galaxy of grand scientific men whom she numbers among her own recently lost ones; yet even in a company which includes Brewster, Forbes, Graham, Rowan Hamilton, Rankine, and

Archibald Smith, she will assign a place in the very front rank to James Clerk Maxwell"*.

C. MICHIE SMITH.

STUDENT LIFE AT OXFORD.

A HUNDRED years ago, and for centuries before that, a University would have been described as "a place for the training of youth." But in recent times the University idea has undergone a development. The training function has been discarded and the modern University is in most cases merely "a body authorised to examine and to confer degrees." Sometimes a certain supervision over teaching is exercised through the system of affiliation; but the University, as such, does not gather its sons to one place of residence and does not provide teaching for them. Such a University, as compared with its older fellows, lacks concreteness. A Senate House and an office suffice it for a local habitation: the narrow channel of examination papers is the passage by which its influence is to reach its sons: its essence is the authority by which it says 'Can you answer this?', 'You have passed,' or 'You have failed:' it is "A Voice—and nothing more."

I refer to this conception of a University because it is probably the one with which most readers of this Magazine are chiefly familiar; but he who would gain an insight into Student Life at Oxford must put it far away from him. Oxford calls herself the "*Alma Mater*" of her students. She claims to have hands to fashion, as well as a voice to pass judgment: her aim is not only to discover what men are and to stamp them with a badge, but to make them other than they are: and she concerns herself not only to furnish the mind and develop the intellect, but also to cultivate the manners and discipline the character of those who are entrusted to her care. She gathers them to her chosen home and surrounds them with the manifold influences of learning and culture and religion, that she may send them forth furnished (not with a degree but) with an equipment for life. A University of this sort must needs have a visible and concrete existence such as one of the modern kind does not require; it must be a *place* as well as a *power*; and thus we find that, while modern Universities derive distinction from the city by whose name they are called, this

* Loc. Cit., p. 338.

University has such a dignity and beauty of outward adornment as to shed lustre on a town otherwise insignificant, and to make it the fairest and most attractive town in England.

The visitor, approaching by rail, sees, clustering against the sky, an array of domes, and spires and towers such as would furnish half a county, and knows that he is near the University city. He has to alight at the extreme border of the town; for the University will allow the noisy steam-engine of yesterday, no nearer approach to its venerable home. Passing along the streets, he will soon light upon a building, or rather a pile of buildings, such as cannot be matched in any other town of England, except by the sister-University of Cambridge;—ancient, ample as a great Hindu temple, noble in architecture, showing perhaps, through its half shut gates, glimpses of grassy courtyards and fair gardens. Not one such mass of buildings only does he see, but another and another, till he is bewildered by their number. What are they? They are plainly independent of each other; for each is shut within its own high walls and gates; and they differ in age, in size, in structure, and in marks of wealth and importance. They are the Colleges which belong to, and almost compose, the University: they are the homes which the *Alma Mater* provides for her two thousand children. Side by side with them, are magnificent libraries, museums, galleries of painting and sculpture, and other public buildings, parks and spacious gardens and playing grounds, all declaring that here is the abode of learning and culture. The very streets, houses, churches, have an air of antiquity about them that is plainly due to the presence of the ancient University; while in the crowd of shops and lodging-houses seen on every hand there are tokens that the city is providing for wants more luxurious than its own.

And the local authority of the University is not less than its apparent influence. It shares with the Municipality the general superintendence of the town; but in the control of its own members it is supreme. It has its own courts before which alone its members can be summoned, on whatever charge: its own officers for the enforcement of discipline, who have the right to enter any house by day or night, and by whom alone disorderly undergraduates can be apprehended. It can make its own laws to regulate the behaviour of its members, and can even impose laws on citizens of the town in the interests of morals and discipline. Thus if the ideal of the University is high—being not only to

examine men, but to prepare them for that long examination which we call life—it has a grandeur and beauty of outward form and an augustness of power and authority worthy of the ideal and rendering no little aid to its attainment.

The colleges that the visitor encounters at almost every turn in the streets of Oxford, point to a unique characteristic of the University, or at least one shared with it only by Cambridge. In reference to the college system of Oxford and Cambridge there are two mistaken ideas that must be guarded against. One is to identify College and University: the other is to imagine the colleges as similar to those schools for young men which are now commonly dignified by that name. The colleges are in no sense identical with the University. All the members of the University are indeed members of colleges,* and nearly all its officials are officials of colleges. But the University is a corporation with certain definite duties and powers different from those of the colleges, and it might, theoretically, still exist if there were no colleges. The colleges are subordinate to the University, in that their function is to entertain and teach its members, and to prepare them for its examinations; and in that they are to some extent subject to its supervision; but they are so far independent of it as to have their own statutes of government, funds, and endowments, and to exercise their own discipline over their members. In fact the relation of the colleges to the University, the degree of their subjection and independence, the way in which they share with it the tasks of teaching and discipline, are full of anomalies; for they have not been settled on any theoretical principles, but have adjusted themselves in the course of centuries.

To picture Oxford colleges as like colleges affiliated to the Universities of India would be as great a mistake as to confound them with the University itself. To explain their peculiar constitution and the position and relations of the three orders that they contain, Fellows, Scholars, and Commoners, it is necessary to recall the character of the University in primitive times. Not always was it "a place for the training of youths," it was at the beginning a place of resort for men already learned, where they might read books and write them, might ponder and discuss, undisturbed by the cares and unattracted by the pleasures of the outer world. It was a secluded home for men whose education was already ripe, and whose

* There are however some "unattached" members of the University, *i.e.*, members not belonging to any college; but they form an apparent, rather than a real, exception to this statement.

lives were to be devoted to study, not a temporary resting-place for successive generations of youths who would pass from it to active life elsewhere. Wealthy patrons of learning founded mansions and endowed them with ample estates, not to provide teachers for the young, or to furnish an education to the penniless, but to give grave devotees of learning (who from their union in the college were called Fellows) such leisure from lower anxieties as would further their pursuit of knowledge.

But one of the marks of advancing civilization in the West has been the growing importance attached to the rising as compared with the risen generation: and nowhere are more striking illustrations of that change seen than in our ancient Universities. Although they were originally founded to give opportunities for undisturbed inquiry and research, yet now the claims of the education of youth are so paramount in them, that it is seriously disputed whether they ought to give any aid to research at all. The revolution that was to change Oxford from a place famous for learning into a place famous for teaching began, tradition says, six hundred years ago. At the College of Merton, then newly transferred to Oxford from Surrey, each Fellow was attended by a servant boy, who waited on him at table, rendered him all menial services, and found a lodging place under his bed. As the Fellow's rank was that of a Master in the University, the servant who stood behind his master at table, was called a 'Post-Master.' For reward of his service the post-master had a sufficient bodily sustenance, together with such scraps of teaching as his master, in spare moments, might fling to him. Doubtless most of the knights of learning in Oxford had such esquires in attendance on them; but it was at Merton that the event took place which, all unknown to the actors in it, was the first movement of the revolution. Soon after the establishment of the college at Oxford, the post-masters, for what reason we do not know, had lodging provided for them apart from their masters in a building called Post-Masters' Hall. After a while they proved to be so unruly when left to themselves, that they were brought back within the college precincts, but were housed in rooms of their own. Gradually their instruction came to be a recognized function of the college; and later benefactors and founders of other colleges began to make bequests not only for the support of Fellows, but for the support and education of scholars. Soon youths with no such recognized position as the post-masters began to frequent the University in order to share with them the education provided, and they were

received by the colleges under the title of Commoners. Thus in process of time the revolution begun in Post-Masters' Hall was complete, and it became the function of the University to finish the education of those whose lives should be spent in the church, the army, the law-courts, or the manor houses of the country.

From this account of the development of Oxford colleges several differences will be apparent between them and those of this country. For instance, in Indian colleges *students* are an essential element. It is not so at Oxford or Cambridge. The essential element there is *Fellows*: and there is one college in Oxford which has no students at all, but consists wholly of Fellows. Moreover, though the Fellows form the governing body of a college, they are not necessarily the tutors in it; and they do not receive their yearly income in consideration of any regular duties performed in connection with it, but as a reward of success in university studies. About two hundred Fellows are generally resident in Oxford; those who are unmarried having pleasant rooms in their colleges, and the married living in villas in the suburbs of the city. All are graduates, many, graduates of long standing; and there is among them a fair sprinkling of men really eminent for character and learning.

It fortunately often happens that an institution founded for one end proves itself suitable, when it has developed, for a widely different end: especially if its development has been slow and free. This has been the case at Oxford. The fellowship system was started when Oxford had no special concern in the education of the young men of England; and men devising plans for the best training of youth would certainly never have hit upon the provision of incomes and homes, gratis, for a number of educated men, as a hopeful expedient; and yet it is found to be of incalculable help in the work which Oxford now sets herself to do. It ensures that there shall always be in the city a society of educated, cultured men: it provides an aristocracy of learning such as excites respect even in the robust but unintellectual youths who have previously looked on masters and tutors with secret contempt, and have brought to the University the school tradition that all learning is vanity, as well as vexation of spirit; it creates a tone of sentiment, a public opinion, such as gives the University a character and an influence in the world outside: and it exerts upon the body of students a thousand undefinable but powerful influences that could not come from mere tutors. Moreover it keeps alive an interest in subjects of knowledge that are not included in the university curriculum, and saves the tutors from becoming mere schoolmasters, and the University from degenerating into a company of tutors and taught. Tutorships are often held but for a short time, passing rapidly from one Fellow to another; and this, together with the constant company of Fellows who are not tutors, saves the tutor from acquiring much of magisterial authority or the magisterial air.

Another difference between the colleges of Oxford and Cambridge and their modern namesakes, arises from the fact that they were primarily boarding-houses. In the centuries during which most of them were founded, the teaching was in the hands of the University and it is only in comparatively recent times that the colleges have usurped this function. This fact declares itself in the structure of the colleges, in which with great variety of outward appearance, there is a remarkable uniformity. They usually contain two large buildings, a chapel and a dining hall, and sometimes, for a third, a library. The quadrangles that form the rest of the college are occupied by the 'rooms' of resident Fellows and undergraduates—a study and a bed-room for each. There is no array of school-room and class-room such as usually mark a teaching institution. The tutor gives his lectures in his own study, or, if the attendance be large, in the dining hall; or lecture-rooms are contrived out of what were once studies and bed-rooms. All this, though it be trivial, yet helps appreciably to dissociate college from school-life and to bring to bear peculiar influences on the student. A Hindu boy, in entering on a college course, merely passes from one class in a school to the next higher in that or another school. His college-life is continuous with his school-life, the only change being that gradual change of position and feeling which naturally comes with years. The English boy on the contrary, looks forward to his going to the University as the end of his school days and the beginning of manhood. He cannot, if he would, imagine that he is still at a school; his position and all his surroundings forbid it. Except for regulations necessary wherever a large number of people live in a common household, and for restraints such as are prudently imposed on youths with characters yet unformed, he is free to live as he pleases: the discipline, for discipline's sake, that belonged to school-boy days is past. Even as regards study, the Oxford undergraduate can, within wide limits, follow his own pleasure. If he has been careful to choose his college rightly and to give a proper impression of the weakness of his mind, he may satisfy the indulgent authorities with work that costs him not an hour a day. He regulates his own expenses, chooses his own

companions and his own amusements. By such freedom he is being prepared, if he can be prepared, for the freedom of manhood and the responsibility that belongs to it.

W. H. FINDLAY.

(To be continued.)

INSECTIVOROUS PLANTS.

IT is now considerably over a hundred years since Ellis, a well-known English Botanist, sent to Linnæus a full and exact account of a species of *Dionæa* which he declared "lived upon insects," for the capture and digestion of which its leaves were specially endowed; yet it is only in quite recent years that this interesting subject has received the attention it deserves. Linnæus did not accept Ellis's account as the true one, but referred the phenomena noticed to simple irritability,—to that sensitiveness to touch displayed by so many other plants; and he does not appear to have considered it a sufficiently interesting instance even of this to call for any special investigation. The capture of insects he regarded as purely accidental, and condemned Ellis's idea that it had anything to do with the nutrition of the plant, as a hasty and unsupportable argument from analogy. The subject was therefore allowed to drop. Other writers indeed, both in England and Germany, noticed it during the following seventy years, but they did not succeed in directing the attention of naturalists to it, and it was not until that prince of observers, Charles Darwin, took it up that it received a thorough scientific investigation. Other naturalists have followed in Mr. Darwin's wake, the chief amongst whom are Sir Joseph Hooker and an enthusiastic and keen transatlantic botanist, Dr. Mellichamp. As the result of their united labours we have now a vast mass of information on the subject scattered through the scientific literature of England and America. A considerable number of plants are now recognized as truly insectivorous, and amongst them are to be found some of the most wonderful adaptations in nature. We purpose in this article to describe some of the more striking of these plants and the curious arrangements by which they are enabled, in the midst of adverse conditions, to maintain the struggle for existence.

The first that we shall notice is a species of *Sarracenia*. The *Sarraceniæ* with their allies *Darlingtonia* are natives chiefly of America where they are found both in temperate and tropical regions. They

have been accurately described by Sir J. Hooker and still more minutely by Dr. Mellichamp. As far as at present understood they can only be called indirectly insectivorous, inasmuch as they seem to be supplied with no true digestive organs, and only feed upon the insects they capture by first enriching the soil with their remains. They grow on wet boggy unproductive land, in swamps where vegetation is comparatively scarce, and where nitrogenous food of any kind is almost wanting. In such situations they are found in large clusters growing to a height of from two to two-and-a-half feet. The species Dr. Mellichamp describes most carefully is *S. Variolaris*. Each plant of this species consists of a single flower-stalk and three or four leaves all springing directly from the root. The leaves are about eighteen inches in length and are modified into hollow tubes narrow at the base, wider in the middle and narrowing again towards the top, where a hood is developed which so protects the entrance to the tube as to keep out the rain. This hood, as well as the rim and upper portion of the tube itself, is covered with honey glands, by which unwary insects are lured on to inevitable destruction. To the attraction of honey is added in many cases the further one of colour, purple streaks and bright translucent spots being mingled with the glands. Immediately below the honey glands is a portion of the tube covered with glassy elongated cells overlapping each other like tiles upon a roof, and all pointing downwards. This surface is so slippery that few insects are able to keep their footing upon it. They slip and fall, and the tube narrows so rapidly that in the majority of cases before their wings can be summoned to their aid they have no room to use them. If they have not fallen so far as this and still have room to fly, then the bright spots above and around them so utterly confuse them that they find it almost impossible to make good their escape. Dr. Mellichamp acknowledges that to assign such an influence to these spots may seem fanciful and absurd, but he gives the reasons which led him to adopt this as the true account of the end served by these apparently useless appendages. He had frequently noticed insects floundering about within the tube in the most unaccountable manner and coming repeatedly into collision with its sides and the inner surface of the hood. They were plainly seeking a way out, but usually failed to find one. He at first supposed that the honey of which they had partaken must have partially narcotized them, but a series of careful experiments convinced him that it possessed no narcotic or intoxicant properties. Neither was the confusion of the captives at all proportionate to the freedom with which

they had indulged; insects that were disturbed immediately after their entrance being as much confused as those that had been allowed to feast for several minutes. It was found, however, that where the number of translucent spots was fewest, the confusion caused was least, and where they were most numerous and conspicuous it was most utter and hopeless. Dr. Mellichamp was thus driven to the conclusion it was these spots that led the unsuspecting victims astray. They were veritable wreckers lights, leading on to sure destruction. Beneath the glassy surface comes a zone in the tube lined with stout spines, sharp and stiff, and again pointing downwards. The insect in its struggles soon impales itself on these and its fate is sealed. The more violently it wrestles the faster it descends. At the bottom of the tube there is a quantity of fluid which is anæsthetic in its effects. Into this the insect soon falls and the troubles of its life are over.

Such is the mode in which this strange plant captures its prey. Its leaves often become half-full of dead insects in the course of a few weeks. A writer in the *London Quarterly* for October 1876 asserts that in twenty leaves which he cut from plants of *S. flava* he found not less than 4,000 flies in a recognisable condition while, at the base of each leaf, there was a mass of unrecognisable débris. Sometimes the weight of their contents is so great that they break off and fall. If, however, the petiole is sufficiently strong to bear the weight, the contents are gradually decomposed, and a peculiar larva that makes this charnel house its home is developed, which eats through the petiole and so brings the leaf to the ground. In either case it carries to the earth a rich store of nutriment from which the roots of the plant obtain what the soil itself cannot yield.

Other species still more complex and remarkable are the *Nepenthes* or Pitcher plants, whose chief home is from Burmah and Ceylon southward to Australia. These plants, of which many species have been examined —chiefly by Dr. Hooker,—have a contrivance for catching insects in many respects similar to that of *Sarracenia*. The midrib of their leaves is prolonged sometimes to the length of a yard or more and at its extremity is developed a hollow vase-like receptacle which is remarkably similar to the familiar household utensil from which the plant takes its name. These pitchers vary in size in different species, in some being as much as 18 inches high. In most cases they stand upon the ground, the midrib which bears them being sufficiently developed to allow of this. But several species of *Nepenthes* being lofty creepers, pitchers are occasionally found at a

considerable height, attached to the branch of some tree around which the prolonged midrib has coiled itself. Each pitcher has a lid jointed to it, which in every case but one, Hooker tells us, is bent down over the entrance so as to leave it sufficiently open to admit insects, but at the same time to exclude falling leaves, &c. The interior arrangements of the pitcher are similar to those of *Sarracenia* except in one important particular. There are the honey glands at the top and round the rim, accompanied with rich and varied colours—which in some of the Bornean species are said to be especially gorgeous,—the zone of glassy cellular tissue, and in some species, where the upper portion is funnel-shaped, a development of spikes of sufficient strength to detain even a small bird. The rest of the pitcher however is not a mere store-house of food to be rendered available by falling to the earth, but is indeed a veritable stomach or a mass of stomachs, where the insects caught are digested and absorbed. If a pitcher be examined before any insect has entered, it is found to contain a small quantity of an acid fluid, which, if poured out is slowly replaced. Whether this fluid is anæsthetic as in *Sarracenia* does not appear to have been determined. As soon as any fly or other insect touches this fluid the secretion is stimulated, and at the same time there is poured into the pitcher a quantity of a juice containing in solution a substance exactly analogous in composition and action to pepsin. Pepsin is the active principle of the gastric juice in animals, and in the presence of an acid is capable of dissolving animal matter, and thus forming a fluid peptone fit for absorption. We have thus in *Nepenthes* a digestive apparatus precisely similar to that of the higher animals, as far at least as the agents employed, and the conditions of their secretion are concerned. Certain differences no doubt there are, but the process is essentially the same.

Similar powers of digestion are possessed by several other well known plants, the chief of which are species of *Drosera* and *Dionæa*—the plant originally noticed by Ellis. In neither of these however is there anything to serve as a permanent receptacle as in *Nepenthes*. *Drosera rotundifolia* was the plant chiefly experimented upon by Mr. Darwin, and almost two-thirds of his volume is taken up with it. Its leaves are small, generally not more than half an inch in diameter, and in structure they agree in the main with leaves generally. They have the usual central cellular system or parenchyma, the fibro-vascular system of 'veins,' &c., which gives support and stability, and the upper and lower epidermal layers or 'skin.' In one respect however they have a structure peculiarly

their own. The minute vegetable hairs which cover the leaves of most plants, giving to them a soft and velvety touch, are found under the microscope to be mere prolongations of the epidermal cells. True hairs of this kind are found on the leaves of *Drosera*, but in addition there are on each leaf generally above a hundred stout 'tentacles' into which spiral vessels enter, showing them to belong not to the epidermis but to the frame work of the leaf. Each tentacle is long enough when bent down to reach the centre of the leaf, and bears at its extremity a minute gland which in ordinary circumstances is covered with a glistening drop of a very viscid secretion. There are similar glands around the base of each tentacle. All these glands are capable both of secretion and absorption, and constitute at the same time the sensitive part of the surface. The viscid fluid which they secrete serves both to attract and detain small insects, and its viscidity is such that when an insect is once upon it, escape is almost impossible. Its struggles serve to excite the activity of the leaf and each tentacle in its neighbourhood slowly bends towards the scene of conflict. If the insect have alighted on any of the short tentacles on the face of the leaf where all the rest can reach it, it remains there; but if it is on the margin of the leaf then the tentacles surrounding it bend towards the centre carrying it with them. Once at or near the centre the process of digestion begins. Every tentacle on the leaf bends over with unerring aim, till its terminal gland is as near the prey as possible; each apparently anxious to do its quota of the work of dissolution and have its share of the repast. At the same time a remarkable change comes over the character of the secretion. It is no longer viscid but watery and slightly acid, and as soon as the glands have absorbed any animal product vegetable pepsin is discharged in abundance. The digestive process may take from forty-eight hours to twenty days or even more. When it is complete the leaf opens again and in a few days recovers its sensitiveness and its viscid coating till another unfortunate insect becomes its prey.

To make the tentacles bend it is not necessary that the object upon the leaf should have any appreciable weight. Darwin found that a minute filament of hair weighing less than $\frac{1}{5000}$ of a grain if placed upon the gland of a tentacle would cause it sensibly to bend. But it appears to be necessary that the surface of the gland itself should be touched and not merely its viscid coating. Heavy drops of rain which flow off the surface of the leaf without removing the secretion produce no effect; neither does blowing upon the tentacles however long it may be continued. The legs of the lightest insect however, which easily penetrate the secretion and touch the gland will impart the necessary stimulus. The amount of bending is also always proportionate to the stimulus given. If a gland be gently touched once or twice the tentacle bearing it may be bent while no other is affected. In this case the inflection is always *towards the centre of the leaf.* But if the stimulus be sufficiently strong and contact be continued, the influence will be passed on to the surrounding tentacles which will bend not towards the centre of the leaf but *towards the tentacle in which the stimulus originated.* The struggling of an insect at the centre of the leaf gives a massive impulse which gradually propagates itself from the centre to the sides, affecting first the tentacles nearest, then those which are more remote, and finally the leaf itself which responds by becoming slightly concave.

Although the bending of the tentacles may be caused by contact of inorganic as well as of organic matter, the other effects of these two classes of substances are very different. Under all circumstances inflection is accompanied by the secretion of a watery and slightly acid juice, but it is only contact with some nitrogenous organic substance capable of transformation into a peptone that can cause the secretion of the fluid containing pepsin. Now it is upon the secretion of pepsin that the *continued* inflection of the tentacles depends, simple contact being an efficient stimulus only in the first instance. Hence it follows that though the leaf readily closes over a minute stone, it quickly opens again, the stone being incapable of supplying the requisite stimulus to what we may fairly call the peptic glands. This apparent power of discrimination between nutritious and non-nutritious organic and inorganic matter, is one of the most remarkable powers of the plant, and is probably due to a partial absorption of the acid fluid which under any circumstances is secreted. If this fluid carries in again with it no indications of the presence of nutritious (*i.e.*, proteid) matter the peptic glands remain quiescent. This explanation is rendered more probable by its exact analogy with what goes on in the stomach of the higher animals, where, as is well known, the gastric juice is only secreted after fluid absorption has commenced, and absorption of such a kind as to indicate the presence of something which pepsin can attack.

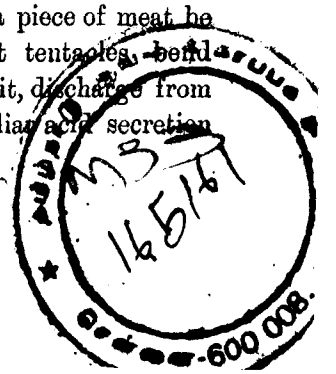
The last of these plants which we shall notice is the one originally described by Ellis, *Dionæa Muscipula* or "Venus' fly trap." In many respects it is the most remarkable of all. As in *Drosera* its

leaves are the organs by which it captures its prey. It has however no viscid secretion by which to attract and detain it, and is therefore endowed with a much higher degree of sensitiveness. Its leaves, which are about an inch in length, are 2-lobed, the lobes being each jointed to the midrib and inclining to each other at rather less than a right angle. Each lobe is fringed on its upper and outer edges with a row of sharp spines, and on its face, attached by joints, are three very delicate filaments, so situated that no insect can alight upon the leaf without touching one or more of them. It is in these filaments that the exquisite sensitiveness of the plant resides. The gentlest *sudden* touch causes the lobes immediately to close, in such a way that the spines interlace along the edges and effectually prevent the escape of any insect that may have been caught. The sensitiveness of *Dionæa* differs in a very important respect from that of *Drosera*, and in each case the character of the susceptibility is wonderfully adapted to the needs of the plant. *Drosera* having a viscid secretion that is itself sufficient to detain small insects for a considerable time, is liable to the irritation that is caused by their struggles for freedom, and this is the exact kind of stimulus that it needs. We have seen that its tentacles are marvellously sensitive to the very slightest continued pressure while not sensibly affected by sudden blows. The exact reverse is the case with *Dionæa*. Darwin found that if a swinging hair an inch and a half long was allowed to strike one of its filaments the lobes instantaneously closed, while a weight enormously larger than that necessary to excite *Drosera* might be deposited upon a filament *if done slowly* without producing the slightest effect. The adaptation is obvious. Having no secretion to assist it, *Dionæa* must close sharply upon its prey or it will be gone. But though the filaments are thus exquisitely sensitive to the stroke of a solid, they are not at all affected by fluids. Heavy drops of rain produce no effect, neither do high winds. *Dionæa* therefore like *Drosera* is perfectly capable of withstanding the effects of weather.

There is another striking contrast between *Dionæa* and *Drosera* in the apparent economy with which the secretions of the former are poured forth. In *Drosera*, as we have seen, the viscid secretion is always present. As soon as a gland is irritated no matter what the irritating object may be an acid secretion is discharged and if the object be a soluble proteid, vegetable pepsin speedily follows. In *Dionæa* however there is no secretion of any kind until there has been absorption of some animal product. Thus if a minute

particle of meat be perfectly dried and allowed to fall upon the leaf, it closes and confines it, but there being nothing to absorb, the glands remain perfectly inactive. If however a piece of fresh meat be used, or if the piece of dried meat be damped ever so slightly, there is no hesitation: an abundant secretion very rapidly exudes, containing both acid and pepsin. Upon this stimulus to the glands by absorption the final and perfect closing of the leaf depends. On the first impulse its lobes, though brought sufficiently near to retain securely any large insect that may be caught, still leave a considerable hollow space between them. If in the course of twelve or fifteen hours there is no absorption and the glands consequently remain unstimulated, the leaf gradually opens again without any loss of sensitiveness. This of course occurs when any inorganic or indigestible substance is caught. But when once absorption and secretion have begun the lobes adhere closely along their whole length and press the confined object on every side. This answers two purposes. In the first place it subjects every part of the confined object to the influence of the secretion and thus promotes digestion, and secondly by causing the whole leaf to be moistened it stimulates glands which would not otherwise be affected and causes them both to absorb and secrete. In this condition the leaf remains, its lobes adhering so closely that they will tear rather than be separated, until the process of digestion is complete, which according to the nature of the object takes from eight to thirty-five days. At the expiration of this time they slowly open again, but seem seldom fully to recover their sensitiveness.

How the impulses communicated to the glands or filaments of the two plants last described, are propagated through the substance of the leaf to other glands &c., is one of the most interesting problems in vegetable physiology. It is not merely the *transmission* of the stimulus but its enormous *multiplication* that has to be accounted for. The fact that the slightest possible stroke upon the filaments of *Dionæa* results in an immediate and forcible closing of the lobes—the effect being to all appearances utterly disproportionate to the cause—points to something in the plant strangely analogous to the nervous system of animals, with the multiplying power of nerve centres. Nor is it motor influences only that are thus transmitted and multiplied. It has been found that if a fly or a piece of meat be placed upon the leaf of *Drosera* the most distant tentacles bend rapidly towards it, and, long before they touch it, discharge from their glands in considerable quantities the peculiar acid secretion



which is necessary to its digestion: while if the object be inorganic the motion of the tentacles is slow, and the acid secretion is only just perceptible. The tentacles are plainly aware—we can use no other word—when they are moving towards a digestible object and when the case is doubtful. Experiments have been performed with a view to determine what amount of absorption is necessary to this result, and it has been found to be so infinitessimally minute as almost to preclude the supposition that a rapid diffusion of the absorbed matter influences every gland. Nor is there anything contrary to the most recent research in the suggestion that some plants may possess a true nervous system. On the contrary it is becoming every day more credible. For "the results of recent inquiries into the structure of the nervous system of animals converge towards the conclusion that the nerve fibres, which we have hitherto regarded as ultimate elements of nervous tissue, are not such, but are simply the visible aggregations of vastly more attenuated filaments, the diameter of which dwindles down to the limits of our present microscopic vision, greatly as these have been extended by modern improvements of the microscope, and that a nerve is in its existence nothing but a linear tract of specially modified protoplasm between two points of an organism—one of which is able to affect the other by means of the communication so established. Hence it is conceivable that even the simplest living thing may possess a nervous system"* Whether the impulses are transmitted from part to part of these strange plants along such protoplasmic lines, it is in the present state of science impossible to say. Dr. Burdon Sanderson has however demonstrated that excitement sets up in their leaves electrical currents precisely similar to those well known to be generated during muscular activity. But this subject is too abstruse and technical for us to enter upon here.

A question which was disputed with great energy for some time after the publication of Darwin's work was—Are these plants really carnivorous? Do they really feed upon what they capture? Have we any reliable proof of absorption by the glands? The negative side in this controversy was taken by many French and German botanists of note, and such a number of specious, if not weighty, arguments were adduced in support of their position that it became extremely desirable that more extensive and minute investigations should be made. This was undertaken by Dr. Francis

* Huxley.

Darwin, son of Darwin "the Great," who in 1878 read a paper before the Linnæan Society detailing both his processes and results. His plan of research was simple. In June 1877 he transplanted upwards of two hundred plants of *Drosera rotundifolia* into soup plates filled with moss washed until it was absolutely free from all traces of earth. Every soup plate was divided by a wooden partition into two compartments, each of which contained one plant. The whole were kept under wire gauze covers so that no insects could be caught. The plant at one side of each plate was 'fed' every two or three days with a couple of small pieces of roast meat weighing about $\frac{1}{60}$ of a grain each while the others received nothing but water. It soon became apparent that the 'starved' plants were feeling the lack of nitrogenous food. The loss of the bright green colour of the leaves showed that they were unable to develop the full quantity of chlorophyll granules necessary to health. On the 7th of August the number of flower stalks on the starved plants was to those on the fed as 100 : 149·1. By the middle of the same month the number of leaves was as 100 : 136·9. Early in September the seeds being ripe were gathered, and the plants were taken out of the plates for final comparison. The following table gives the results of the comparison in ratios:—

	Starved.		Fed.
Ratio between number of plants	100	:	101·2
Weight of the plants exclusive of flower stalks	100	:	121·5
Number of flower stalks	100	:	164·9
Sum of the heights of flower stalks	100	:	159·9
Total weight of flower stalks	100	:	231·9
Total number of capsules	100	:	194·4
Average number of seeds per capsule ...	100	:	122·7
Average weight per seed	100	:	157·3
Total calculated number of seeds produced ...	100	:	241·5
Total calculated weight of seeds produced ...	100	:	379·7

Such results, arrived at by a man who inherits much of his father's power of patient observation and love of truth, may well be accepted as setting the question carnivorous or non-carnivorous finally at rest.

Before leaving this interesting subject we must glance for a single moment at the position which these strange plants occupy in the scheme of creation. They add another link to the chain which binds together the animal and vegetable kingdoms. Already the sharp line of distinction which Scientists drew fifty years ago is gone for ever. There is a wide borderland disputed by a hundred

species, which to the biologist of to-day is neutral territory. No single characteristic can be named which is the exclusive property of either one or the other. The two shade insensibly into each other and there is no gap anywhere. The physical basis of life, the mysterious protoplasm from which all cells, vegetable or animal, are developed, is the same in both cases. Cellulose and chlorophyll so long considered exclusive possessions of vegetables are so no longer, having been found, the former in the testa of *Ascidians*, the latter in the body of the green *Hydra*. Motion and locomotion, circulation and respiration, are no longer exhibited by animals alone. Plants like animals may be killed by electricity, intoxicated by narcotics, rendered unconscious by anæsthetics. In the cases we have noticed they are possessed of a sensitiveness more delicate than that of any animal nerve. They wake, they sleep and even apparently 'dream.' There are animals on the other hand, which seem to have neither circulation nor sensation. The Jelly Fish or the common *Hydra*, may be propagated *by cuttings*, and the body of *Hydra vulgaris* has been *grafted* on to that of *Hydra viridis*. Now at last we have plants that live, not on what they find in the inorganic world, but on albumin, fibrin and other of the most highly organized products of animals. This is their natural food, and for its digestion they are endowed with stomachs similar to that of man himself. Like him also they not unfrequently suffer the usual penalty of gluttony—an acute attack of dyspepsia.

Thus are the two 'kingdoms' bound into one—the vast kingdom of Nature; and thus is manifested the unity of design, the 'one unbroken purpose' which runs through all. Whatever theory we adopt as the explanation of this unity, the unity itself cannot be denied. The soundest science would seem to lead us to a theory of evolution. But whether we accept the current theory as verified or not—and it has yet many difficulties to overcome before it can *demand* acceptance—we may at least be permitted to adopt it provisionally. If true, it adds enormously to the wonder of the universe, for it reveals not only the *results* of creative energy, but the very *methods* of creation. It removes the veil which shrouds the Divine scheme, and permits the reverent student to gaze with awe and wonder upon that Divine Hand which is ever laid upon us all, and which has fashioned and still fashions all in accordance with one perfect plan, born of Eternal Love, and showing itself in Eternal Progress.

GEORGE PATTERSON.

LITERARY NOTICES.

CHRISTIANITY AND MODERN SCEPTICISM. *By the* REV. A. G. GRIDLESTONE, M.A., *Vicar of All Saints, Clapham Park. Author of "The High Alps without a Guide." London: Hodder and Stoughton. 1883.*

This is a beautifully got up volume, which presents many features of interest even to those who do not care much for Christian Evidences. Unbelievers may be excused if they sometimes feel a little impatient of the solicitude shown by apologists regarding their state of mind. So much of the writing and speaking addressed to those outside the Christian pale is redolent of offensive smugness and self-satisfaction, that the retort "Physician, heal thyself" must often be on the lips of non-Christians. It is therefore refreshing to find one who is himself a Christian minister and a professed apologist, speaking out what seems very wholesome truth to those who occupy the unassailable fortress of orthodoxy, and attributing much of present day unbelief to the pomposity, dishonesty and want of sympathy of Christian believers. To honest men this reproof will doubtless do good, and may prevent them from assuming that *ex-cathedra* tone which comes so naturally to all who try to teach, and which is so irritating to all the taught that have passed beyond the period of intellectual infancy.

A large part of the volume is taken up with the discussion of what the author calls "Defective principles in ascertaining and teaching religious truth." Some of the points which he makes are extremely happy, and likely to be useful, quite as much to the inquirer after religious truth as to the apologist. There is a certain traditional view of Christianity, the fatherhood of which is rather difficult to trace, which is assumed as settled truth in almost every attack upon that religion. It is difficult to characterize it in a single word, but perhaps the best that can be applied is "mechanical." It assumes that a divine revelation must be a revelation of everything, that its inspiration must be a mere dead dictation of words, that all its parts are on a level of importance, and that such a thing as historic growth is inapplicable to anything in which God has a direct part. For example, how obstinately does the opinion maintain its ground in this country that an inspired Bible must mean a repertory of scientific and philosophic truth. As our author points out, this is not so much the fault of those without the Christian pale as of those within it, who have imperilled their own faith and that of others by making demands for the Book which it does not make for itself. Being chiefly the material for the history of a divine process, the Bible could not possibly be a store-house of science. Had it been such an impossible thing, it would have defeated the purpose of Him who inspired it, when He gave to man a reasonable soul, capable of inquiry and discovery, and finding in the exercise of these powers one of its highest and purest enjoyments.

The tendency to torture texts is another off-shoot of the "mechanical" view which is well worth notice. Mr. Gridlestone complains that Christians, by practising this unscientific habit themselves, have taught it to unbelievers, with whom it is a favourite method of attack. Mr. Bradlaugh is particularly fond of it. Were it not for the injury done to truth on both sides, one would

have little sympathy with the confusion of these expositors of Christianity, when they find their favourite weapons in the hands of the enemy. They ought to have remembered that it is only in this way that the devil can quote Scripture for his own purposes. But bad habits have a great tendency to self-propagation, and this one seems to thrive as luxuriantly on the soil of India as on that of Europe. Every public man ought to set his face against it, especially every aspirant to literature, and to an influential place among thinking men. Long ago Milton said "as good kill a man as kill a good book," and the twisting of texts is therefore equivalent to homicide with the additional aggravation of torture. And yet there are plenty of critics of the Bible now, who misquote and misinterpret, applauding poor Tom Paine's foolish sentence "I keep no Bible." There is abundant evidence that many of the most violent adversaries of Christianity among us either keep no Bible or else read it only for controversial purposes, never studying it as an organic whole. But Christians who employ texts in this forced way might just as well adopt Paine's boast for their motto. They keep not a Bible, but a collection of texts. Every student of religion may well write up in his study in letters of gold Mr. Gridlestone's cautions to readers of the Bible, "(1) Ascertain the true meaning of the words (2) consider who spoke or wrote them, (3) and their connection, (4) and the circumstances under which they were spoken, (5) and the persons to whom they were addressed, with the impression they were originally intended to convey, &c."

There are some interesting thoughts regarding the morality of Scepticism which we would recommend to our readers. Harsh things have been said on both sides here, where harshness was least admissible. No set of men can claim a monopoly of morality or of immorality either. When apologists accuse scepticism of an immoral tendency, the retort is easy: "Whence then your immoral believers?" But there is a middle position which no candid man will deny: viz., that Scepticism is often the refuge of an evil conscience, that unbelief is assumed because belief is terrible. It is not difficult to hold a brief in favour of even this sort of Scepticism, when compared with belief in supernatural religion combined with wickedness. For surely it is a nobler thing to seek a system of unbelief not out of harmony with my moral state, than to remain a believer and a hypocrite. But there is a far higher type of Scepticism than this. It is that unbelief of which Tennyson sings in that most classical part of classic "In Memoriam," where he tells us

> "There lives more faith in honest doubt
> Believe me, than in half the creeds."

It is a doubt forced in upon the spirit from without, the transition state of a man seeking to realize where and what he is in this wonderful universe, and fighting his way to firm conviction. That fight has *sometimes* been a losing one, and the valiant soldier been beaten in the conflict. Such a man is an honest infidel. But one who starts on a career of infidelity without having passed through such a struggle is an impostor, a pretender to the degrees of Scepticism who knows *nothing* of the agonizing ordeal of real doubt. He may easily be known from the real sceptic. He is as arrogant as the other is humble, boastful of his mental state, while the other feels it to be a state of pitiable weakness. Content with earth, he has never tried to soar, and so cannot understand the sadness with which the real sceptic recognizes the powerless

pinions of the soul. Upon this distinction must be based a profound difference in the modes of treatment applied to these different classes of men.

That part of Mr. Gridlestone's book which deals with Christian Evidences proper is not so satisfactory as the first few chapters. He is evidently much more the Christian priest, the observer of the weakness and poverty of human nature, the subtle diagnostic of morbid spiritual phenomena with a view to sympathetic healing, than the apologist of the schools. But the loss is comparatively small. Men who know how to present the old and familiar, but never antiquated, defences of the faith are plentiful enough, and so are their books. Writers of Mr. Gridlestone's candour regarding the faults of popular Christianity and popular modes of presenting it are rare. All the more cordial therefore is the welcome which we offer to his book.

THE LIFE AND ACHIEVEMENTS OF EDWARD HENRY PALMER, *late Lord Almoner's Professor of Arabic in the University of Cambridge. By* WALTER BESANT, M.A. *London: John Murray. 1883.*

This Memoir of Professor Palmer will be read with deep and sad interest. The account of his tragic end is still fresh in the memory of all, and his life will ever be regarded as the greatest price which England paid for the tranquilization of Egypt. War always costs life, and it is usually the best blood of the combatants that flows most freely, but seldom is the name of one so gifted, and withal a 'man of peace,' found on the roll of the dead. The best linguist of his age, a graceful poet, a brilliant journalist, a successful teacher, an enthusiastic explorer, a keen antiquarian—such was the man who was basely betrayed and foully murdered while securing the safety of the rear-guard of our army. Truly such safety was dearly bought!

Edward Henry Palmer was born at Cambridge in 1840, and received his earliest education in the Perse school of that town. Here he first showed that marvellous power of acquiring foreign languages which subseqently raised him to eminence as a scholar. While a mere boy his spare time and money were both spent upon gipsie 'tramps and tinkers' with whom he soon learnt to converse freely in Romany. From Cambridge he went to London where, as a clerk in the Docks, he had abundant opportunity of following his natural bent, opportunities which he did not allow to slip through his fingers. From sailors, organ-grinders and the motley crowd of foreigners who congregate in the East End of London, he soon picked up a sufficient knowledge of French and Italian to enable him to speak these languages, and before he was nineteen years of age he could converse with perfect fluency in any of the dialects of Italy and France. At nineteen he returned to Cambridge where he entered at St. John's College, and meeting with Syed Abdullah, he at once commenced to learn Arabic, Persian and Urdu. The rapidity with which he mastered these languages is one of the marvels of his life. In three years he could not only read them, but write and speak them with ease and grace. His method of learning a language was by persisting in conversation until he had obtained a fair vocabulary and a sufficient acquaintance with the inflections of the language to enable him to express his thoughts in it readily and accurately. Then, and not till then, would he make a careful study of its grammar and structure. This

method he applied to both Arabic and Persian, and by its means combined fluency and accuracy, the ability to *use* these tongues as well as to *criticise* them, as they have seldom been combined in any one man. His power of application was immense. He worked often for eighteen hours a day at one subject, and if his mind was set on mastering anything he reckoned no pains too great, and allowed no difficulty to daunt him. This, far more than genius,—though a man of unusual genius he doubtless was,—was the great secret of his unparalleled success. "He got what he wanted," says Mr. Besant, "because he was willing to work for it. Also, what he wanted was so great, so tremendous a thing that he was willing to work for it night and day, incessantly, with untiring resolution, patience and zeal. Nevertheless, as happens to all who can work, he had his reward."

This reward—recognition as an accomplished orientalist—came first from the Committee of the Palestine Exploration Fund, who secured his services for their expedition to Sinai, and afterwards assisted him in his tour through the Desert of the Exodus, a tour which he accomplished on foot and with only one companion. A little later he was elected a Fellow of St. John's, Cambridge, and in 1872 was appointed Lord Almoner's Reader in Arabic in the same University, a post which he held for six years. It was during this period that his most enduring literary work was done. His edition and translation of Zoheir, his Arabic Grammar, his Persian Dictionary, the "Survey of Western Palestine," and a translation of the Koran for Max Muller's "Sacred Texts of the East" were all published between 1872 and 1878.

In the latter year he severed his connection with the University and went to London, where he took to journalism and light literature. The next three years were undoubtedly the happiest of his life. His pen was never idle, for he gave himself no rest; but the atmosphere of his new work was more to his taste than that of Cambridge. In his nature the keen susceptibilities and tender sympathies of a woman were combined with masculine energy and courage. He was avaricious not of praise, but of sympathy and appreciation, and the fact that he was not fully appreciated at Cambridge had during his six years' residence there infused a certain bitterness into his otherwise happy life. In London it was not so. With congenial associates and plenty of good work his life sped happily along, and the cynical gloom which his friends had often lamented at Cambridge disappeared entirely. During his London life he produced the book by which he is best known to the general public,—"The life of Haroun Alraschid, Khalif of Bagdad."

This happy London life was cut short by the Egyptian Campaign. His accurate knowledge of Arabic and the manners and customs of the Bedouins, as well as the personal acquaintance which he had made with many of their chiefs while on his previous tours, made him the one man who was able to win to our side the unruly tribes of the desert. The path of duty was plain and he did not shrink from it. He fully understood the danger to which he was exposing himself, but his services were rendered gladly, and what he did for his country he did well. But it cost him his life. Into the details of his last mission Mr. Besant enters fully, and with a pathetic eloquence born of love. An indescribable sadness is added to the narrative by the fact that it is gathered from "letters written to a young wife loved with a tenderness and passion which break

out irrepressibly in every other line." He died, alas! before his time, when he seemed just rising to the place which he was destined to fill. But he had accomplished work that will not be forgotten, while his cruel fate has embalmed his name in the memories of at least two generations of Englishmen. "In his conduct of his mission and in his fearless encounter with death," says the *Athenæum*," Palmer showed the world that a scholar could be also a hero, and that the man who learnt well, taught well, spoke well, wrote well, did all things that he tried well, could also die well."

THE GEOGRAPHY OF BRITISH INDIA, *Political and Physical. By* GEO. SMITH, LL.D., F.R.G.S., C.I.E., *London: John Murray. 1883.*

This work is, as the author tells us in his preface, "the result of twenty years of preparation." It contains a vast mass of matter presented "with an almost excessive degree of condensation" within the compass of one of Mr. Murray's ordinary Student's Manuals of 520 pages. It is however rather a book of reference than a student's manual, and it is as such that it will prove most acceptable. While the History of India has been written and re-written its geography has been neglected. Not indeed in the sense that geogaphical investigation has languished, for a most complete and trust-worthy survey has been made, and reports and memoirs innumerable and of great value have been issued; but neglected in the sense that no effort has yet been made to condense and make generally available the information thus acquired. This is the first attempt of its kind, and Mr. Murray is to be congratulated on having found so well qualified, patient and painstaking a geographer. Speaking of his work Dr. Smith remarks :—

"Its generalizations as well as details will enable the ordinary reader, probably for the first time, to form a just idea of the magnitude of the British Indian Empire; of the variety of its races, and all that concerns peoples more numerous than those of Europe: of the course of the history of every Province and even District when under native rulers; of the splendid and widespread archæological and architectural remains of these rulers; and of the success of the British Government, thus far, in making the Empire a unity for the first time in history; so that, by detailed administration, education, and free religious suasion, its two hundred and fifty-three millions may be trained to govern themselves. The volume may, practically, be found by the traveller to be a guide-book in the best form. The Index, and Maps of Provinces, in districts, should make it the most handy Gazetteer, as well as a full and an accurate work of reference for all classes."

These are the words of a man who has confidence in his work; but it is a confidence that is fully justified.

The Volume is divided into two Books the first of which treats of the Political Geography of India, and the second of its Physiography. The first and second chapters of Book I are devoted to a rapid view of India as a whole. The first of these chapters deals with the *Empire* as such, and contains a mass of interesting matter never before brought together within so small a compass. Its growth and administration, its Provinces and States, Imperial Surveys, Land Tenures, Taxation and Debt, are each briefly and lucidly expounded. The second is a sketch of the more prominent physical characters of the country—its Mountain Chains, Rivers, Lakes, Tides, Waterfalls and Forests, with the chief indigenous trees. To this is added a succinct and admirable

account of what has been done to open up the country and to conserve or increase its productiveness by means of Canals, Irrigation, Railways, Harbours, Lighthouses and Forest Administration. These two chapters will be to many readers the most interesting portion of the Book. They present, in an orderly and compact form, an amount of general information which will be acceptable to every student of India, and which has hitherto had to be gathered from sources the most diverse and often ill-attainable. Their value is enhanced, and the same may be said of the entire work, by the fact that Dr. Smith gives the latest available statistics. For example the Census report of 1881 is used, and as a rule Trade Returns, &c. for the financial year 1881-2. For his ability to do this, Dr. Smith acknowledges his indebtedness to the Supreme Government who have, as he says, "most promptly supplied him with recent records." The remaining 380 pages of Book I are taken up with a minute description of each province and district, including the chief towns, places of historical and archæological interest, shrines and mission stations.

"The unit of the Indian Empire," says our author, "is the District or State corresponding to the much smaller County of English geography. For the first time it has been possible thus to treat, District by District, and State by State, the vast extent and details of Indian geography, beginning with Bengal and the metropolis of Calcutta; exhausting the East in Assam, Burma, and the Andaman and Nicobar Islands; then going over the North-West with Oudh; the Panjab with Kashmeer and Baloochistan; passing West to Bombay, with Sind and Aden, Ajmer and the Baroda, the Rajpootana, and the Central India States; treating the Central Provinces, Berar, and the Haidarabad State; and closing with the oldest, most peaceful, and in respect of Christianity, most progressive part of the Empire, in the South, or Madras, Coorg, and Mysore, the last recently transformed into a Native State."

Book II gives us in four chapters a sketch of the Geology and Meteorology of India. Here we have, in the main, a most readable abstract of the recently issued "Manual of the Geology of India," by Medlicott, Blandford and Ball, and the "Indian Meteorologist's Vade Mecum" by Blandford, supplemented by matter gathered from still more recent memoirs and reports.

It would be well nigh impossible that a book so comprehensive in its scope and yet so condensed should be issued free from errors. There are errors here, but the wonder is they are so few. Such as we have detected are in unimportant points of local description which do not materially detract from the value of the work. Dr. Smith has performed a very difficult task, and performed it well. He has supplied a much felt want, and we doubt not his book will be thoroughly appreciated. Its value is enhanced by twelve well executed maps, four isothermal and isobaric charts, a rainfall chart, an appendix giving the bibliography of the subject—a list of 304 works, and most of all by a complete index containing upwards of 5,000 names.

THE STUDENT'S HANDBOOK OF PHILOSOPHY. *Psychology: by* B. F. COOKER, D.D., LL.D., *Professor of Psychology &c., in the University of Michigan. London: Hodder and Stoughton. 1882.*

This volume of two hundred closely printed pages is the first of a series of Handbooks of Philosophy, designed to embrace Psychology, Logic, Ontology and Philosophy of Religion. Apparently the whole series is to be the work of

one person. This would seem to be a sufficiently Herculean labour; but "brother Jonathan" has a big country, big ideas, and is not afraid of a big undertaking.

The present volume treats of Psychology. Psychology is both a Science and a Philosophy. It is a Science in so far as it is a reduction, by observation, analysis and inductive generalization of the phenomena of consciousness to uniformities and general laws.

In the study of Psychology a variety of methods have been tried. There is first the method of the Physiological Psychologists. It assumes that every mental fact is but the other side of a Physiological fact, *viz.*, some molecular change in the brain. It therefore proposes to study the mind through the brain. But supposing the truth of the hypothesis were granted, the thing proposed could not be done, and that for two very sufficient reasons. First, it is impossible, to any appreciable extent to study the molecular changes that go on in a living brain. Secondly, even supposing that could be done, no study of the "neural tremors," however minute or protracted, could tell us anything of the mental fact, or do anything towards bridging the "intellectually impassable gulf" that yawns between brain-action and consciousness. There is, secondly, the method of the Associational Psychologists. According to it, the laws of association are not merely one of the phenomena to be studied, but they exhaust almost the whole field of inquiry. For they are the mental attractions and chemistry whereby separate fleeting sensations are transmuted and built up into the seemingly real and permanent human mind. But the attempt is as futile as that of accounting for the material cosmos by a "fortuitous concourse of atoms." There is, thirdly, the Metaphysical Constructive method. This method assuming that Thought and Being are identical, or at least that Thought is the antitype and measure of Being, starts with the idea of pure or absolute Being, and from it, by a necessary logic, seeks to evolve the human soul and the cosmos—the whole universe of finite being in short. This is to play the part of Procrustes over again, and instead of making the bed to fit the occupant, to stretch or curtail the occupant to fit the bed. Then, lastly, there is the Subjective Psychological method. This commences with observation and analysis of the phenomena of consciousness, and seeks, by inductive generalization and deductive inference, to reduce them to order and law. This is the method adopted by our author.

His division of the subject is worthy of notice. He first bisects it into Phenomenology and Dynamics. Under the former he treats of the *phenomena* of the mind; under the latter of the *faculties* of the mind. It is the fashion now-a-days to cast unbounded ridicule upon the notion that the human mind has faculties. No doubt there is a way of talking of the faculties of the mind which is objectionable, as giving the impression that what is meant is that a mental faculty is a portion or locality of the mind, which may be active while all the rest of the mind is quiescent. But no psychologist uses such language literally, if he uses it at all. All that is meant is that the mind is endowed with permanent capacities, or powers, of acting in a certain way, and that at one time it acts in one way, and at another time in another. If this is seriously denied, then the mind is reduced to a nonentity—to a mere series of phenomena, which have only a momentary existence.

Under the head of Dynamics, we have the following divisions and sub-divisions:—I. INTELLECT, sub-divided into (1) Spontaneous Consciousness, (2) Representative Consciousness, (3) Reflective Consciousness. Spontaneous consciousness comprehends (*a*) Sense, both external and internal, and is the faculty that apprehends phenomena, whether of body or mind. And here we may remark in passing that the position taken up by our author on the much disputed question of External Perception is that of Realism, although not the ordinary Natural Realism. He quotes with approbation the statement of Ueberweg. "There is no contradiction in the assertion that a true knowledge of what is outside my consciousness may be in my consciousness." At the same time we find him saying: "*World-consciousness is but the interpretation which the mind itself puts upon subjective feeling.*" "The mind re-acts upon the occasion or excitant of sensation and localises the object, referring the subjective feeling to its objective correlative or cause, and thus transmutes subjectivity into objectivity." (*b*) Reason, the organ of necessary and universal ideas, the power of spontaneously and immediately apprehending ultimate realities which lie beyond or behind consciousness. "This is pre-eminently the human faculty, which distinguishes man from and elevates him above the brutes, giving him a certain kinship with God." (*c*) Primitive Judgment, the faculty of relations; the faculty that apprehends the relations between the ideas of the Reason and phenomena. It gives us such immediate judgments as, "I exist," "I am dependent and finite," "I am free," "I ought," "God exists." Representative consciousness comprehends (*a*) Memory, or the power of retaining, recalling and representing to the mind what has previously been presented to consciousness: and (*b*) Imagination, or the power of representing what is recalled by memory under new combinations. Under this head fall to be considered all such abnormal states as Reverie, Dreaming, Hallucination, Insanity, &c. Reflective consciousness corresponds to the Dianœtic faculty of Aristotle, the Understanding of Kant and the Elaborative faculty of Hamilton. It is in short the Logical faculty.

II. The second division of the mental powers is FEELING. This is sub-divided into Sensation, Sentiment or Emotion, and Desire. We cannot stop to give the more minute sub-divisions.

III. The third division is WILL. Many psychologists efface the distinction between Will and Wish or Desire. With them, Will is merely the strongest desire. But Desire has nothing intentional, whereas this essentially belongs to Will. In harmony with this Will is defined as "the power of the soul by which it is the conscious author of an intentional act." In volition, the mind is a self-determining power—a first cause. Our author's treatment of this part of the subject is brief, but clear and incisive.

On the whole we can recommend this Handbook. It is well thought out and carefully written, and, in addition, is beautifully printed. It is concise, and there is no indulgence in lengthened exposition or illustration. It would probably, therefore, be thought dry by the general reader; but it seems to be well adapted for the purposes of the student.

HAND-BOOK OF PRACTICAL PHARMACY, BY GEORGE BIDIE, M.B., C.I.E., *Brigade Surgeon, H.M's Indian Army, &c. 2nd Edition, revised and corrected. Madras: Higginbotham and Co. 1883.*

Dr. Bidie tells us that he has aimed at making this book useful as a practical guide for students of Pharmacy. He has evidently had in view the needs of young men studying in the Medical schools of the Presidency, and has tried to compile a work which will be not only useful to them while under training, but also a *vade mecum* to them in after-life. In our opinion Dr. Bidie has succeeded in doing this. He has given just the information which such young men need to have on the subject, and that too, in a concise and compact form. The book contains a description of the ordinary operations of pharmacy, a summary of officinal pharmaceutical preparations, a pharmaceutical *materia medica*, and a good deal of information on the sources and adulteration of drugs and on the arts of prescribing and dispensing. The fact that the author was writing for the benefit of embryo hospital assistants and apothecaries has led him sometimes to go beyond the strict bounds of his subject. For example, on pp. 109-10 he gives directions for putting a patient under chloroform. When he thus wanders however his matter is always good.

Seeing that the book will be chiefly used by native young men, many of whom will often be far away from any one who could guide them, every care should have been taken to prevent the possibility of error. In some cases it seems to us this has hardly been done. For instance; why in the description of officinal pharmaceutical preparations (Cap. III) have the directions of the Pharmacopœia respecting the way in which the ingredients should be put together been almost systematically omitted? Imagine a young hospital assistant attempting to make *Unguentum hydrargyri nitratis* without any directions beyond the bare ingredients! It may be said that the book is not intended to be used by any one who has not the Pharmacopœia at hand. Why then put a temptation in the way of the student by giving the names and quantities of the ingredients? Dr. Bidie should have given either more or less than he has done. A very complete index has been compiled, which if it had been *only* an index would have been admirable. An attempt has however been made to add to its utility by appending the dose to each of the medicines named, though they are all given in the text. This has been done not by printing in full "grains 3 to 5," or whatever it might be, but by suppressing the preposition and substituting for it the most microscopic dash. It needs no greater amount of thoughtless carelessness than is continually met with in every department of life to read "Nux Vomica, dose grs. 13," or "Ext. Aconiti, dose grs. 12." In a matter of such importance as this every precaution ought to have been taken by type, &c., to avoid the very possibility of a mistake.

We notice these points as they seem to us to be defects in an otherwise excellent book. We hope the call for a third edition will soon give the author an opportunity of remedying them.

THE ELEMENTS *of* PHYSICS : T. P. KOTHUNDARAMIAH B.A. *Southern Star Press, Trichinopoly. 1883.*

The number of books on elementary Physics, which have appeared in Madras of late years, is rather remarkable, especially when we consider that most of them have been written by authors who were supremely ignorant of the subject. The book before us cannot, however, be classed with these. The author is a distinguished graduate and the Arni Gold Medalist of his year, which insures his having studied the subject. In the preface we are told that the book is intended to take the place of Balfour Stewart's Primer which, as is pretty generally admitted, is not exactly the kind of book suited for our Matriculation classes. We hardly think, however, that our author has succeeded in writing a book that will supplant the primer, for if the one errs on the side of simplicity we fear the other runs to the opposite extreme. We know of no more difficult task than that of writing a really elementary text book, one which will contain the most essential parts of the subject clearly expressed in a simple way, and illustrated by suitable experiments which will fix the facts in the student's mind and not be an additional burden to his memory. To say then that Mr. Kothundaramiah has failed in a task in which few succeed is no great reproach. While we think it is not likely to be taken as a text book we think it is sure to be very useful both to teachers and to scholars, for the matter is well arranged and the illustrations, so far as they go, well chosen. With the work as a whole we have been greatly pleased, but it is by no means free from errors, some of which have certainly surprised us very much. On page 15 we find the statement "The velocity of the motion of a body, gravitating towards another varies inversely as its mass," therefore of course a heavy body falls to the earth more slowly than a light body! This is of course only a slip, for what precedes and what follows is accurate. The next error we would point out is, however, more serious inasmuch as it is one to be found in many text books. The particles of a gas are said to repel each other, a statement which is repeated over and over again. Now though Maxwell thought there was a repulsion inversely proportional to the 5th power of the distance, this has nothing to do with the ordinary properties of gases. Again, in a foot note to page 30, we find the poor word *Force* abused in a way that we would not have expected from the author, no doubt he can point to this use of the word in many books, but that does not justify him. It reminds us of Maxwell's lines:

"That small word "Force" is made a barber's block
Ready to put on
Meanings most strange and various, fit to shock
Pupils of Newton."

A little more care might have been taken in the correction of the proofs,—a tedious but very important business—for we find on one page (p. 60) no less than five serious errors, while many mistakes in English have been allowed to pass. For instance, we find this more than once, "the mercury will be found *to stand in the tube to a height* of 30 inches," and again "carbonic acid is half as much havier (*sic*) *as* air." These mistakes disfigure a book greatly, but are easily corrected, and we hope that the author will soon have the opportunity of removing them in a second edition.

SEETA AND RAMA : *A Tale of the Indian Famine. Second Edition. Madras : People's Friend Press. 1883.*

We gladly welcome a second edition of this little tale. It is the work of a graduate of our local University, and on the whole it does him credit. Some of the verses, it is true, will not scan, but the substance is well stated. In a simple manner, free from the bombastic forms of expression which young Hindu writers in verse so often indulge in, he tells the story of two lovers. The scene is laid in the lovely village of Krishnapore, and Seeta, the heroine, is the Schoolmaster's daughter. A rumour runs that she is likely to wed the son of a rich villager, who loved her "with all the tender feelings that pure love inspires."

Meantime the disastrous famine comes and spreads desolation in Krishnapore. Seeta and her old father go forth in search of sustenance. The old man dies by the way and Seeta, who finds herself in a famine camp, is doubly desolate, as she is forced to the conclusion that Rama too has perished. But at length the famine camp is broken up and as Seeta wends her uncertain way towards Krishnapore, she is glad to receive as an escort one whose road lay in the same direction. On comparing notes of their past experiences, this turned out to be no other than Rama, who had been brought, in almost a dying state, into the camp, and whose case excited at the time much interest amongst the inmates. The end may be anticipated. They were married :—

"And never was a happier marriage seen,
In all that happy vale of Krishnapore."

The tale is fashioned after English rather than Hindu models both in sentiment and form. Krishnapore irresistibly reminds us of Auburn, the fortunes of Seeta are in many respects not unlike those of Evangeline, and some forms of expression seem to be coined in the mint of Tennyson. If we might offer counsel to the promising author, we would recommended him to construct tales in prose, describing actual Hindu life, with the view of being an interpreter to English readers or an instructor of his own country people. Such tales would be very useful, and such the author of *Seeta and Rama* is well qualified to write.

THE WISDOM OF GOETHE, *by* JOHN STUART BLACKIE. *London : Blackwood and Sons. 1883.*

Professor Blackie has done good service to English readers by giving them this volume of extracts from the writings of "the greatest poet of the present age, and the greatest critic of any age." In a very true sense Goethe is to Germany what Shakespeare is to England. Though men of widely different characters, each had that keen insight into, and sympathy with, human nature in all its forms and phases, which made him essentially a poet of life. For keen and searching subjective analysis combined with a chaste and powerful imagination, these two men stand far ahead of any other poets of ancient or modern times; while a rich gift of utterance—without which a poet must carry his inspiration to the grave—enabled each to leave behind him such a storehouse of homely philosophic thought as will be drawn on for ever yet never ex-

hausted. While to German readers Shakespeare is well known, English readers are as yet very ignorant of Goethe. Shakespeare, indeed, was understood and valued in Germany before his countrymen had fully learnt his worth, and our present high appreciation of his genius was at first, to a very large extent, the reflex of a foreign estimate. Wieland's translation introduced him to Germany more than a century and a quarter ago, and did perhaps more than anything else to *ungallicize* the German drama by setting before it a higher model than Racine or Corneille. In this sense Shakespeare may fairly be called Goethe's "Master," and although the pupil never attained the Master's power, yet his is the only name worthy of association with that of "the Immortal Bard of Avon."

Some of Goethe's works—*e.g.* Faust, Werther, and Wilhelm Meister, especially the first named, which has been many times translated,—are tolerably well known in England; but his others are almost wholly unknown except to readers of German. Professor Blackie has therefore done a real service in giving us a volume of extracts embodying a few—only a few—of his wise and beautiful words. No man could have done the work better. Professor Blackie brings to his task not only a loving appreciation of his author and a perfect knowledge of German, but also, himself a poet of no mean order, a power of graceful expression second only to Goethe himself. Under the headings, Life, Character and Morals, Religion, Politics, Literature, Philosophy, Natural History, Art, Women, Education and Culture, are given groups of extracts which go far to justify the compiler's introductory remark—"In the present age I have found no man whose utterances have a better chance to be generally accepted than the great German poet-thinker Johann Wolfgang von Goethe." Prefixed to the volume is a brief chronological account of the poet's life and an estimate of his character. In the latter chapter Professor Blackie does for Goethe what other hands have recently been attempting for Shelley,—he defends him against false charges in connection with his too numerous love affairs. Of a benevolent and passionate nature, with a preponderance of the æsthetic over the moral in his intellectual constitution, admired and sought by all, Goethe could not but love and be loved. At the same time his careless ease and utter disregard of consequences led him to think only of the present. His sins have doubtless been over-stated, and for this he is himself chiefly to blame. What Professor Blackie now does for him he scorned to do for himself. His Autobiography is his worst enemy, engaging the reader's sympathies, as it ever does, on the side of those whose love he rejected and never on his own. But even in this we see his true generosity of heart, which, whatever were his failings was all through life the strongest sentiment in his character.

To all lovers of sound philosophy and true poetic thought we confidently recommend this little volume.

WITH THE POETS: *A Selection of English Poetry. By* F. W. FARRAR, D.D., *Canon of Westminster. London: Suttaby & Co., 1883.*

This volume of Selections is well worthy of note for the sound taste and literary judgment which it displays. Canon Farrar introduces the reader to between eighty and ninety English authors dating from Chaucer to George

Eliot. His object has been to produce such a volume as will tend to form a true poetic taste in young readers. He is of opinion that poetry is not cultivated as much as it ought to be, and that the pieces selected as studies are often ill-chosen and unsuited to the purpose. We should have thought that in this age of Selections and admirably edited School Editions, such a criticism was hardly deserved; but those who agree with Canon Farrar will be ready to acknowledge that he has done much to remove the difficulty. The first half of the volume is devoted to poets who flourished from the 14th to the 18th centuries, the latter half to those of the present century. A few pieces also are added illustrative of American poetry. All the chief authors of each period are represented, and the minor writers come in for a fair share of attention. Prefixed to the collection is an Essay on the development of English poetry and the influence it has exerted in successive stages, which is well worthy of careful study.

Our only objection to the work is that the Ballad, though not forgotten in the prefatory Essay, is not represented in the selections. Although this is intentional it seems to us a mistake; for no department of English poetry, except perhaps the Drama, has exercised a wider and deeper influence upon the character and thought of the English people. The volume is also somewhat too sumptuously got up for the common every-day use to which, if it is to be useful, such a book should be put. In its present dress it is a luxury, but one which—unlike most luxuries— we can cordially recommend to those who, in the midst of a busy life, are anxious to extend their acquaintance with what is best in English poetry, but who have neither money nor time to bestow on the originals from which Canon Farrar has culled. In this country the name of such is legion, and amongst them this elegant volume should have a wide circulation. A companion volume is promised shortly containing further extracts from modern poets.

NOTES AND EXTRACTS.

In the recently issued Report on Public Instruction in the Madras Presidency for 1881-2, the Director gives us this interesting summary of the progress made during the decade 1871-81:—

"In 1871, out of a total population of 31,308,872 persons in the Presidency, 1,530,150, or under 5 per cent., were able to read and write. In 1881, out of a population of 30,868,504, the number under instruction or instructed was 2,268,996. This shows an increase of probably little less than 3 per cent. even after allowing for those in school in 1871 who were not returned as able to read and write. In the same period the number of scholars in schools connected with the department rose from 115,212 to 327,808, or by 185 per cent., showing that the extension of the influence of the department has been much more rapid than the extension of education amongst the people. For, whilst in 1871 the proportion of instructed to scholars was 13·3, in 1881 it was 6·9 only. The proportion was probably lower in the year under report, considering the great increase there has been in the number of scholars. There has been considerable difference in the progress of instruction in each district. The relative progress may be gathered from the following table, in which each district is ranked in order of progress according to the results of the Census.

1871.		1881.	
Percentage of persons able to read and write to population.		*Percentage of persons under instruction and instructed to population.*	
Madras	18·3	Madras	26·0
Tanjore	8·8	Tinnevelly	12·1
Tinnevelly	8·2	Tanjore	11·7
Nilgiri	8·1	Chingleput	10·8
Chingleput	7·9	Malabar	10·7
Trichinopoly	6·0	Nilgiri	9·0
Madura	5·9	Trichinopoly	8·8
North Arcot	5·4	Madura	8·7
South Arcot	5·3	South Arcot	8·3
Malabar	5·3	North Arcot	7·6
Bellary	4·2	Bellary	6·1
Kistna	4·0	Nellore	5·9
Nellore	4·0	South Canara	5·8
Kurnool	3·7	Coimbatore	5·7
Coimbatore	3·6	Kistna	5·5
Canara	3·5	Kurnool	5·1
Cuddapah	3·3	Cuddapah	4·8
Godávari	3·0	Salem	4·7
Salem	2·8	Godávari	4·5
Ganjam	2·5	Ganjam	3·7
Vizagapatam	2·3	Vizagapatam	2·5

"The figures above given include females, but it is under this head that the progress of education has, comparatively speaking, been more rapid than with the other sex, for whilst in 1871, under males 1,432,364 were able to read and write, the town of Madras excluded; under females only 24,921 were instructed to this extent. On the other hand, in 1881, of males, 2,007,989 were under instruction or instructed against 155,409 females, showing an advance in the one case of 40 per cent., and in the other case of 524 per cent., and if the figures for Madras be included the total advance is about 300 per cent., but the actual figures under females for Madras itself show comparatively little improvement. Again, whilst the proportion of pupils to reading population was 7 per cent., under boys in 1871, it was 13 in 1881, the corresponding figures under girls being ·7 and 1·4 per cent., respectively. It is possible that the figures of 1871 are more affected by the exclusion of pupils under "able to read and write" in the case of girls than in the case of boys. They are also affected by the public indifference to the education of women prevailing in the country ten years ago. But after making every allowance for these disturbing elements, the progress has been undoubtedly beyond what could have been looked for at the time by the most sanguine believers in the growing change in the opinion of the natives in the matter of female education. Such opinion has probably been changing more rapidly than the avowed public opinion, and in the privacy of the home life instruction must have been imparted to their wives or daughters by husbands and fathers, who probably have not even now the courage to show that they regard the vulgar opinion regarding the education of women with dislike, and, it may be, contempt. The tide has already turned, and how rapid may be its flow those will most hesitate to predict who are best acquainted with the marvellous changes which in bygone days have occurred in the opinion and beliefs of the people of this country: but that its flow will be steady and gradual, even if not rapid, none can doubt. What the influences are which have been at work it is difficult to say, or how far the demand for knowledge is coming from the women themselves; but there can be little question that the most potent engine has been the persistent and enlightened efforts of Christian Missionaries in this direction, for in the districts where this influence has been brought to bear progress has been most rapid; but the general spread of European and Christian ideas regarding woman's position in society among the younger men now becoming heads of families has told much on public opinion."

The following letter from Professor MONIER WILLIAMS appeared in the *Athenæum* of June 9th:—

OXFORD, *May 30th* 1883.

"All who are labouring for the promotion of female education in India, will learn with melancholy interest how great were the literary attainments of the sister of Srîpad Babajî Thakur of the Bombay Civil Service, who has lately died at the early age of nineteen. We are informed on the authority of her brother, that besides being a proficient in the literature of her own mother tongue (Marâthi), this remarkable young lady was also well acquainted with English, Kanarese, Persian and Sanskrit. In the last language she knew by heart Pánini's Grammar, the 'Unnádi-Sutras,' the 'Phit-Sutras,' Hemachendra's 'Kosha,' and the grammatical poem of Bhatti. As an instance of her powers in memory it is stated that she learnt the whole 'Dhatupathi' by heart in four days. When quite a child she was more than a match for any ordinary draught and chess player, and could solve the difficult chess problems propounded in the *Illustrated News* and other journals. If this account of her intellectual powers and acquirements be not exaggerated, one is inclined to ask whether her untimely end may not have been partly due to an over-wrought and over-tasked brain. When she was in a raging fever the relatives who surrounded her bedside neglected to send for European medical aid, though the Grant Medical College was close at hand.

"This is another sad illustration of the simple fact that in India we are ever confronted with the most bewildering extremes and the most unhappy contrasts. No middle term seems to exist anywhere, no intermediate region between excessive wealth and abject poverty, between lofty spiritual aspirations and the grossest superstitions, between the highest triumphs of knowledge and the deepest depths of the most degrading ignorance. We are told to beware of over-legislation. Ought we not also to be on our guard against over-education? If the forcing process is applied to human brains physically incapable of bearing any unusual strain, a nemesis must follow. Even in England we are apt to forget that the average weight of a woman's brain is several ounces less than that of a man. I commend to both our legislators and educators a wiser study of the law of adaptation as expressed in the following Sanskrit proverb: 'Yad yena yujyate loke budhas tat tena yojayet' (To whatever thing any other thing is suited in this world, let a wise man fit that to that)".

The Rev. JOSEPH COOK of Boston is now delivering—or probably by this time has delivered—a course of twelve lectures on "Advanced thought in Foreign Lands," the first of which—"Advanced thought in England and Scotland" is now before us. It is thoroughly characteristic both in matter and style. The first trait of modern British thought he finds in—

"An unflinching demand for the application of the scientific method—that is, of definition and induction to all subjects, however sacred.

"If there be one thing written on the face of our age more clearly than any other, it is that all topics must be submitted to a most thorough scientific examination, whether we make new departures or adhere to old ideas. We must revere the scientific spirit, whether it be radical or conservative in its outcome. You cannot live in England a week in the more cultured circles without feeling that you are a ninny, that you are a fool, if you do not believe in the scientific method in its application to the most sacred doctrines of religion and philosophy and art, as well as to politics and social science."

Another prominent trait which he dwells much upon is ridicule of materialism.—

"It is a characteristic of the more cultured circles in England, and especially in Scotland, to ridicule the vagueness, evasiveness, slatternliness, and untenableness of materialistic and diagnostic definitions of matter and life.

"You cannot live in the more cultured circles of Britain a month without greatly diminishing your respect for agnosticism and materialism. Yes; but

you say: 'England is the home of agnosticism.' So it is. 'The chief defenders of materialism are in Great Britain.' So they are; but I am profoundly convinced, after conversations with the leaders of philosophical thought in University centres and elsewhere in the British Islands, that really advanced thinking in England is fundamentally anti-materialistic, anti-agnostic, and so really anti-Spencerian. You are sitting one day in Edinburgh"—"when I say 'you' I mean myself" he had said at the beginning of his lecture;—"with a company of learned men, at table at dinner, and one of them says, Herbert Spencer cannot read German. You think that must be a mistake, and turn to Professor Calderwood, and say: 'Is it true? That is a strange assertion.' 'I have always understood it to be the truth.' You ask the views of the whole company and find that not a man doubts the assertion. Agnosticism, as represented by Spencer, has a very poor following north of the Tweed. You are in the study of Lionel Beale one day in London, Herbert Spencer's home, and he says 'That man's books contain so much false physiology that they will not be read ten years after his death, except as literary curiosities.' And Lionel Beale is supposed to know something of physiology * * * * It pains you not a little to find that your own country has large circles that follow him so loyally. It pains you to find that there is a British materialistic school. One day you express this view in company to Professors of Edinburgh and Glasgow, and one of them turns upon you somewhat sternly and says 'There is no British materialistic school. Britain includes Scotland and England. There is no Scotch materialistic school. There is no English materialistic school. If there is any materialistic school in these islands, it is a London and a Cockney materialistic school.' This is Professor Tait of Edinburgh. You hear the same sentiment expressed by Professor Veitch of Glasgow, the biographer of Sir William Hamilton. But there is an Alexander Bain in Scotland, who defines matter in the agnostic Spencerian way, as 'a double-faced somewhat, physical on one side, and spiritual on the other.' You ask Lionel Beale what he thinks of this definition, and he says: 'It is obvious nonsense.' You quote that opinion to Professor Veitch or to a dozen others whom I will not have the pedantry to name, and you will find them all repudiating this central keystone of modern materialistic theories."

He concludes his lecture with this beautiful passage:—

"Scotland you learn to love passionately. You pace to and fro in the Covenanters' burial-ground; you walk over the fields made classic by Burns and Scott; you look abroad from Scottish heights upon many a landscape in which no hill rears its head unsung. You come into close sympathy with her reformers, her orators, her poets, her statesmen. You find the whole heaven of the inner sky in Scotland studded with sacred stars, and you have an inspiration every time you touch but the hem of the garment of the most heroic portions of Scottish religious history. You love England, and when, at last, you bid adieu to the British Islands and look back upon them, what figure is it that best summarizes the advanced thought, the advanced philanthropy, the real heart of the leading political power in the world? Mrs. Browning, Shakespeare's daughter, I think of her as the best symbol of the choicest part of Britain. In her grand Christian convictions, her mighty aspirations for progress, her love of the poor, her spiritual tenderness, born of Christianity, her mental aggressiveness, born of science, her womanliness—I had almost said her manliness—I will say her heroic readiness to follow God whithersoever he may lead; this woman, with Tennyson at her side, is really the best representative I can name of what appears to me to be the innermost heart of England and Scotland."

A subscription has been raised in England to perpetuate the memory of Mr. John Francis, late publisher of the *Athenæum*, by the establishment of "Francis Pensions" for the relief of old and impoverished members of the trades connected with literature. Mr. Francis was a man whose name should certainly not be allowed to drop out of memory. He it was more than any other man who gave to England the incalculable boon of a *free press*. When

he began his labours journalism of all kinds was handicapped by a tax of eighteenpence on each *advertisement*, a penny stamp duty on each newspaper and a duty of three halfpence per pound on paper. To bring about the *abolition* of these obnoxious duties was the great object of his life. Towards this end he worked steadily and patiently, and although in the agitation which he was instrumental in setting on foot he always kept himself in the background, it was well known that from the armoury of his immense knowledge came every fact and argument which was used as a weapon in the campaign. His labours were crowned with complete success, and he lived to see all his prophecies fulfilled. The following interesting facts are from the *Bookseller*:—

"An objection commonly entertained to an unfettered press was the fear that the removal of all restrictions would promote the growth of immoral literature. * * * How entirely groundless was this alarm is proved by the enormous increase which has taken place in religious periodicals of every denomination, and the general elevation in the tone of secular journalism. The good has far outstripped the evil, as Mr. Francis foresaw it would. According to some statistics collected by him in 1830, there were 64 newspapers then published in London, with an aggregate circulation of 379,747. In 1860 the number, including class journals, had increased to 177, with a circulation of 2,284,600. In 1882 there were 554 of such publications, the aggregate circulation of which it would be impossible to estimate. Of the total number only seven are nominally of an infidel character, although, perhaps, a dozen more are of questionable repute. Compared with the vast bulk of healthy periodical literature, the ill-conditioned weeds are so few as scarcely to deserve mention. At least one of the cheap periodicals issued by the Religious Tract Society has a circulation *more than quadruple that of the entire infidel press throughout the country.*"

This last is certainly a noteworthy fact, and, coming, as it does, from a wholly independent and reliable source, is a remarkable confirmation of Prof. Tait's assertion (as quoted by Mr. Cook) that there is no *such thing as a materialistic school* in England. A similar statement to that of the *Bookseller* may be made respecting the circulation of the atheistic and religious publications of this country. We have been at some pains to collect statistics and find that that excellent and cheap little paper "*Progress*," published by the Madras Auxiliary of the Religious Tract Society, has a circulation more than three times as great as *all the atheistic periodicals* of India taken together.

A very interesting movement has been set on foot in the Mysore State for the amelioration of the condition of the non-caste population of South India, or, as the promoters express it "for the Regeneration of the Pariahs." A Provisional Committee has been formed to collect opinions, and has issued an "Appeal to the Native Princes, Zamindars, Merchants, Graduates of the Madras University, and *all other educated gentlemen* of Southern India."

"We have to recognize," says this appeal, "the sad fact that the low position of our country in the scale of civilization is partly owing to the ignorance in which the masses are at present steeped, and partly to the division of the Hindus into castes and sub-castes of *exclusive* nature with a tendency to limit our sympathies and sphere of usefulness. The caste system and its concomitant religious intolerance, when in their full vigour, not only made the higher orders totally neglect the welfare and advancement of the lower classes, but assigned to them a degrading social position—a state of things not at all conducive to the continuance of friendly feeling between both. But while it is a source of gratification that the progress of higher education during the last 30 or 40 years has to some extent mitigated the evils of the spirit of cold in-

difference and jealousy above alluded to, we cannot mince matters and ignore the absolute truth that a great deal more remains undone. We can no longer afford to be unconcerned about the sad and distressed condition of the lower orders amongst us such as the Tamil-speaking Pariahs, who as a body are ignorant, ill-fed, and given up to the pernicious vice of drinking which consumes the major portion of what little they earn."

After pointing out that it was not always so, that these now 'despised' pariahs have a language and history of which they might well be proud, the questions are asked—"Is it then just, proper or expedient to look down upon the pariahs, or allow them to pine away in their miserable condition? * * * Is it not time to do something for the amelioration of the lower classes of Southern India?"

The objects specified as desirable, provided funds can be obtained, are:—

"(*a*) To establish Charity schools in all the large towns of Southern India for the education of the lower orders.

"(*b*) To employ learned men to go about the country preaching religion and morality amongst them, and to train up their own preachers.

"(*c*) To give scholarships to promising and intelligent lads to enable them to prosecute their studies in English schools."

If the proposed Association be judiciously guided it may do much good. It is undoubtedly a step in the right direction, but we fear its promoters will be disappointed in the response made to their appeal. It argues well however that the chief spirits of the movement are men of good position and of well-known ability and integrity; and we shall be glad if our fears are not realized. Rai Bahadur A. Narrainaswamy Moodaliar has already promised a donation of Rs. 8,000 towards the work of the Association.

From the recently issued Census of Protestant Missions in India for the year 1881, we gather the following statistics. They show in a concise and clear manner the progress made during the last three decades.—

	1851.	1861.	1871.	1881.
Mission Stations	222	319	423	569
Native Churches	267	297	2,278	3,650
Foreign and Eurasian Missionaries ..	339	479	488	586
Ordained Native Ministers	21	97	225	461
Native Lay Preachers (Catechists, &c.) ..	493	1,266	1,985	2,488
Native Christians	91,092	138,731	224,258	417,372
Anglo-Vernacular Schools (Boys) ..	91	162	347	385
„ „ Pupils „	12,401	21,090	40,075	45,249
Vernacular Schools „	1,099	1,353	1,912	3,020
„ Pupils „	38,661	36,386	54,241	84,760
Boarding Schools (Girls) ..	86	108	no returns	155
„ Pupils „ ..	2,274	3,912		6,379
Day Schools „ ..	285	261	664	1,120
„ Pupils „ ..	8,919	12,057	24,078	40,897
Zenana Pupils „ ..	—	—	1,997	9,132

The rate of increase in the number of Native Christians in the whole of India from 1851 to 1861 was about 53 per cent.; from 1861 to 1871 it was 61 per cent.; and from 1871 to 1881 it was 86 per cent. The largest *actual* increase has been in the older Missions of the Madras Presidency where from 160,955 in 1871, the number of Native Christians has risen to 299,742 in 1881. The highest *rate* of increase has been in the Panjab where from 1,879 Native Christians in the year 1871 the number has risen to 4,762 in 1881.

A new work from the pen of the Rev. S. Mateer, F.L.S, entitled "*Native Life in Travancore*," is announced by Messrs. W. H. Allen & Co. Few if any living Englishmen are so thoroughly acquainted with "the Land of Charity" as Mr. Mateer, and we have no doubt his work will be found a valuable contribution to our knowledge of this most interesting part of India.

SCIENCE JOTTINGS.

The death of Dr. Spottiswoode, the President of the Royal Society, at the comparatively early age of 58, leaves a blank in the ranks of Science that will be much felt. Mr. Spottiswoode was unable to be present at the Royal Society's Soirée on the 13th of June on account of an attack of fever contracted during a visit to Rome; but at that time none seemed to have any fear of a fatal result of the illness. Before, however, his friends in Madras had learned that he was seriously ill, the telegraph had brought word of his death.

Dr. Spottiswoode was born in London, but belonged to an old Scottish family whose members have well upheld the honour of their name. He was educated at Eton, Harrow and Oxford, where he distinguished himself greatly in Mathematics. After his graduation he gave lectures in Balliol College for a few terms on Geometry of three dimensions. He left Oxford to undertake the management of the business of Queen's Printers, which his father had handed over to him. To this business he devoted his energies for some time and with great success. The business, however, did not confine him to London, for in 1856 he made a tour through Eastern Russia and in 1860 another through Croatia and Hungary, of each of which he published an interesting account. It is in Science, however, that Spottiswoode has left his mark most strongly, both as an original worker and as an organizer of Societies. His influence has been particularly felt in the Royal Society, the Mathematical Society, the British Association and the Royal Institution, in each of which he held important offices. It would be out of place here to give any account of his Mathematical writings, but we may say that he took special pleasure in all forms of analysis which involved *symmetry*. It was only at a comparatively recent date that he turned his mind to Physics, but there too, he has left his mark. His most important Physical work was done on Polarization of Light and on Electrical Discharges. On the former subject he wrote an elementary treatise which appeared as one of the 'Nature' series, and is an admirable little work on the subject. In Electricity he, for the most part, worked with apparatus of such power that he was able to perform experiments quite beyond the reach of less wealthy experimenters, and some of the results obtained were both remarkable and valuable. Amongst other gigantic pieces of apparatus he possessed an induction coil, the secondary coil of which contained 280 miles of wire. It weighed 15 cwt. and was capable of giving a spark 3½ feet long. Quite recently, in company with Dr. Warren de la Rue, he carried out a very important series of investigations upon the nature of electrical discharges in vacuum tubes, with a battery containing at first 1,080 and afterwards 8,000 cells. A number of very valuable results were obtained. Not long ago we saw in the works of a

well known instrument maker a 'Holtz' electric machine which was being constructed for him, which was so large that it required a steam engine to drive it.

Dr. Spottiswoode was married to a daughter of the late William Urquhart Arbuthnot, a Member of the Indian Council. He was an LL.D. of Cambridge, Dublin, and Edinburgh; D.C.L., of Oxford, F.R.S.E., F.R.G.S., and F.R.H.S.

Some time ago a number of very remarkable fossil footsteps were discovered at Carson Nevada, which are supposed by many to be human tracks. They are from 18 to 20 inches long and 8 inches wide, the stride being from 2½ feet to 3 feet. Except for the large size they resemble closely human footsteps in soft mud, but some of the best qualified judges that have seen them consider that they are the tracks of some large plantigrade quadruped, most likely a gigantic ground-sloth. They occur along with Mammoth tracks.

An interesting investigation of the flora of Ancient Egypt has been made by Dr. Schweinfurth from materials obtained from a tomb which dates back to at least 1000 B.C. The wreaths and other funeral offerings contained a large number of different species of plants.

A recent investigation of the chemical character of the venom of serpents has led to the conclusion that the venom contains three distinct proteid bodies, one of which is probably harmless while the other two are poisonous.

Baron Nordenskjöld has again sailed for the Arctic regions with the object of investigating some questions on the nature of the inland part of Greenland. He is accompanied by a picked scientific staff.

Professor Lord Rayleigh, Clerk-Maxwell's successor at Cambridge, has been nominated as President of the British Association at its meeting in 1884, which is to be held at Montreal.

There was a very fine display of sunspots at the end of June and the beginning of July. Several large spots could be well seen with a common telescope provided with suitable dark glasses.

The new Vienna Observatory was inaugurated by the Emperor of Austria on the 5th of June. It is nine years since the work was begun, and during these years the present Director has visited all the chief Observatories of Europe and America to study their instruments and fitting up. In consequence it is to be expected that the Vienna Observatory will be the most complete one in existence. It contains an equatorial telescope, the object glass of which is 27 inches in diameter constructed by Grubb of Dublin. This is the largest refractor at present in existence, but it is to be exceeded by no less than 9 inches by the new telescope which is being built for the 'Lick' Observatory in America.

The proposal to erect a permanent Meteorological station on the top of Ben Nevis in Scotland seems at last likely to be realized. A considerable sum has already been subscribed for the purpose, and arrangements have been made to construct a road to the top at once. The importance of this work to meteorology can hardly be over-estimated, for the observations that have been made on the top for the last two summers by Mr. Clement Wragge have shown their great value in forming early forecasts of the coming weather, and in yielding information about the vertical movements of atmospheric disturbances.

The death is announced, at the advanced age of 95, of General Sir Edward Sabine. He was a former President of the Royal Society and a valued contributor to its transactions. His chief scientific work was done in connection with terrestrial magnetism, the constants of which he determined in many parts of the globe. He also made a large number of pendulum observations for the determination of the figure of the earth.

News has been received from the party sent to observe the total eclipse of the 6th of May last at the Caroline Islands. The observations were, on the whole, successful. The corona was very large and several good photographs both of it and of its spectrum were obtained. A large number of other photographs were also taken, which are likely to yield most valuable results. A careful search for intra-mercurial planets was unsuccessful.

The International Fisheries Exhibition in London has proved a great success: it was visited by more than half a million people before the end of June.

The Albert Medal of the Society of Arts has been awarded to Sir J. D. Hooker for his eminent services as a Botanist and scientific traveller, and as Director of the National Botanical Department. India, we may add, has benefited greatly by his botanical work.

C. M. S.

QUERIES.

[*All queries for this section should be sent to the Editor, 69, Mowbray's Road, Royapettah, Madras, and should reach him not later than the 15th of each month.*]

3. (P. R. Sundara Aiyar, Ernakulam)—(1) *The age of miracles is past. What degree of responsibility does this show to be devolving on the present and future generations? May miracles be expected in future in any rank of society?*

This question may best be answered by reconstructing the series of propositions on which it probably rests. The questioner feels that miracle is a very powerful, if not irresistible, form of evidence, and that any generation of men which had a supernatural religion presented to it with such a sanction was in a more favourable position than our own for believing in the truth of that religion. Since we have no miraculous attestation addressed to our senses now, may we not be excused if we reject a supernatural religion until we receive supernatural testimony in its favour? Take for example Christianity. According to the Sacred Scriptures, the generation contemporary with Jesus had his miracles and his resurrection to help them to believe. Why should we believe in Christ without such signs being given to us?

The question is a very natural one, but it takes a very different view of miracles from that of Christ himself. The teaching of the parable of the Rich Man and Lazarus, shows that he regarded their evidential value as very low. "If they hear not Moses and the prophets, neither will they be persuaded though one rose from the dead." The moral evidence of scripture, witnessed by the conscience within, is what Christ trusts to as the great means of producing conviction. Truth is one, moral truth especially, and the conviction which brings about belief is moral and inward.

Still miracles have an evidential value. The first miracle narrated by the Evangelists is said to have manifested forth Christ's glory: and his disciples, believed on him. But the great evidential value of miracles is for the believer

and not for the unbeliever. The heart and conscience being at one with Jesus his miracles are gracious signs of his power, illustrations of his beneficent activity, pictures of the nature of his Kingdom. The one miracle addressed to unbelievers is the miracle of the Resurrection. "An evil and adulterous generation" says Jesus, speaking to his own day, and not less to ours, "seeketh after a sign; and there shall no sign be given unto it, but the sign of the prophet Jonas. For as Jonas was three days and three nights in the whale's belly, so shall the Son of man be three days and three nights in the heart of the earth." That is to say: minor miracles being without effect save on the hearts of the faithful few, there remains the grand miracle—the Resurrection.

Now the evidence of the Resurrection is unique and has lost none of its force in all the ages that have elapsed. Christianity itself, its sacred books, its holiest rites, all witness to its truth, for without pre-supposing it, they are impossible. The chain of evidence for this transcendent event is the most complete that history can show, and the responsibility of those who reject it now even greater than that of those who refused to believe it at the time.

As for the last part of the question regarding what may be expected in the future, the Christian answer must be 'Yes.' To the crowning miracle of the past—the resurrection and ascension of Jesus, there corresponds the crowning miracle of the future. "This same Jesus which is taken up from you into heaven, shall so come in like manner as ye have seen him go into heaven." So said the angels to the apostles as they gazed upwards after their ascended Lord and in that hope his people wait.

That the age of miracles is past is by no means certain. On the contrary, every year gives to faith new and convincing proof of God's present working for holy ends in and under all the forces of nature. When once the veil has been fully lifted from the face of the universe, it will show not nature without God, but that nature and the supernatural are really one.

(2) *Christianity, it is said, does not hide those moral difficulties which seem to overpower us. How is it really in advance of that flimsy optimism which says "Whatever is, is right"?*

One great merit of Christianity is that it attempts no intellectual solution of the mystery of evil. It recognizes its existence, and assures us only that God is not to blame. Then it gives its strength not to its explanation, but to its destruction. There is a sense no doubt in which Christianity is nobly optimistic, but it is not by shutting its eyes to evil, and lying down to sleep on the pillow of 'the best of all possible worlds.' As a revelation, it discloses to us the divine activity working amid evil for its suppression, and sparing no sacrifice for that holy end. As a religion it aims at linking man's energies on to the divine, and enlisting him in the war against wrong. It appeals to a sacred patriotism through its conception of the Kingdom of God, and calls forth the complete energies of redeemed man in the vindication of his human birthright, of which evil robs him. The flimsy optimism justly stigmatized by the questioner would lull men to sleep. Christianity by appealing to his ideal of righteousness and revealing to him the divine activity exerting itself in that direction, stirs him to strenuous moral endeavour. It never ceases to call evil a horrible thing, and to urge its extirpation in himself and others.

4. (K. L. KOTHUNDARAMIAH, MADRAS)—(1) *What are the ends of punishment?* (2) *Are their crimes which merit eternal punishment? And what are they?* (3) *Are criminals, punished on earth for certain crimes, punished again in heaven* [perhaps the *future state* is meant] *(by God) for the same offences?*

These three questions may be answered together. The whole subject of future punishment is one that has been obscured by a limited view of the nature of punishment in general. The kind of punishment with which we are most familiar is legal punishment, and this has been adopted as the type of all punishment. As a matter of fact, it is only one particular kind, very imperfect, and in every way unsuitable as a type. Law attaches its penalties only to external actions, and acknowledges its powerlessness to reach states of mind unless these are exhibited by acts. Ethical science on the other hand regards

actions as mere symptoms of mental and moral states, and ethical punishment as contrasted with juridical, applies to moral states not to individual acts.

Now the moral government of the world, if it exists at all, must be a government taking notice not merely of the *accidents* but of the *essence* of wickedness, not merely of individual acts but of the moral states which they presuppose. The divine government is so arranged that evil ethical states are causally connected with pain and loss, while a right ethical state is productive of happiness. The end of ethical punishment is thus the moral order of the universe, just as the end of legal punishment is the order of society. But while legal punishments are purely arbitrary, ethical punishment is itself a part of the universal order. Sinners are punished by the operation of those laws which they themselves have broken, the very laws upon which the whole order, harmony and beauty of the world depend.

Hence the irrelevancy of the question as to the repetition of punishment. Such a question could never have been asked had not the questioner been under the domination of the legal and imperfect view. Human Law punishes an act by a certain penalty, and when the penalty has been endured, human law has nothing more to say. But the punishments of the divine government are effects of certain causes, pain and loss springing from an evil ethical state. So long as the cause continues, the effect will also continue. If the evil ethical state existed in the present life, its tendency was to pain and loss. If it continues to exist in the future life, the tendency to pain and loss must also continue.

Thus we are led to the question of eternal punishment. Our answer must be that so long as sin, any sin, continues, its tendency will still be to pain and loss, in other words it will be accompanied by punishment as its divinely appointed effect. Readers of the Bible should satisfy themselves as to what it teaches on the subject of future punishment. Here however we are dealing speculatively with speculative questions, and are clearly led to the conclusion that sin persisted in eternally must be sin punished eternally. As a matter of fact we all know that sin persisted in tends to be persisted in still longer, that length of time instead of inclining a man to repentance most frequently hardens him in his sin. May not this show that, unless there is some unknown intervention of divine mercy, the wicked man will wax worse and worse, and his punishment be eternal.

(4). *What evidence have we of the immortality of what is called the soul?* (5) *Are there not passages in the Bible which flatly deny any immortal principle in man?*

What is called the soul. What else would you call it? To quarrel with language which you cannot mend is a sign of juvenility, and a want of mental robustness. Why should a man refuse to speak of the soul except with a latent apology for his rudeness, or an implied sneer that he does so out of accommodation to the weakness of the rest of mankind?

The two questions thus grouped together ask for an exposition of the argument for personal immortality, first apart from, and then in connection with the Holy Scriptures. This it is of course impossible to give here. We shall have in a future number an article on "*Immortality*" by a well known English writer. We advise our correspondent to look out for this and *study it carefully* when it appears.

The leading lines of thought, on which an expectation of immortality is justified from nature are sufficiently familiar to all intelligent men. The argument from consciousness and the evident inconceivability of our ceasing to exist; the argument from analogy, which holds the soul to be like other existences capable of changing its form but not of passing out of existence; the argument from the widespread belief in a life after death; and above all the argument from the highest aspirations of the highest members of the race in all ages are worthy of consideration. They show that there is nothing improbable in the continuation of personal existence after death, and that those who deny it are going out of their way to oppose the probable by means of the improbable. Demonstrative evidence of immortality however is unattainable from nature, and the arguments seem to reach only a high degree of probability.

When we come to Christian Revelation we tread with firmer foot, for life and immortality have been brought to light by the Gospel. What then of those passages which "flatly deny an immortal principle in man"? The truth is that the question argues an almost incredible paralysis of the historical sense. The questioner is evidently unable to rise above the conception of the Bible as a storehouse of proof texts, all of equal authority. Thus people of this school will quote the utterances of Job's three friends, which are disapproved by God, as of equal authority with the words of Jesus because they are in the Bible. The error of our questioner is a little more respectable. He simply imagines that such persons as the writers of the Psalms, because their works are inspired, should stand in as favourable a position with regard to this doctrine as Christians. On the contrary, these ancient writers laboured in darkness and difficulty especially about the future life, because the time had not come for the fuller revelation. They had a light within them, but not the full light. Hence the darkness of their views regarding death. Not that they ever contradicted the truth of a life after death. They did believe in such a life, but they regarded it as shadowy and unsatisfying, a region of gloom and terror. It was reserved for Christ to scatter this darkness by his personal testimony. Vague hopes and fears, longings and aspirations of the nobler souls now give place to absolute certainty. "He descended into the region of the dead. The third day he rose again," is the foundation on which the Church rears the superstructure. "I believe in the Resurrection of the body and the life everlasting."

5. (A. F. N.—Bellary)—*In your July number you give an account of a year's work of the 'National Indian Association'. Will you please inform me what this Association is, what its objects are, and by whom it is conducted?*

The National Indian Association was established by Miss Carpenter about thirteen years ago. It is under the patronage of H. R. H. the Princess of Wales, and numbers amongst its members many prominent Indian officials and native gentlemen. Its head-quarters are in London where the Honorary Secretary Miss E. A. Manning is the life and soul of the movement. The objects of the Association are thus explained in its prospectus:—

"To extend a knowledge of India in England, and an interest in the people of that country.

"To co-operate with all efforts made for advancing education and social reform in India.

"To promote friendly intercourse between English people and the people of India."

It endeavours to carry out these objects in a variety of ways, the chief of which are by arranging for lectures, social gatherings &c., and (in Madras at least) by directly undertaking female education. There are Branch Associations in Calcutta, Bombay and Madras, the last being under the patronage of H. E. the Governor, and the presidency of the Director of Public Instruction, with Mr. Chensal Rao Pantulu Garu as Honorary Secretary. All the work of the Association is conducted on the principle of non-interference in matters of religion. Membership is obtained by a subscription of Rs. 7 per annum, and this entitles to a copy of the Journal of the Association, a Monthly Magazine of 64 pages. We advise our correspondent to join the Association. It well deserves support.

NOTICE TO CORRESPONDENT.

A. Sankariah, Esq., Trichoor.—Your communication (received through the Rev. W. Miller) will appear in our next issue.

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THE PLACE OF AGNOSTICISM IN RELIGION.

There generally exists, alongside of any prevailing system of thought or belief, a more or less distinctly opposite tendency; and if, as frequently happens, either of these is led to ignore the just claims of the other, (for it is very seldom that both do not contain some portion of truth) then, that other is almost always led into an undue assertion of itself. This provokes similar assertion on the opposite side, and the result too often is, that, instead of clear reasoning and calm statement, there is nothing but strong and angry assertion, amidst the dust and storm of which both parties lose all distinct consciousness as to where truth lies; or, indeed, if there is left any consciousness of its whereabouts, the eyes of both are apt to be firmly shut against its recognition, unless it happens to be a truth that makes for victory.

It seems to me that considerations such as these help to explain, to some extent at least, the present unfortunate relations of Theism and Agnosticism to each other. Unduly-pronounced assertion of knowledge has led to a corresponding unduly-pronounced assertion of ignorance. There have been those whose mode of expression at any rate, gave one the impression of their having pigeon-holed all the attributes of the Almighty, and of their being as familiar with their nature, and as certain of their number, as, we may presume, a merchant is with the contents of his office desk. The whole designs of Providence with reference, at least, to the human race seemed

thoroughly well known to them, and doubt or hesitancy as to any of the high and solemn matters involved was apparently never felt. This assumed knowledge too was often accompanied by what I will venture to call a sort of spiritual flippancy,—a conspicuous absence of that indescribable solemnity, which would have indicated, that those who were so ready to assert the truths intellectually, had any deep living hold of them spiritually. And, as the truths in question were truths of the spirit,—requiring above all to be spiritually discerned,—and could only prove and justify themselves as realities by the power they were seen to possess, of ennobling and purifying the lives of those who professed to be influenced by them, it was natural that, in the absence of such power of proving and justifying themselves, there should gradually grow up an indifference and scepticism with reference to them, as being but the baseless fanciful construction of the human mind. I do not mean to say that this indifference and scepticism may not be due to other causes as well. I believe it is, and shall have to say something on this subject in the course of this paper, but at the same time, I think that the merely formal and mechanical way in which spiritual truths have often been held, has done something to prepare the way for that indifference and scepticism with regard to them which has culminated in the Agnosticism of our day.

This reactionary tendency maintains the impossibility of knowing or ever getting to know whether our spiritual consciousness has any real objective validity; whether, for example, there is any real object to answer to, and capable of satisfying the soul's thirst after God, as there are objects that answer to and are capable of satisfying the various bodily senses. Scepticism is thought to be impossible in the region of the latter, and faith as impossible in the region of the former. The realm of spiritual truth has therefore come to be shunned as leading no whither,—to no conclusions that can be submitted to the definite test of experience, and be accepted or rejected accordingly. Men have taken refuge from what seems to them only an unprofitable sea of speculation, in a more eager and enthusiastic pursuit of what are called the natural sciences. Withdrawing from what they regard as the region of pure assertion and the unverifiable, they have betaken themselves with redoubled ardour to the region where solid truth seems to invite them to lay hold of it and prove it by all the processes familiar to us as modern scientific method. Thus embarked in the pursuit of physical science, and seeming as they pursued it ever to feel their feet on the solid ground

of knowable and verifiable fact, this region has come to seem to them the only region of reality, and the realm of the spiritual to look more and more like the realm of ghosts, in which flitted only the vague, shadowy, unsubstantial phantoms of morbidly excited imaginations, or of more or less consciously disingenuous intellects. And so ultra-dogmatism (so often accompanied with real weakness of spiritual belief) has brought about its own overthrow,—a circumstance in no wise to be regretted if there were not also involved in its overthrow the loss of truth which, if properly held, forms, as seems to me, the most precious possession of the human race. A new and strange species of dogmatism has arisen, which roundly declares affirmation, however modestly made, within a certain sphere of the human consciousness impossible, while it apparently considers it can be triumphantly made in the region ordinarily known as scientific. Now this dogmatism seems to me to be as much an excess as that whose place it has taken. It was at first a protest, and a salutary protest, against the tendency, (specially characteristic of the beginning of this century), of hard and dry dogmatism to prate mechanically of its knowledge of the divine nature and the divine plans. But, in protesting, it seems to me to have fallen into the error of protesting too much, and is in danger of becoming as hard and dry a system of dogmatic denials as the other was of dogmatic assertions.

It is the purpose of the following remarks to endeavour to show what the writer considers to be the proper place of Agnosticism in religion, and in doing so, to show that with every confession of ignorance in this region, a corresponding confession of faith seems imperiously demanded by the human heart,—a faith which, as it seems to me, as much implies a spiritual reality to correspond to it, as our ineradicable faith in an external world implies an external reality to correspond to *it*.

I shall first, then, endeavour to set forth how far the man with a definite religious faith is prepared to follow the less definite Agnostic in his confession of ignorance;—at what point he finds it impossible to follow him further, and feels himself called upon to affirm that he knows, or, if you please, believes.

It is the merest truism that the finite cannot comprehend the infinite. No matter what attribute (to use ordinary forms of speech) of the Divine Being is mentioned; as infinite, it must be beyond the power of a finite intelligence to comprehend it. And in this way, we may name every attribute in turn, and of every attribute thus named, we may say that as infinite it is incomprehensible. We

may then proceed to sum up the whole, and say, that, as every attribute ascribed to the Divine Being is infinite, and as the infinite is necessarily the incomprehensible, the nature of the Divine Being is necessarily the incomprehensible. Here, then, in a sense, we have a complete Agnosticism with reference to the divine Being. We might go even further, and admit that, in ascribing attributes at all to the divine Being, we were speaking in a figure,—in a manner which, being human and finite, was not to be understood as conveying any adequate idea of the divine nature.

But perhaps the best way to bring out the difference between the Agnosticism that goes along with a definite religious belief, and that which is unaccompanied by any such, will be to give a few quotations from those who held the former position. Take a few amongst many similar ones to be found in the Jewish and Christian Scriptures. In Isaiah's prophecy, for instance, we find the Divine Being (spoken of as 'the Holy One'), represented as saying:—"To whom will ye liken me or shall I be equal? Hast thou not known? Hast thou not heard, that the everlasting God, the Lord, the Creator of the ends of the earth fainteth not, neither is weary? There is no searching of His understanding."* Or, again, take this rapturous outburst of St. Paul's:—"O the depth of the riches, both of the wisdom and knowledge of God! How unsearchable are His judgments, and His ways past finding out! For who hath known the mind of the Lord or who hath been His Counsellor?"† Here, then, we find fully acknowledged, or rather, strongly asserted, the impossibility of likening God to any one else; the unsearchableness of His understanding, His judgments, or His ways; and the hopelessness of attaining to a knowledge of His mind. Yet, with all this profession of invincible ignorance, it will be seen that there is a profound difference between this form of Agnosticism and that which it is so fashionable to profess at the present day. The Unsearchable is declared by the definitely-religious Agnostic to be God. He who is to be likened to naught else is the *Holy One*. *It is judgments* that are declared to be unsearchable, and it is a *mind* that is said to be unknown. And so it ever is. Even while the religious spirit is humbly disclaiming knowledge, it in the same breath claims to know. Even in declaring that the divine "thoughts and ways are as far above the human, as the heavens are above the earth," it apparently makes the declaration only to secure credence for what it supposes might seem otherwise incredible, viz., that "the Lord will have mercy upon,"—"will abundantly pardon" the man who "forsakes his wicked ways and unrighteous thoughts." It will be seen then, from these quotations, that that which is declared to pass beyond the sphere of human knowledge is not absolutely the nature itself of the First Cause of all things, so much as the infinity of that nature, and the mysteriousness of its operations. We know,—and on this fact every stress must be laid,—but we know *in part*. We see through a glass darkly.

* Isa. xl. 25 and 28. † Rom. xi. 33 and 34

I may be permitted to make one more quotation in which these two elements of knowledge and ignorance are brought into the closest and clearest, but not hostile contrast. The writer is meditating on the wonder of Omniscience,—the marvel of a mind to which there is no knowable thing unknown, and exclaims:—"O Lord, thou hast searched me and known me. Thou knowest my downsitting and my uprising; thou understandest my thought afar off. Thou compassest my path and my lying down and art acquainted with all my ways, for there is not a word in my tongue, but, lo, O Lord, thou knowest it altogether."* Need we wonder that when the writer's mind was filled with the contemplation of such marvellous knowledge he should add: "Such knowledge is too wonderful for me; it is high I cannot attain unto it. Whither shall I go from thy spirit, or whither shall I flee from thy presence? If I ascend up into heaven, thou art there, if I make my bed in hades behold, thou art there. If I take the wings of the morning, and dwell in the uttermost parts of the sea, even there shall thy hand lead me, and thy right hand shall hold me. If I say: Surely the darkness shall cover me; even the night shall be light about me: Yea, the darkness hideth not from thee, but the night shineth as the day; the darkness and the light are both alike to thee."† Many however who read these soul-stirring words, and feel their spirits moved to their depths in response, may be inclined to object,—in all sadness perhaps,—"But what is all this supposed knowledge but unproved and unfounded assumption? And if it is only this, what is its value"? To the first of these questions I would answer that words that can stir the soul as these do, cannot surely be mere wind and nothing more; and to the second I would answer that if they are, I hardly know what value they can have. Things, indeed, have been assumed without warrant in the sphere of the spiritual, as well as in that of the physical,—things which ought to have been proved in some way,

* Psalm cxxxix. 1—4. † Ibid v. 6—12.

but were not. A wholesome scepticism with regard to these is very desirable, but I must add that, as it seems to me, the scepticism has lost its wholesomeness and become morbid in the department of consciousness which we are at present considering. A spirit of rejection in the sphere of the spiritual is abroad, which, if it were applied in the same indiscriminate way, in other directions would leave the human mind hardly anything to accept. In opposition to the blank Agnosticism which is the outcome of this spirit, I think there is reason for maintaining that there are elements of our experience affording solid standing ground on which we may base a definite and deep religious faith.

The word *experience* has unfortunately acquired a narrow and artificial meaning whereby it has become the watchword of (as it seems to me,) a seriously mistaken philosophy. In this philosophy a part of our experience has been taken, as if it were the whole. The most precious part of it,—the spiritual—by being persistently ignored as fanaticism or enthusiasm, has come to be looked upon as non-existent, for any purpose with which the philosopher or the man of science needs concern himself. Now I do not remember to have met with any valid reason for treating our total experience in this way. A portion of it is accepted, and a portion rejected, without any clear principle being stated to justify this procedure, which therefore seems to become arbitrary and unjustifiable. That this is not an unfounded accusation I shall endeavour, in the following remarks, as clearly as possible to show.

Philosophers of all schools unite in assuring us that consciousness must be the ground or evidence upon which all our assertions regarding things are based. Upon the strength of this principle, most of them are content to believe, in some sense, in the existence of an external world, the characters of which it is the function of the physical sciences to ascertain for us. The whole investigation proceeds upon the conviction, that what is inquired into, is distinct from ourselves, and that part of it addresses itself to us as a mode of existence, more or less like our own, making up the world of sentient creatures, while another part does not at least directly thus address itself to us. Both together make up what, in a large sense, may be called the sense world, the world of sight, and touch, and sound. Now this belief, the more deeply we meditate upon it, seems to resolve itself into a belief in the existence of a power from the omnipresence of which we cannot escape; in the midst of which

we live, and move, and have our being,—a power which makes itself felt whenever we put forth our own and whose might seems infinitely to transcend our own,—a power which in proportion as we feel its reality as distinct from, and independent of us, enables us the more vividly to feel our own,—a power which, besides addressing itself to us as physical force, appeals to us in many gentler ways,—ways which seem to enter the region of our spirits with as much quietness and stillness as the dews of heaven fall upon the bosom of the earth. They are rather *influences*, i.e., inflowings, than *forces*, but in virtue of their being recognized as such, they are recognized as having a source as distinct from us, as the more obtrusive action of what are called the forces of the external world. And, yet, there are philosophers who, by withdrawing their minds from that aspect of things in which they appeal to us thus as real forces and influences, and by confining their attention solely to what are called 'states of consciousness,' (which in reality are nothing but the effects of these influences and forces viewed apart from their causes,) get rid of the belief that there is any real thing other than these 'states of consciousness.' To such philosophers, the apprehension of any power—external world or other,—of anything, indeed, save their own 'states of consciousness' becomes dim and almost fades away. The mental eye, by being incessantly fixed upon 'states of consciousness' comes at last to see nothing else. Here, as elsewhere, we may become at last almost powerless to see aught but what we have habitually gazed upon, and may in some fashion convince ourselves that there is nothing else to see. The only remedy is to adopt whatever means the circumstances of the case may require, to recall the mind to the existence of facts which have only come to be thought not to exist, because attention has been withdrawn from the fact of their existence. Let me illustrate from a fact which is in the power of any one to verify for himself. Gaze intently for some time upon any single object—a tree,—a house,—a hill,—till it has made a strong impression upon the retina. Now, withdraw the eye and try to fix it upon some other object. It will be found that there is apparently no other object to fix it upon. In whatever direction we turn, we seem to find nothing but the tree, the house, or the hill on which we have been fixing our attention, and it is only after some persistent gazing, that the presence of other objects begins to dawn upon us, at first dimly, but gradually with greater and greater clearness, until at last we end with full recognition of their presence and nature. The application is evident. Some philosophers have so long dwelt in

the region of 'states of consciousness,' that at last they seem to have lapsed into forgetfulness of the existence of any other facts of consciousness but these. The remedy must be the withdrawal of the mind from exclusive absorption in them, and its concentration in other directions. If this be done, we shall soon, I think, recognize that there are objects in these other directions, not properly described as mere 'states of consciousness,' and feel ourselves justified in the rejection of any agnostic scepticism as to the reality of a power other than ourselves which affects us under the form of the influences and forces of the external world. In short that weight, hardness, whiteness, loudness, sweetness, heat, besides being 'states of consciousness,' are also names for modes in which a reality independent of us addresses itself to our consciousness, which reality, therefore, we may, to that extent, be truly said to know.

I now hasten to show the bearing of these remarks on the somewhat similar Agnosticism that exists in the sphere of our religious or spiritual consciousness. We are all of us, with greater or less clearness, aware of the existence of such things as holiness, righteousness, justice, purity and truth. These constitute an order of things possessing a reality as positive as weight, hardness, whiteness, &c. These latter have all their source in an order of reality which we call the external world, and which we are sure is something more than the mere 'states of consciousness' it produces in us. This order of reality is that with which the minds of the great majority of the human race are engrossed, and in proportion to the engrossment, the consciousness of another order of reality,—the spiritual—becomes dim. "The world is too much with us"— the world of form, and size, and sound, and colour; and, as a consequence, the world of holiness, and righteousness, and truth, is thrust aside into the limbo of forgetfulness and is in danger of being thought not to be. The material world seems to possess a reality which the spiritual does not, though, as seems to me, this is only because the attention is habitually engrossed with the one and withdrawn from the other.

It must be carefully noted here, what the kind of reality is that is contended for, as belonging to the spiritual order of being. Probably no one, at least no one of whom we need at present take any note, would deny the reality of either of the orders of being we have been speaking of, considered simply as 'states of consciousness.' The region of denial lies elsewhere. And what is contended for, in opposition to this denial, is that just as we are compelled to refer all of what we call our experience of the external world

whose nature is for us properly described by the effects it produces upon us, so in the department of consciousness indicated by such words as holiness, righteousness, purity, and truth, our full experience is not accurately or adequately given until these qualities also are ascribed to a power whose nature likewise can for us only be properly described by the effects it produces upon us. And, as in the one case the power, while producing as its effect, a 'state of consciousness,' is necessarily thought of as something independent of that 'state of consciousness,' so in the other, as we are conscious of righteousness as an experience of our minds or spirits, so are we conscious of that experience carrying us directly out of ourselves and compelling us to think of a power other than ourselves as the source whence our experience flowed. And just as in the one case, we name the power, because of the effects it produces in us, a resisting, extended, tangible, coloured thing, so, in the other case, why should we be forbidden to name the power, because of the effects it produces in us, a holy, righteous and just being? But what is this but to believe in the existence of God in the same sense in which we believe in the existence of the external world or of each other?

Here, however, a difficulty meets us, and it may be as well to admit that it is one which, as it seems to me, no amount of logical acuteness can altogether overcome; though the oppressiveness with which it weighs upon the human spirit may, I think, be greatly lightened if we allow any force to the following considerations. The difficulty, I refer to, is the distressing fact of the existence of evil. It might at first sight be said that there is precisely the same ground for affirming an evil power independent of us, as there is for affirming the existence of a good power. And yet it does not seem to me to be so. To begin with;—there is this all-important difference between the two, viz., that the power of evil is felt to be a power which ought to be overcome, and the power of good is felt to be a power which ought to be universally victorious.

Now observe the significance of this. There has been a power at work in the universe which has created, or if you please evolved, a being (man) possessed of a power of perceiving that much in this same universe is out of joint. That is,—Out of an order of 'things as they are' has been evolved a being who possesses the power of perceiving that things are not 'what they ought to be.' And just as we must think that 'things as they are' have contained the seed or cause out of which has grown that most unique of all things, 'the thought

of what ought to be,' so we seem naturally led to think with more or less confidence that this 'thought of what ought to be' is identical with some transcendant I AM, which is gradually revealing itself to us as that which shall be. Or we may put the same thing in this way. Out of 'things as they have been' has proceeded the conception of 'things as they ought to be.' 'Things as they are,' then, however they may seem to be, or, relatively to us, may *really* be, opposed to our conception of 'things as they ought to be' cannot be fundamentally so. And yet the conception of 'things as they ought to be' is essentially a governing conception, that is, it claims to guide 'things as they are' towards a different goal from that they would tend to without it. We may therefore hope that the power that created, or may I not say, *He* who created, this governing conception, will ultimately so modify 'things that are' relatively to us, and also us, relatively to 'things that are,' that they shall at last be found to harmonize with our conception of 'things as they ought to be.' If this line of thought be admitted to be solidly based, then good and evil no longer stand on the same level in the universe. The one, with intermittent defeat, seems destined to be more and more clearly victorious along the whole line, while the other, with intermittent victory, seems destined to undergo as complete defeat. In the, as it seems to me, unnecessarily vague words of Matthew Arnold, the Eternal that we feel to be not ourselves, seems to be a power that is making for righteousness.

This is not a solution of the insoluble problem of how evil ever came to be, but it seems to me to give a totally different aspect to things, if we are able to look at them in this way. It gives a brightness and hopefulness to our thoughts about them which, else, would seem to be enveloped in an atmosphere of the blackness of darkness. From nebula to nebula, is the one despairing outlook. From base to noble, from sin to righteousness, from earth to heaven, is the inspiring prospect that seems to open out to us on the other side. And now we are able to state the exact position, on this subject, of the definitely-religious Agnostic, as distinguished from the Agnostic with no definite religious faith. Both are equally strenuous in their denunciation of the fraud, and violence, and wrong that prevail in the world. The hearts of both alike are saddened by the suffering that meets us on every side. But here the likeness ends. The ordinary Agnostic is almost shut up to a philosophy of pessimism. He finds himself amid the deep gloom of sin and suffering, with no promise of a brighter dawn,—none, at any rate, that will be lasting,—and

certainly none of which he can hope to be a part. As he has declared the nature of the power that moulds the destinies of the universe to be inscrutable, to be incapable of having any affirmation made regarding it, he can draw from this direction no ray of light or comfort to satisfy the deep thirst of the soul. The definitely-religious Agnostic on the other hand, while he also feels his spirit stirred within him by the prevailing fraud, and violence, and wrong, and by the widespread suffering of the human race, finds also working within him and around him a more majestic order of spiritual conceptions. With reference to these, he finds himself led to an ever clearer and clearer conviction that they must have their ultimate explanation sought, in a Being other than himself. He feels that he has not made them, but has only apprehended them. They come to him, moreover, clothed with an authority of which no sophistry or ingenuity seems able to strip them. He feels, too, that there are no other ideas that can claim, as they can, to be of the very essence of his being. True to them, he feels that he is true to his very inmost self, though, in other portions of his strangely compounded and disjointed being, he may be suffering pain, or enduring sorrow. And, from reflections such as these, he returns with a more and more steadfast faith that the power at the root of existence is the power that planted these spiritual conceptions in his heart, and that this power, if not visibly Almighty now, nevertheless possesses an unrevealed Almightiness, which will in due time be revealed to the eyes of the universe.

It is not meant that he who thus reflects, can always, and with the same living spiritual hold, realize to himself this view of things. The vision of it sometimes becomes strangely dim to us, and the blackness of despair seems to settle down upon our hearts. There are times when we seem to lose hold of the divine elements within us, and of the divine Being without us, and feel inclined to join with "the fool who says in his heart there is no God." The holiest Sufferer the world ever saw had the exclamation "*My God, My God, why hast thou forsaken me?*"* wrung from him in a mysterious hour of darkness, though he was afterwards able with full confidence to say, "*Father, into thy hands I commend my spirit.*"† I might multiply quotations indefinitely in which the same spirit is manifested,—full and sad recognition of the power of evil in the world, sometimes intensified into deep perplexity and gloom, but,

* St. Matt. xxvii. 46. † St. Luke xxiii. 46.

withal, seldom without the firm conviction that there is a power mightier still on the side of good. I shall however content myself with one more illustration of how, amidst perplexity and gloom weighing heavily upon the spirit, there may remain the unshaken conviction that there is behind them an unseen light and love. The writer of the book of Job represents his wife, after all her husband's afflictions had fallen in quick and sharp succession upon his head, as asking him in a tone apparently of mingled bitterness and contempt, "Dost thou still retain thine integrity? Curse God and die." Notice however the calmness and dignity of his reply. "Thou speakest as one of the foolish women speaketh. What! shall we receive *good* at the hand of God, and shall we not receive evil?"* A startling question surely, but finding, as it *seems* to me, its explanation in the peculiarity of the Theistic, as distinguished from the Agnostic recognition of evil. The actual evil itself may be, as we have seen, as fully recognized, and as accurately measured by the one as by the other. But in the one case, it is believed to come from the hand of GOD, that is, from one who, while what He sends seems only evil, is, nevertheless, believed to be in spite of appearances, in His own essential nature holy, and just, and good, afflicting no man willingly. This conviction it is, which enables him who has a living hold of it to bear suffering and wrong in a spirit in which the darkness is illumined with the light of assured faith and hope. In the case of the Agnostic, however, the suffering and the wrong come he knows not whence. He has apparently but the feeblest consciousness of aught within, that would enable him to believe that behind the visible 'clouds and darkness' there are, though unseen, 'justice and judgment,' 'righteousness and truth.' He is, therefore, almost driven to confront the evil in the world in a spirit of defiant rebellion, or of apathetic despair. The difference, then, is in great measure *something* inward. Of the one class of minds, it seems to have such a deep and living hold, that it finds expression for itself in words which sometimes reach the highest pitch of the sublime. "Though He slay me, yet will I trust in Him."† Of the other class of minds it has such a feeble hold that it seems to possess no appreciable power to enable these minds to penetrate beneath the surging, seething waves of suffering and sorrow, and, with the eye of faith, to discern a peace and calm, deeper than the storm of evil that is ever raging around.

* Job ii. 9 and 10. † Job xiii. 15.

There remains, now, only one question to ask. Is this inward something variously called conviction, faith, assurance, hope, a delusion,—the beautiful, it may be, but yet baseless fabric of a vision, or does it answer to a transcendant reality? Where is the evidence to determine this question to be sought? Manifestly not without, for that presents to a great extent the same aspect to both the upholder and the denier of the reality. It must then be sought mainly within. It must, in short, be sought in meditation upon, and a consequent living hold of, the things called righteousness, holiness, and truth. And if there be this living hold of these things, it seems to me, that this will bring with it the belief that the ultimate explanation of them is to be sought in the ascription of them to a Being not ourselves who is righteous and holy and true. It is open, of course, for any one who has not got this living hold of these things to describe this belief as a mere delusion, born of mysticism or enthusiasm. I would beg such a one, before he makes any dogmatic assertion of this kind, to consider whether he makes it of his own actual knowledge, or whether he may not rather suspect that he is making his ignorance the measure of existence, that he is as good as saying that what he does not know, (possibly because he has given no serious or sustained attention to it) does not exist. *Omne ignotum pro nihilo.*

To me, no faithful or adequate account of human experience seems possible that ignores the elements we have been considering, and all that they seem to involve. And if we will only fairly, steadily and reverently attend to and meditate upon the order of reality to which *these* elements belong, we shall, I feel confident, find that it will assume a majesty and authority before which our spirits will bow in humble adoration, and a reality before which all other realities will pale. It will more and more be seen to be the one eternal and necessary Being and all else to exist for its sake only. But why, should I say 'its'? Is it felt in anywise unnatural to say 'His' instead? And then might we not say, that this order of reality would be more and more identified with that just and righteous Being "of whom, and through whom, and to whom are all things?"* And should we not feel that our true vocation in life, that which comprehends and gives point to all others, is 'to glorify Him with our bodies and our spirits which are His.'†

A word in conclusion as to the bearing of the Agnostic and the

* Rom. xi. 36. † I Cor. vi. 20.

Theistic view of things upon human conduct. It surely seems clear that in proportion as the Agnostic tone of thought prevails, it must tend to produce a paralysis of all beneficent energy, that in proportion as we refuse to admit that any one affirmation made regarding the ultimate cause of all things is more true than another, or that one destiny rather than another is in store for our race, in that same proportion do we deprive ourselves of a leverage to enable us to raise and purify both ourselves and others; whereas on the contrary, if we can attain a belief, that at the root of existence is a Being whose essence is goodness, justice and truth, and that the destinies of our race are not ended here, but that we may look forward with confidence to "a new heaven and a new earth wherein dwelleth righteousness," if, I say, we find ourselves able to take this view of things, it surely seems clear that it will brace and nerve us for the struggle against every form of unrighteousness within and without us, so as to make ourselves the fitting denizens of that kingdom of righteousness that is to be. And though strictly speaking the fact that a certain theory of life and things tends to produce conduct of which we approve, and which is conspicuously adapted to the circumstances in which we are placed, is no proof of the truth of that theory, still I think that at least the same weight ought to be allowed to this consideration that is allowed for instance to the fact that the undulatory theory of light seems best fitted to explain the phenomena involved. The fact that it does so, is considered to go a long way towards justifying our belief in the truth of the theory, and so, may the fact that a certain theory of life and things tends to produce conduct which is best suited to our circumstances, not also be allowed to go some way towards proving the truth of that theory of life and things upon which that conduct is based?

Lead kindly Light, amid the encircling gloom,
Lead Thou me on;
The night is dark, and I am far from home,
Lead Thou me on.
Keep Thou my feet; I do not ask to see
The distant scene; one step enough for me.

R. Harvey.

THE GREAT ENGLISH READING ROOM.

There is at all events one exception to Lord Byron's definition of solitude—one spot far away from "rock and flood and fell" and "'midst the crowd and shock and hum of men" where most people do not experience the dreary sensation of loneliness.

Few, I think, can forget the first time that they passed in at the unpretentious sliding door at the end of the wide corridor and stood in the great Reading Rotunda of the British Museum. A new sense of the communion of books seemed to steal across one's spirit. To the provincial, book-loving sight-seer it feels indeed like the inauguration of a reading millennium. He is inclined at once to take his place in one of its comfortable corners and to say, 'This is my rest, here will I stay, for I do like it well.'

But this privilege to chance sight-seers is a forbidden one. Mere explorers are not made welcome beyond the entrance door where a bust of the clever Italian who designed the room looks down on his admirable work. The visitor suddenly introduced is, indeed, seldom able to conceal his wonder and gratification as he gazes round the enormous chamber so lofty, so airy, so vast, so still and yet so crowded, so comfortable and warm like any private library.

"Where in lordly sweeping bays
In distant dark retiring nooks,
Stretches before my eager gaze
This sea of books.

I pause, and draw one fervent breath,
Then plunge and seem to pass away
Into deep waters still as death,
Yet clear as day;

To move by boulders of the Past,
By caves where falter dimly pure
Gleams of the Future—all the vast
Of literature."

The great company of books line the walls of the Museum Reading Room all round to a height of some forty or fifty feet. Years ago, I recollect hearing that there were twenty-five miles of books in the Museum Library; many more miles might be counted now, as every book entered at Stationers' Hall is bound to find its place on its shelves. The great mass of leather-bound volumes make the most artistic decoration that can well be imagined, and the high

circular roof converging to a centre, draped, I think, with cloth of a neutral-tinted hue blends admirably with the warmer colours on the walls.

From the threshold of the great room one can catch a glimpse of some of its ardent students and regular habitués. At one of the raised desks enclosed in glass near to the entrance door one of the most prolific of English lady novelists used some years ago invariably to be seen, often with her pen stuck in her ear, and her thin fingers passed through her short-cropped hair, seemingly buried in the involvement of one of her sensational tales. The usual place for ladies is a less conspicuous one, but the author of *Aurora Floyd* appeared to prefer the little glass sentry box.

Though the Reading Room of the British Museum is certainly one of the genuine sights of the Metropolis, and one with which a stranger is certain to be delighted and astonished, yet there is no doubt that the most pleasurable sensation is reserved for the day when he goes not as an idle wayfarer any longer, but provided with a ticket which enrolls him as a 'reader.' This passport can only be had after a little delay. People going on a short visit to London are often disappointed that their time is nearly over before they can obtain the privilege to which as a worthy British subject they have, according to present arrangements, a right.

An application to the authorities of the Museum has to be made, accompanied by a certificate from two householders that the applicant is a respectable person. Unfortunately some delay seems always incidental to this stage of the proceedings, so that you have to look a little before you if you wish, at once on arriving in town, to enter on this portion of our national heritage.

Armed with a ticket, you make your way to one of the readers' desks which are alphabetically ranged round the great circle. Nothing more complete and comfortable than all the fittings of these desks can well be imagined. Their width and height are perfect. Below, there is a space for stowing away hats and wraps; to the right, the reader is provided with a raised shelf where books for consultation can be kept. To the left, a book-stand draws out, contrived to move in any direction. In the centre, there is an inkstand with a steel pen and two quills. There is also a paper-cutter, a blotting-pad and a heavy press-weight to keep the book open. Of chairs, there is a choice of three kinds, stuffed leathern, cane-bottomed, and highly polished mahagony. Mr. Charles Dickens, we believe, used strongly to recommend the use of the second kind to

constant students; but the luxurious spring leathern ones seem always the most popular.

There are a few desks, like the compartments in a railway train, reserved for 'ladies only.' It is, however, one of the little standing jokes of the Museum Reading Room that these desks are oftenest left solitary and tenantless. In case the male sex should be too much flattered by this coincidence, we must explain that, in some cases, at all events, the comparative desertion of this female quarter is to be ascribed to the irritating neighbourhood of a few conversationally-inclined ladies who seem sometimes bent on pursuing an unwished for acquaintance, and can do so much more easily in their own quarter than when placed side by side with a frowning representative of the other sex on whose every feature is written 'No talking allowed here.' Some ladies, therefore, desert those reserved desks for the sake of undisturbed quiet, others go in company with their father, brother, or husband and naturally take their place side by side with them. It must be remembered, however, that wherever one is placed, no where does the axiom, 'Silence is golden,' hold more true than at the desks of the Museum Reading Room. The hours are wasted and the visit spoilt if one has the misfortune to take one's place in the vicinity of a garrulously-inclined neighbour. But it must be admitted that, generally speaking, the sanctity of silence is devoutly preserved.

The ticket-holder having secured his desk and noted its alphabetical place, makes his way to the raised, circular enclosure in the centre of the room where the official directors sit and carry on the business of the great library, commanding a good view of all that goes on below. Round the outside panels of this circular desk there are shelves on which the catalogues dwell. They make quite a library in themselves. Alphabetically arranged, they number nearly six hundred folio volumes, bound in whole purple calf. So great is the wear and tear that they are being perpetually rebound though their corners are tipped with metal and their leaves are of vellum with the entries pasted in on paper, if we recollect aright.

Before consulting the catalogue for the volume, or volumes, of which you are in search, it is necessary to provide yourself with one of the slips of paper from the files which hang suspended at the many corners of the catalogue counters. Innumerable quantities of these tickets must be consumed in a single day, and it must be confessed that a visible waste of these useful little slips is continually going on. In this indispensable ticket, the name and full particulars of

the book required must be entered, also the date, the reader's signature, and letter of his desk. If anything is wanting in the correct filling up of the slip, it has to be brought back to the reader for correction, so that carelessness in the matter entails sometimes considerable delay.

The catalogue consulted and the tickets duly filled up, (each book must have its own ticket), the reader is instructed to drop his slip into one of the neat little wicker baskets also attached to the corners of the catalogue counters.

The novice, however, is fortunate if he has not to summon one of the obliging assistants to his aid before he is able to possess himself from the ponderous catalogues with all the information necessary for the filling up of the important slip. When it is, at last, consigned to one of the little baskets, the reader returns to his seat to await his books. In the interval, he may help himself to one of the many hundreds of volumes on the shelves within his reach.

His ticket, meanwhile, is being taken by one of the assistants from the basket and carried off on its travels, sometimes through vast chambers and corridors, up flights of stairs, along narrow galleries, perhaps for a quarter of a mile. It is brought back to the reader between the leaves of his book. Again the assistant carries it off, this time to an enclosure in the room where it is his duty to copy its contents into one of their books. Even this is not all. After it has been thus controlled, it is taken to the central desk where it is deposited in one of a row of little zinc compartments alphabetically labelled. The process of securing one's book ought not, it is said, to take more than a quarter of an hour, but it is often longer because of the number of people to be served.

At the hour for closing, a bell is rung. There is a subdued movement throughout the vast room, and a hurrying on all sides towards the central desk, to restore the literary accumulations of the day. It is at this juncture that the acquisitive reader looks in dismay at the pile of heavy volumes he has gathered round him, many of which probably he had small need, and still smaller intention of opening. But as it often happens in life, to the most troublesome, things are made most easy. The rapacious gentleman is seen walking at his ease, empty-handed towards the central desk, while by his side a wearied-looking attendant rolls a mahogany wagon groaning under its load of heavy tomes.

When the books for the day are returned the ticket is duly replaced in the reader's hands and the officials within the enclosure

then check off their entry regarding its contents. Till this receipt of the returned ticket is given to the reader, he is held responsible.

The Museum readers are of various types and would form an interesting study in themselves. Probably three-fourths of them are genuine workers. There are the copyists by whom much hard work is done. Sometimes the copyist is an attenuated asthmatic old man, sometimes a fair young girl. There are indeed whole families of copyists—husband, wife and daughter are often seen busily engaged.

To a very distinct type of reader belongs the ancient looking shrivelled dame who goes trotting about quite at home with the attendants and everybody, and who seems most frequently engaged on some heraldic business. Smart young secretaries to famous men and at work for them, with possibly an autograph letter from their chief lying open beside them, and the famous men themselves, are all frequent visitors at the great National Reading Room.

Sometimes one's attention is pityingly directed to a not unusual type of reader—perhaps the most constant of all—the grey, stooping, underfed, chilly-looking literary hack who on a frosty winter day shambles shiveringly to his seat. He fumbles with his blue fingers in the pocket of his thread-bare coat for his manuscript. Presently brain and fingers seem to thaw in the warm soothing atmosphere. He begins to write with flying quill. He calls for no books, for he does not happen, at the moment, to require to refer to any, and he will not give the attendants more trouble than he can help, for they are always kind and obliging to him, and this soft carpeted and well-heated library is the only comfortable spot with which he is familiar in this hard world. He might have remained in his dingy lodgings on this bitter morning, since he needed no books of reference, but was driven forth from them because his present earnings do not admit of a daily supply of coal. When the luncheon hour arrives, instead of hurrying to the refreshment rooms, provided for the convenience of readers in apartments, opening off the wide corridor which forms the entrance to the reading rooms, and where bowls of steaming soup and good beef-steaks are to be had, you may catch a glimpse of the poor reader under the shadow of one of the antique statues, furtively munching his stale crust, driven forth from his reading paradise for the moment; for I need scarcely say, that no refreshment is permissible at the desks. Sometimes, perhaps, when things are looking up a little, the poor reader betakes himself to a dingy looking chop-house in one of the nearest

streets, the windows of which perhaps may be familiar to Museum readers from a central figure. A very large, beautifully sleek cat which used to be one of its characteristics, was some years ago almost invariably to be seen there ; whether or not he had learnt from his literary neighbourhood to view life with a philosophic gaze, it is certain he was wont to sit in the midst of pork pies and slices ot cold plum pudding with unexcited demeanour, surveying both pork pies and passers-by with cynicial half-shut eyes.

Another shop window which meets the eye as one descends the wide easy flight of steps from the great attic portico of the British Museum, is one that is decidedly suggestive to the student with 'tired eyelids upon tired eyes.' It is an old established optician's where many probably, like the present writer, have invested in the first, but, alas, not the last pair of spectacles.

There has been a suggestion made lately to the effect the British Museum Reading Room should be limited to a students' room—that it should be reserved for those who have literary work to do, and that this is a matter which should be strictly guaranteed. Some in authority consider it quite a false theory that every respectable person in the United Empire is entitled to find luxurious accommodation, attendance, pens, ink and books which he wears out in the reading as if they were his own—alas, to the shame of selfish human nature be it spoken—sometimes more recklessly than his own. Even in the case of students it is proposed that there should be some limitation to the large number of volumes that are so frequently exacted—that such rapacity should not be tolerated without special causes shown. This alone would do much to lighten the labours of the attendants.

Every year the crowd of readers naturally increases at the desks of the great reading room. When all the ardent scholars, male and female, of the new schools and universities are in full work, the numbers will, doubtless, become overwhelming. We trust, however, for the sake of the many, who though they cannot strictly be said to belong to the profession of literature, have learnt to find true solace and joy in that which has been called the great resting place for wearied human nature, the world of art, that other measures will be resorted to for obviating the difficulty than the summary one of closing the doors of our National Reading Room against promiscuous readers.

It would, we feel sure, be disappointing to those travellers from the far East who hope, one day, when they cross the sea to visit the

countries of Europe, to hear that new and fettering restrictions had been brought into force with regard to the great Reading Room which is, for the present, part of their national heritage.

To Anglo-Indians whose brightest hopes centre in a return to their native land, it would, indeed, be a very bad piece of news to hear that, unless, they could strictly guarantee that they were engaged in literary work, the doors of the familiar Museum Library must be closed on them.

We must necessarily find many changes after an absence, but on those shelves we are sure to meet friendships that do not change which (as has been well said) are exposed to no danger from the occurrences by which other attachments are weakened and dissolved. "A great writer" as Macaulay eloquently says "is the friend and benefactor of his readers ; and they cannot but judge of him under the deluding influence of friendship and gratitude. We all know how unwilling we are to admit the truth of any disgraceful story about a person whose society we like and from whom we have received favours, how long we struggle against evidence, how fondly when the facts cannot be disputed, we cling to the hope that there may be some explanation or some extenuating circumstance with which we are unacquainted. Just such is the feeling which a man of liberal education entertains towards the great minds of former ages. The debt which he owes to them is incalculable. They have guided him to truth. They have filled his mind with noble and graceful images. They have stood by him in all vicissitudes, comforters in sorrow, nurses in sickness, companions in solitude. Time glides on ; fortune is inconstant ; tempers are soured ; bonds which seemed indissoluble are daily sundered by interest, by emulation, or by caprice. But no such cause can affect the silent converse which we can hold with the highest of human intellects. That placid intercourse is disturbed by no jealousies and resentments. These are the old friends that are never seen with new faces, who are the same in wealth and in poverty, in glory and in obscurity. With the dead there is no rivalry. In the dead there is no change. Plato is never sullen : Cervantes is never petulant : Demosthenes never comes unseasonably : Dante never stays too long. No difference of political opinion can alienate Cicero. No heresy can excite the horror of Bossuet." Let us hope that to our intercourse with friends such as these no obstacle will be thrown by those who sway the destinies of the great English Reading Room.

JANET S. MILNE RAE.

STUDENT-LIFE AT OXFORD—II.

THE first business of the youth who is leaving school and "going up to Oxford" is to choose a college. If he has more than ordinary ability he will try, for his own honour and the credit of his school (and also, if he be not rich, for the relief of his pocket) to win a scholarship. There are scholarships attached to most colleges, some even offering as many as twenty or thirty. In value they range from £60 to £90 a year, and may thus pay about half of a student's yearly expenses. They are conferred by examination, and most of them for proficiency in some one subject, Classics, Mathematics, or Natural Science. The most valuable of them, and those given by the best colleges are eagerly competed for, and great honor redounds to the school whose boys carry them off. Scholars are distinguished from 'Commoners' (*i. e.* ordinary undergraduates, who have no scholarship) by wearing an ampler gown: they generally dine at a separate table in the dining hall, and they are expected to do credit to their college in university examinations. If the youth whose fortunes we are following does not aspire to a scholarship, there are many considerations that may determine his choice of a college. He may easily find one to his taste, whatever his taste may be. One will be renowned for success in the 'schools' (*i. e.* in university examinations), another for success in cricket or on the river: one for steadiness and hard reading, another for 'fastness' and idleness: one will have a good laboratory for physical science, another a famous 'coach' in composition: one will be said to have none but gentlemanly men in it, and another will be known for ill-manners. Having chosen a college, on whatever ground, his next step is to get the college to choose him, and this is sometimes a harder business than the other. Most colleges hold an informal entrance examination, to find out whether those who seek admission are likely to pass the first university examination within a reasonable time. The hardness of this test varies with the standard of efficiency of the college; a man, for instance, who is refused at Balliol, may find the doors of half a dozen other colleges open to him readily. Let us suppose that our hero has been moderate in his ambition and is accepted by the college of his choice. He must now face that ordeal which is at once the hope and the fear of many a Hindu boy—matriculation. But to the Oxford aspirant for graduateship, matriculation has few terrors. All the preparation needed is to put on his head a college cap and on his back that square yard of black 'stuff' which is euphemistically called a 'gown,' and to take in his hand no inconsiderable fees. Thus armed, and escorted by the Dean or other official of his college, he seeks the Vice-Chancellor of the University. In the presence of that (as yet) awful being, he enters his name and an account of himself in huge registers, and disburdens himself of the money he has brought: while into his ear is mumbled by the Vice-Chancellor's lips a long latin oath, to which, without having heard a word of it, he pledges himself. Receiving now from the Vice-Chancellor's hands a copy of the University Statutes (in latin, like the oath), he goes out from his presence a Matriculate,—a full-fledged member of the university. So easy to reach at Oxford is that golden apple of matriculation that is guarded in India by the dragons of 'English text' and mathematics and chemistry!

The dream of our hero's boyhood is now fulfilled; he is no longer a schoolboy, but 'A university man,' or, as he will rather prefer to call himself, 'A 'varsity' man. To be in the streets after dusk without cap and gown is a university offence punishable by a fine of five shillings: but if perchance on the evening of this day of his matriculation, our hero, strolling without cap and gown along 'the High' should meet the velvet-sleeved Proctor and hear the ominous question "Are you a member of this university"?—a thrill of pride rather than of dismay will pass through his bosom as he answers "I am."

But let not the gentle reader hastily envy the English youth so simple a method of entrance into the university: for if this gate opens to him easily, there are still doors enough whose locks he must pick for himself before he reaches the inner chamber of graduateship.

The difference between Oxford and the new universities, is not that it makes graduates on easier terms or with fewer tests than they do, but that it admits undergraduates on easier terms. A man may, theoretically, be a member of the Oxford University for any number of years without passing any examination; and indeed the writer has known one white-haired old gentleman, who has been for twenty years an undergraduate and has never passed or tried to pass any examination. He joined the university not for the sake of its degree, but for certain social advantages that he would have as a member of it.

This suggests a reflection which will have much illustration

shortly—that examinations and degrees are not held so important at Oxford as in the new universities. The latter have adopted scarcely any of the functions of a university except examining and conferring degrees, and they naturally attach an exaggerated importance to these functions. But Oxford has much else to bestow besides knowledge, and much else to do besides testing knowledge. A man may come to Oxford and be a member of the university for three or four years and go away without any degree or any record of examinations creditably passed, and yet the university may have done its work upon him.

But though our hero has got into the university without passing any examination and will be occupied with much else there besides examinations, we will let our thoughts pursue first (as his ought to do, but alas! will probably not do) the track of his studies. There lie before him three examinations corresponding to the Matriculation, F. A. Examination and B. A. Examination of the Madras University. At Oxford they are called, by the university, 'Responsions,' 'First Public Examination' and 'Second Public Examination,' or, in the more expressive and convenient language of the undergraduate, 'Smalls,' 'Mods,' and 'Greats.' He must turn his attention at once to 'Smalls'; for that Examination is held three times a year, and he will be expected to present himself for it at the end of his first term, that is, within eight weeks of his matriculation. The Tutor in his college who has charge of candidates for 'smalls' will direct him as to what lectures he should attend and what books he should read. The curriculum of this examination was marked out in the dark ages of education, before the grand discovery was made that a boy should be taught a little of everything. In those days, it is said, a great schoolmaster was asked how boys should be educated, and answered "Teach them classics." "What else?" said his questioner. "Why should they be taught anything else?" answered the great schoolmaster, "but if you must have a second subject,—Mathematics." The 'smalls' curriculum might have been laid down by this authority. It requires the candidate to present two or three or more books of some Latin, and as much of some Greek author; and gives him also a paper on Arithmetic (such as might be set to a middle school candidate in Madras), and another on *either* the first two books of Euclid *or* algebra up to simple equations. The university deals tenderly, it will be seen, with human weakness in regard to mathematics and indeed so indulgent is it, that if a man can but master this moderate amount, it will

demand no more from him during the whole of his university course. This considerable amount of classics and smattering of mathematics is all that is required for 'smalls': of history, geography, (except as involved in the latin and greek texts) science, modern languages the candidate may be as ignorant as on the day he was born. This examination however, simple as it seems, is disastrous to many. Perhaps the candidate is from one of the great public schools and then, while he can construe his classics at sight, simple equations will be abstruse to him and arithmetic nothing but bewilderment. Or perhaps he has won a mathematical scholarship and intends to take his degree in mathematics; and if so, how can he be expected to turn English sentences into Latin without 'howlers'?* So that the undergraduate, whose steps we are following, is told that he cannot afford to be idle during this first term. Though he is being introduced to all the novel experiences of university life, he must still "grind" at his arithmetic or take his weekly efforts at latin composition to his tutor if he would get through 'smalls' at his first attempt. At last the time comes when he must add to his university experience that of a university examination. He must don a black coat and a white tie as well as cap and gown; for that is the respectful garb in which from time immemorial undergraduates have appeared before their examiners. In this dress he joins the hundreds of others similarly attired, to pace the quadrangles of 'the schools' till the doors are opened, and then to find the little table where he is to wrestle with his papers. It bears the traces of many a previous struggle; here an inky caricature of the examiners, there an exclamation of misery in Greek: here a parody of some question paper, and there the latin equivalents of 'ploughed' and 'plucked.' The written examination is like written examinations all the world over—a paper in the morning and another in the afternoon till all are done; in 'smalls' they will last but two days. But there is yet to come a more formidable ordeal. All Oxford examinations, except those in mathematics, include *oral* questioning as well as papers, and a few days after he has written his paper our hero will be summoned before the examiners. They have had time, he feels, to mark all his mistakes, to detect all his subterfuges and measure all his ignorance, and are now prepared to expose and overwhelm him with cunning questions. In a bare, awful room he sees them sitting, three in

* This polite name for egregious mistakes is supposed to be derived from the fact that the Latin in which they are found is 'Dog'-latin.

number—three against one—side by side before a table covered with green baize. At the end of the room are a few of his comrades who have come, he thinks, on purpose to enjoy his discomfiture. On the opposite side of the table to the examiners is a single empty chair waiting for its victim. He seats himself, or rather he seats that uninhabited frame which once held himself, but from which memory, mind, faculty, have all fled. One of the three who are arrayed against him takes up what the trembling youth recognizes to be his papers and glances through them to choose suitable instruments for the torture. Sometimes the ordeal is gentle. There is an aspect of humanity in the faces opposite and a kindliness in the voice of the questioner that reassures the candidate and calls back his recreant faculties. Sometimes the examiners are cold and stern; the place where the victim's memory should be remains vacant, and thrust after thrust, more and more grimly dealt, he has no strength or wit to parry or return. For some the trial is short; a few careless questions and the examiner says "That will do"—words that the candidate may treasure for hours pondering how to interpret them; whether their tone meant, "Your papers are so good that further examination is needless," or "They are so bad that it is useless." For others the torture may be prolonged half an hour, or an hour in which case the victim has the additional pang of feeling that his papers have left the examiners undecided and that his fate depends on the answers he gives now. It is possible to become hardened even to oral examinations, but there are many Oxford men who will long remember the feeling with which they faced those passionless examiners and knew their fate to be hanging in the balance.

Successful candidates in 'smalls' are not arranged in classes, but simply a list is published of those who have passed. If our hero's name is not in that list he will find his 'Dons' (*i. e.* the Fellows of his college) look coldly upon him—that is, if he is in a college that maintains a high standard of efficiency. If, after another term's preparation (given to exactly the same subjects), he should fail again, he may perhaps be asked to seek residence in a less exacting college. If he should even exhaust the patience of all the colleges by repeated failures, there are still the 'Halls' where he may read for 'smalls' and be 'ploughed in smalls' till his hair is grey.

But we will suppose a happier fate for him. He has got through 'smalls' at the end of his first or second term let us say. After a vacation's rest he returns to start on a new journey whose goal is mods.' But here he finds two paths before him, the path of 'pass

examinations' and that of 'honour examinations.' Up to 'smalls' there was but one path; that wicket all must pass through. The brilliant could gain no distinction there, the incapable could find no escape. But from 'smalls' onward, different routes may be chosen. For him who is content with a degree won as easily as possible, there is the straight level path of 'pass examinations'; for the ambitious and daring there is a steep and difficult ascent to 'honour examinations.' Pass moderations (the equivalent of the Madras F. A. Examination), is laid down on the same lines as Responsions, and the requirements of it will not be considered outrageously difficult by alumni of the Madras University. An amount of Latin and Greek, not half so hard to the average Oxford man as the F. A. English is to the Hindu student, algebra up to quadratics and a book and a half of Euclid, or, *instead of* mathematics, the elements of Logic—this is all the burden imposed on the undergraduate in his midway course. There are only two Honour Examinations in connection with moderations, one in classics, the other in mathematics. Students who aim at distinction in other subjects, such as Law or Theology or Science, must be content to take the pass examination at 'mods' and to wait until 'greats' for the chance of showing their proficiency; but devotees of classics or mathematics may take honours both in 'mods' and in 'greats.' For 'classical mods' the undergraduates must present a much larger number of Latin and Greek authors than for 'pass mods,' and must submit to a much more searching examination upon them: he will have the opportunity of composing Greek and Latin prose and verse, and of showing acquaintance with Ancient Literature, Philology and Logic. 'Mathematical mods' is in pure mathematics only and requires the differential and the integral calculus, with some knowledge of the calculus of finite differences. The candidate for 'classical mods' is excused from taking 'pass mods,' since his examination includes the pass examination, as the whole includes the part; but he who seeks honours in mathematics must first take the pass examination, to show that he possesses what Oxford considers the essential of a good education, a fair knowledge of classics.

In beginning to read for moderations, our hero will get into the full current of university work. The class system followed in schools and in Indian colleges, of having a large group of students taught together in all subjects, cannot be maintained in Oxford; for on the one hand the average number of undergraduates in a college is not more than a hundred: and on the other hand the number of

optional honour examinations and the wide range allowed to candidates in the selectionof Greek and Latin authors to be presented for examination, make the subjects of study very various.

A plan is followed which is the only one possible in these circumstances, though it does not provide for the student so much direct teaching and such direct oversight as the class system does. Some of the Fellows of the college undertake the teaching work and are called lecturers; and among the lecturers one or more take the additional work of directing and supervising the studies of the undergraduates and are called tutors. The tutors distribute among themselves the candidates for the various examinations, one taking charge perhaps of all the 'pass men,' another of the classical honour men and another of the mathematical honour men. The lecturers, before Term begins, arrange together what subjects they shall severally lecture on, choosing those that are most likely to be of importance to a considerable number of men. Out of the programme of lectures thus formed, the tutor advises his men as to which they will need to attend, according to the subjects they are presenting for examination. It will often happen that on some subject which the student is taking, no lectures are being delivered; in which case he must study it privately under the tutor's supervision. Any subject, such as composition in English or Latin or Greek, which cannot be taught by lectures is undertaken by the tutor who has also a general oversight over his men to see that they are working with proper diligence and do not shirk their lectures.

For the subjects required in honour examinations it has lately become common for colleges to form themselves into groups and institute combined lectures, open to all the colleges of the group: a means by which a completer set of lectures can be arranged and larger classes formed than would be possible in a single college.

Lectures are given only in the morning, commonly between 9 A.M and 1 P.M., no lecture occupying more than an hour. The number of lectures that must be attended varies greatly; one student may have only three or four a week, while another may have nearly all his mornings filled up with them. In all cases a good deal of work must be done by the student himself without the aid of lectures: and there is a general disposition among undergraduates to think lightly of them and regard the hours spent on them as so much taken away from their working time.

The undergratuate whose career we have been pursuing, returns,

after the vacation in which he has been rejoicing over his success in 'smalls,' to find an intimation awaiting him that his tutor would be glad to see him at once. He arranges with him whether he shall take 'pass' or 'honour mods,' what subject and books he shall present, and what lectures it will be useful for him to attend. He thus gets a programme of work for the term, having perhaps something like this for one morning:—

8-30 a.m. Essay to be taken to tutor.
9-0 ,, Lecture on Latin Poetry by Mr. A. at Worcester College.
10-0 ,, No lecture.
11-0 ,, Lecture on Logic, by Mr. B. at Balliol College.
12-0 ,, Lecture on Greek, by Mr. C. at New College.

If he is not going in for 'honours' however, he would consider three and a half hours of lectures in one morning as an outrageous burden.

For four, five, or six terms he may go on working quietly on these lines,—lectures in the morning and, if he be a 'reading man,' study in the evenings; the routine being interrupted only by occasional informal examinations, given by his tutor, and by college examinations, called collections, held at the end of every term. After a year of work, or at any time later, he may present himself for moderations and will repeat, but on a larger scale, his 'smalls' experiences. As in 'smalls' also failure may bring upon him admonitions from the college authorities, and repeated failures would lead to expulsion.

The second public examination, alias 'finals,' alias 'greats,' looms in view when 'mods' is left behind, and the routine of work must be resumed to reach this highest summit of the university course. In 'greats' there are, besides the pass examination, six honour examinations,—in Literae Humaniores, Mathematics, Natural Science, Jurisprudence, Modern History and Theology.

Taking any one of these honour examinations exempts the candidate from the pass examination; and in the pass examination itself, there is a wide choice allowed, all the subjects being optional. Out of ten or a dozen subjects the candidate must choose three, not all belonging to the same branch of learning. He may offer, for instance, (i) two Greek authors, (ii) outlines of Greek and Roman history, (iii) the elements of Political Economy; or, if his tastes tend in other directions, i) the French language and literature, ii) the elements of Geometry including Geometrical Trigonometry, (iii) the elements of Physics. This will seem to the Madras graduate a very moderate amount of work by

which to win a degree, and the task is made easier by the fact that the candidate need not present the three subjects for examination all at the same time, but may pass in them one by one at separate examinations. When he has passed in all three and has resided for three years at Oxford, he is entitled to the Bachelor's degree. He will have won it indeed on the lowest terms on which it could be won, and on what most youths would consider easier terms than the Madras University imposes on those who seek its favours; but he is *nevertheless* a Bachelor of Arts, and in two years more he will be admitted, without further examination or residence, to the highest position which the University offers to its ordinary members,—the rank of a Master of Arts.

W. H. FINDLAY.

(*To be continued.*)

A STUDY OF WORDSWORTH'S ODE.

THERE are two possible views of Nature both poetical and susceptible of genuine artistic expression, but at the same time antithetical the one to the other. The beauty of the external universe, from the simplest charm of the homeliest loveliness up through all degrees of grandeur to the splendid and the sublime, may be regarded in itself, and as ministering satisfaction to the human craving for the beautiful. Art would then seek merely to awaken the feeling of delight in beauty, and if successful in doing so, it would have fulfilled its utmost mission, whether addressed to eye or ear, or the inner sense of the harmonious and the pleasing. A statue, for instance, created by an artist with this fundamental conception of art, would simply aim at satisfying the taste, at awakening pleasing sensations, at being beautiful. A poem by an artist of the same school would correspond to Bain's definition of poetry and *its chief end, and would simply* seek to please by suggesting happy images and rousing delightful trains of emotion. This is the most obvious poetry, and there is a great deal in our literature to which such a definition is perfectly applicable. But when we pass to the higher examples, leaving behind those poets whose verse is nothing more than the melodious expression of animalism more or less healthy, and entering upon the region of that poetry which enthrals the noblest minds and stirs the heart to its depths, we find this conception of art inadquate, this idea of poetry too narrow to hold the masterpieces of the ages.

No poet is so little capable of being weighed in these balances as Wordsworth, and no part of his work shows this more clearly than the 'Ode on the intimations of immortality from recollections of early childhood.' We purpose in this paper to give a brief exposition of that noble poem, chiefly as a specimen of spiritual poetry, that poetry which no materialistic view of man can satisfactorily account for.

The psychological condition presupposed by the poet first demands attention. Experienced in greater or smaller measure by all, it yet becomes so disguised as the years roll on that many men ridicule Wordsworth's view, and declare that such an experience is rare, if not impossible. The poet is conscious of a gulf in the midst of his years, over which he has passed almost unconsciously, but across which he can now look back with a painful sense of loss in what he has left behind him. Instead of his years being 'bound each to each by natural piety,' instead of the child passing imperceptibly into the man, being his father in the sense that all the elements of value in childhood have been taken up into manhood and enriched, he feels that in some respects his mature age is poorer in elements of good than was the period of extreme youth. Then all nature was suffused with beauty, 'apparelled in celestial light, the glory and the freshness of a dream.' This beauty, this glamour that surrounded all the objects of sense has left him. He feels that he does not see the things he once saw. Nature is still the same, the beauty of the rainbow and the rose, the look of delight from the moon shining in clear skies, the shimmer of starlit waters all remain,

> "But yet I know, where'er I go,
> That there hath passed away a glory from the earth."

The change fills his heart with sadness, and he looks round him questioning what the reason may be.

Does not universal experience testify to the truth of the poet's words? It is not given to many to know the intoxicating delight of the first dawnings of the poet's intercourse with nature, but all know and speak of the illusions of youth, and the disenchanting process of later life. Time was when the scenes of early infancy were bright with a brightness that the highest success of manhood fails to restore. The streams of our boyhood were larger, fresher and more musical than the dull prosaic streams that now roll along the earth's surface, filled with a weariness that we can feel by sympathy. The little clump of trees beside our father's house was the model of all forests, whose shady spaces we peopled with the creatures of our fancy. The little

village temple represented to us all that was grand and awe-inspiring in architecture. The great man's house was our ideal of splendour. So active is the fancy of youth that we have known children, lying down on some grassy bank or near some cornfield waving with yellowing grain, and peopling that mimic forest with bright inhabitants, roving at will among the grassy undergrowth, and waging mystic conflicts under the majestic corn-stalks of youth. But apart from such vagaries of young imagination as these, who has not felt when returning to some scene of long-remembered delight, the pang of disappointment with which he felt that all was changed? The people whose wisdom he looked up to with reverence had sunk into village gossips, the stately trees under whose shade he had mimicked the serious pursuits of after life had shrunk into mere ordinary timber, the temple had degenerated into a miserable shed. Might he not exclaim like Wordsworth:

> "Whither has fled the visionary gleam?
> Where is it now, the glory and the dream?"

But the poet is the poet still. Though much has departed, yet much remains. The spring is ever young, and all young life throbs with sympathy at the return of the joyous season. Though youth with its celestial light has gone from the poet, yet nature, ever fresh and young, demands her joyous sacrifice, and he will not wrong her by refusing to join in the innocent revel. The most solemn sounds in the world, the trumpet voice of the cataract, and the wailing of the winds awaking from their sleep, join in the gaiety, so that the merry shouting of the shepherd boy is felt to be a harmony in the tempest of sounds. The poet puts on his floral crown, to sympathize with joys that he no longer feels save with the tender sadness of reminiscence. But the sense of something lost is overpowering, and in stanza V. of the Ode, he proceeds to give to himself an account of his state, in a philosophy of youthful consciousness.

The theory that follows in the immortal words beginning

> "Our birth is but a sleep and a forgetting.
> The soul that rises with us, our life's star,
> Hath had elsewhere its setting,
> And cometh from afar;"

is one that always suggests Plato, with whose splendid genius the more sober and commonplace Wordsworth had much in common. In Plato's psychology an important place was held by his theory of Reminiscence. In all the history of philosophic thought, no question has been more perplexing than that of universals. Apparently one of the first devices for at once simplifying and enlarging the scope

of thought is that of general notions represented in language by names. What are these convenient names significant of? How is it that men are able to identify particulars under them? It cannot be anything sensuous, for the senses give us nothing but particulars, each bristling with individual peculiarities. Where then are we to seek for the roots of this manifest power, and how can we give ourselves an intelligible account of its origin? Plato's explanation was that the human soul, wrapped as we find it in the narrow trappings of flesh, is an exile and a prisoner, 'earth's inmate,' as Wordsworth puts it, with a fatherland far other than that which now surrounds and occupies it. By virtue of the supersensuous reason within him, man has kinship with a world, not of sensible phenomena filled with bewildering particulars, but of ideas, apparent to the pure reason unentangled and uncorrupted by the flesh. These ideas are real existences, and the only real existences, for they correspond to the connotation of what we call general names. As a sensuous being, man possesses only the power of observing particulars, and these particulars in virtue of some undefined likeness to the ideas, have the power of recalling what was familiar to the unbound spirit in the prior state of existence. Hence the power of apprehending generals or universals, that we find to be everywhere the possession of phenomenal man. He has awakened within him his sleeping powers that flourished in glorious activity when yet he was face to face with the supersensuous world. He no longer gropes amongst the distracting multitude of sensuous objects without power over them, capable only of receiving impressions from them. He brings to them his original birthright of reason, and he contrives to impress upon them as much reality as they are capable of receiving by bringing them under the sway of the general notion or idea. Still he feels that they are not what he calls them, but only empty bundles of sense-impressions, and there falls upon the philosophic mind a pathetic sense of loss, of the poverty of earthly life, and a longing after the higher world from which the soul is now an exile.

What Plato uses to explain at once the existence and the difficulty of rational thought, that Wordsworth uses to explain the existence and the difficulty of the poetic mode of thought. There is a poetry still on earth, a mode of viewing the things we see about us that fills them all with beauty, as if the commonplace were touched with the finger of the sun. Nature and the soul of man in the highest moments of both are not a discord but a harmony, and the poetic ear is not deaf to it. But the fervour of the poetic consciousness is rare and

short-lived. It raises man so high above himself that it seems an insanity, and the poet an inspired maniac, so different are he and his modes of thought from the men and the thought around him. The reason must be that poetic fire is a possession drawn from a previous existence, when the soul stood unclothed of sense, and bathed in the light of eternity.

It is almost desecration to put into ordinary language the exquisitely beautiful thought which Wordsworth has enshrined in the most perfect form that English speech seems capable of taking. But the necessities of exposition demand that even stanza V. should be analysed, for the poet finds in the fact with which it deals the strongest confirmation of his theory. Why is it that youth is so susceptible of the poetic influence, that even dull prosaic men rise almost to inspiration while they are young, and seek to express their thoughts in rhythmic language? That language may be poor enough, but it testifies to the fact that there are feelings within too glowing and splendid for ordinary prose, which struggle for expression in suitable form. It is because the soul is yet fresh from the experiences of a grander state of existence. Its rising as the star of our life is but the conclusion of a previous course under more gorgeous heavens than ours. The commencement of earthly life, which seems to us the first entrance upon the field of light and knowledge, is really the conclusion of a fiery splendour, which blazed around the central glow of the Divine intelligence. As it declines to the murkier sky of earthly life there still shines around the spirit, the reflection caught from that supernal brightness, and so

> "Not in entire forgetfulness,
> Nor yet in utter nakedness,
> But trailing clouds of glory do we come
> From God who is our home.

Wordsworth's figure is most striking. The growing boy is nature's priest, travelling westwards from the sunrise, attended on his way by the vision he has enjoyed in the inner sanctuary. At first the afterglow is bright about him, and he scarcely discerns that he is moving ever farther and farther from the fountain of light. But gradually as he proceeds onward on his journey, his consciousness of his divine original dies within him. His power of discerning the 'visionary gleam' decays, and at last he is left with no light but the ordinary experiences of life. Earth is not his mother, but like a kindly foster-mother, she strives to attach her foster-child to herself, and alas, with too much success. She surrounds him with earthly beauty and earthly love, till he forgets his nobler birthplace and heavenly

parentage among the lower attractions of sensuous things. The 'endless imitation' of childhood is but the boy's attempt to familiarize himself before his time with what will all too soon obliterate the memories of the eternal world. Wordsworth agrees entirely with Plato in his disparagement of experience. Worldly wisdom is but a dull weight of convention, a callosity established upon the sensitive organs of the soul by the deadening influence of custom. The man bows down in reverence before the child, who has not yet lost his heritage, that immediate intuitive knowledge of the eternal mind, which his deafness to the distracting voices of external things enables him to enjoy in the inarticulate silence of infancy. What though he can give no utterance to this transcendent knowledge? He enjoys it in virtue of his position; it broods over him as the day does over all; it is a master from whom he cannot escape, or rather a heaven-born freedom of which misleading experience has not been able to deprive him.

It is interesting to note the difference between Wordsworth's view of childhood, and that of the poet who alone among his contemporaries can be compared with him in mystic depth and spirituality. Shelley also held high views of the human soul, and of the poetic consciousness. In plain directness of aim, producing the most splendid results by the simplest means, he is far behind Wordsworth, but in appreciation of the whole spiritual side of nature and of man, he is fully abreast of him. His definition of poetry as the 'record of the best and happiest moments of the happiest and best minds' may well be placed alongside of Wordsworth's 'season of calm weather,' when the soul, far inland in the desert of life, can yet catch sight of 'that immortal sea which brought us hither.' But in their estimate of childhood they are different. Wordsworth speaks of the shades of the prison house that begin to close upon the growing boy. Shelley speaks of the time

> "When first
> The clouds which wrap this world from youth did pass."

To him extreme youth is no friendly element to the poetic spirit, but needs to be left behind before the full meaning of life and its mysteries begins to dawn upon the soul. Yet there is no fundamental contradiction between them. Both absolutely recognize the essential spirituality of mind as a dynamic, not merely acted upon but acting, bringing with it into the conditions of the phenonenal world, powers and possibilities of a purely transcendental character, having a horizon wider and more magnificent than to be bounded by the present life.

This intense spirituality of view comes out most clearly in the IXth stanza of Wordsworth's Ode. The mere *æsthete* in poetry is not insensible to the beauty of youth and the charm of its tender recollections. Like Wordsworth he may be ready to exclaim—

> "The thought of our past years in me doth breed
> Perpetual benedictions."

Youth's openness to pleasure and excitement, its freedom from the grosser forms of selfishness, its susceptibility of noble enthusiasms, its trustful simplicity, are all things purely beautiful and worthy of artistic treatment. But Wordsworth tells us that these things, though they are much to him, are not all, nor most. High and severe thought is more to him than pleasureable emotion, and the capacity for such thought he recognizes as part of the soul's original heritage. Why is it, he seems to ask, that the soul cannot be content to live and enjoy, taking its fill of beauty in this beautiful world, careless of anything beyond its present home? Why can we not leave alone

> "Those obstinate questionings
> Of sense and outward things,
> Fallings from us, vanishings;
> Blank misgivings of a creature
> Moving about in worlds not realized?"

It is simply because, whatever the exact account be which we give of his origin, man has been constructed on principles inconsistent with his being a mere citizen of the world. He may, as we have seen, forget his origin, under the charm of his foster-mother, but he cannot altogether belie his true self. The mortal fleshly nature does assert itself strenuously, but there are times when the soul catches a glimpse of its own true character, becomes aware of its higher instincts, and then the baser, merely earthly part trembles like a guilty thing surprised. It is difficult, nay impossible, to fit the spirit of man to a merely earthly life, and the moments when this truth unveils itself in awful majesty to the sense-bound soul may well be moments of terror. The shallow view of man which reflects itself in merely sensuous poetry makes little of these things, because [illegible] moments are rare and fleeting, but Wordsworth is [illegible] truth itself when he says that they

> "Are yet the fountain light of all our day
> Are yet a master light of all our seeing."

In other words, the obstinate questionings are witnesses to us of what we really are. There are other truths to which we must be faithful, other aspects of nature to which intelligence (and most of all poetic intelligence) must not be blind. But the light in which

alone other matters appear in their true colours is the light that reveals man to himself as a spiritual being, whose earthly years, crowded though they be with busy noise, are but moments in the being of eternal silence. For after all our questionings, and all the knowledge which we can ever possess of the universe, the silence seems still unbroken. Our very discontent with a mere sensuous life, which Wordsworth interprets as the restlessness awakened by half-forgotten memories of better things, is thus a priceless blessing, awakening in us the sense of

> "truths that wake
> To perish never";

which neither the 'listlessness' of mere worldliness, nor the 'mad endeavours' of men seeking to forget all in folly, nor any other influence hostile to the real happiness of man can altogether destroy.

With Wordsworth then the deepest poetry is the expression of man's highest thought on the highest subjects. Is there room in such a Puritanic estimate of the poet's place for a really poetic treatment of nature? At first sight it would seem as if attention to nature would only abstract our attention from the great theme. The joyous song of the birds, the gambolings of the young lambs, all the varied play of merely natural life, are they not irrelevant to the true subject of poetry, distractions from the proper business of a high thinker? Such is the ascetic extreme into which in all ages some of the strongest but narrowest of minds have run. Early Christians, mediæval Friars, sixteenth century Puritans were all enemies of art for this very reason. Hence the error on the opposite side, exhibited in the revived paganism of certain artistic circles, that morality and artistic devotion to beauty are incompatible. On the one hand art is reprobated as a fleshly idolatry, and apotheosis of sense; on the other it is declared that beauty never could survive the prudish swathings of conventional morality. The poetry of Wordsworth should be the peacemaker between them, for there never was poetry so faithful to a delicate morality, and so faithful at the same time to the utmost teaching of nature. Accordingly we have now to ask—What is the spiritual poet's view of nature, and her relations to human art? Human nature, and especially poetic human nature being what it is, how is it related to nature generally? Or to put it still more definitely; What part does nature play in spiritual poetry?

Let us again recall the fundamental contrast between the two schools to which we called attention at the beginning of this paper. If nature were only what the fleshly school allege, if the function

of art were merely to please, then there would be no reconciliation possible between a high moral purpose and the devotion to art. But Wordsworth and all who hold with him repudiate such a view both of art and of nature. For nature is significant to him of some thing beyond itself. Natural beauty speaks not of itself but of another, and the true poet is he who can hear the message, who is able to be a seer of the invisible world that lies beneath the fairest forms of sense. Nowhere has this mystic doctrine been expressed more finely than in Keble's hymn :—

> Two worlds are ours; 'tis only sin
> Forbids us to descry
> The mystic heaven and earth within,
> Plain as the sea and sky.

To read the indications of that mystic heaven and earth, to pierce beneath the sensuous crust, to recognize once more the shining of the celestial light through the thick veil of material things, and to enlighten again the eyes that have grown dim to the higher meaning of the world, this is the function of art and especially of poetry. This implies a constant reference to nature and natural beauty, because they mean more than they seem, being a revelation of the eternal mind, whose working is visible in every part. Poetry is thus like science, in that it is the thinking of God's thoughts after Him, with this difference that it suffuses those thoughts with the emotion of Beauty. And this we are able to do in virtue of the human soul within us, for phenomena would not speak to us of the Eternal if it were not for the voice of the Eternal within. Here Plato, Wordsworth and all the noble host of transcendentalists part company with those who regard the soul as a bundle of sensuous impressions, made what it is by the world without. They point to the fact that it is not so much the world that makes the soul, as the soul that makes its world. We take these masses of impressions, we work upon them, we reduce them to an order all our own, and we fix upon them thoughts and ideas which are no more naturally connected with them than, for instance, two such sensations as blueness and sweetness. Look at the concluding lines of the Ode for a confirmation of this truth :—

> "To me the meanest flower that blows can give
> Thoughts that do often lie too deep for tears."

Here is surely an effect altogether disproportionate to the cause, unless poetry is something more than the mere expression of delight in natural beauty. That it doubtless is, but it is much more. It is the consolation to mature and thoughtful men, who have left behind

them the illusions of boyhood, and yet have something left to shed a brighter light upon their surroundings.

> "Though nothing can bring back the hour
> Of splendour in the grass, of glory in the flower;
> We will grieve not, rather find
> Strength in what remains behind."

And what remains behind? What is the light beyond the common light of day that still recalls man to a sense of higher and nobler things. It is the 'human heart by which we live,' that richly endowed nature which would be so strangely unsuitable to its surrounding, were sense all. Among its gifts he reckons first sympathy, fellow-feeling, the social instinct, that faculty, certainly not the outgrowth of selfishness, but a growth which all the selfishness of the ages has failed to kill.

The very darkness of human life itself casts a light for the poet, who finds soothing thoughts springing out of human suffering. That black cloud of human misery crossing every path is a thing of loathing to the poet of sense, whose only use for it is to form the dark background of his pictures of joy. Ordinarily it is a monstrous evil, fit only to be railed at, for he has no idea of anything higher than enjoyment, of any pathway into a serener light leading through the gloomy gates of sorrow. But worst of all is the Shadow of Death, the ruthless destroyer that puts a period to the brightest day. No contrast can be more pointed than that which marks off Wordsworth and all the mystics in their view of death from those who do not see beyond the senses. To the one, it brings an utter sense of loss, of bafflement, of the termination of all hope and joy; to the other, it opens out vistas of a larger life and a diviner activity. Wordsworth was a Christian believer, and there is nothing remarkable in his regarding the 'philosophic mind' as a state of faith. But Shelley, in spite of his rejection of historical Christianity, is just as emphatic. These poets both knew what is in man, and they saw that it implied continuation of life after death.

The concluding stanza of the Ode states afresh the poet's attitude towards nature. His deeper thought does not deprive him of delightful sympathy with the external manifestations of her many moods.

> "And oh ye fountains, meadows, hills and groves,
> Think not of any severing of our loves!
> Yet in my heart of hearts I feel your might."

The naive simplicity of early life has departed only to give place to an appreciation of the spiritual in nature which is deeper and more abiding, because it is the result of conscious effort, a mental

possession gained by painful toil. The eye 'that hath kept watch over man's mortality,' that has taken in all the sadness as well as the beauty of human life, can still take a sober pleasure in the delights of this God-revealing world. This full realization of the diviner meanings of existence is the victor's palm, won in honourable conflict. That conflict was waged against the blinding, narrowing influences of earthly things, and that victory is the victory of true humanity, with its spiritual heritage of tenderness and joy and fear, over things that hid from it the mystic light that shines through all phenomena. The poet's soul and those kindred spirits that he draws with him in his upward flight, see in all around them, in every leaf and flower as well as in the glories of sun and stars, a true revelation of the Divine, answered in the inner sphere by a voice that claims kinship with that which it recognizes. The poet is nature's priest, consecrated to the office of mediating between her and the crowds of ordinary men, bringing forth her inmost secret, and interpreting it to less gifted though still kindred spirits. The scientist hews the stones and builds the walls of the fair sanctuary of knowledge, but the poet trims the altar lights that blaze within the holy place, the symbol and the token of the Divine presence.

ALEX. ALEXANDER.

THE CLOSE OF DAY.

The sun is sinking low ;
The West is all a-glow ;
In shadow lies the ground ;
My ear can catch no sound ;
The birds have sought their nest,
And fold their wings in rest,
'Ere Night descends.

Spirit of Good Divine,
May we be wholly Thine !
Though all things pass away,
And Night succeeds the Day,
Fill us with Thee, that so
We may rejoice to know
Life's daylight ends !

WALTER F. HOOPER.

In Memoriam.

MARY JANE PATTERSON, born Feby. 21, 1855, died Aug. 14, 1883.

Already in this third month of our brief history, we have to speak of sorrow. Our Editor has been temporarily laid aside from his duties by severe family bereavement. After two short years of happy married life and zealous Christian labour in India, it has pleased God to take to Himself the spirit of Mrs. George Patterson, and to promote her to higher service. Her life in Madras was short, but it was long enough to prove that one of no ordinary gifts and graces was amongst us, and to make us feel that the cause of Christian philanthropy has sustained no ordinary loss in her sudden removal. This is not the place to speak of the many qualities that are fit themes only for the inner circle of friendship. But there are aspects of her life that have a wider, if a less sacred interest. She was one to whom nothing that affected the sacred cause of God and man was ever indifferent. The infant Christian community held a warm place in her affections. In the cause of Female Education her labours were abundant and self-denying. Her devotion to that struggling cause in this city, leading her to give what was, we fear, too much of her strength to severe linguistic study, and laborious supervision of schools, may well win for her memory a pathetic reverence even from those to whom she was personally unknown. This periodical she regarded with peculiar interest, and we may well feel that we have lost a faithful friend. Every page of its first two numbers passed under her scrutiny while going through the press. To many students of the Madras Christian College Mrs. Patterson was well known, and we do not need to ask them to cherish her memory. But while they could not but recognize her friendly feeling and warm personal interest, they could not know how deep and far-reaching her sympathy with them was. She never forgot them in her prayers. Her life was short but it was complete, filled with loving service. As we laid her to rest in the quiet Cathedral Churchyard, beside other Christian ladies who had given their best life to India, who could help feeling, amid all the sorrow and gloom, that a life so spent and ended is in the highest sense saved ?

LITERARY NOTICES.

PICTURE LOGIC. By ALFRED JAMES SWINBURNE, B.A., *Queen's College, Oxford. London: Longmans, Green and Co., 1882.*

The use of diagrams or pictures in treatises on the physical or natural sciences is universal, and the aid thereby rendered to the student is incalculable. In Geometry diagrams are absolutely indispensible, as they are, approximately at least, the very subject matter of the study. If not so absolutely indispensible in the other sciences, yet what would a work on Astronomy or Geology, or Zoology or Physiology be without such aids to enable the mind to realise the verbal descriptions? Now it seems pretty evident that the mental sciences are, by their very nature, debarred from any such adventitious aid. They deal with phenomena that have neither magnitude nor shape nor colour, so that it is even more impossible for the draughtsman to outline thought than for the sculptor to "out breath." If it were otherwise—if the teacher of Psychology could represent mental operations or products on the blackboard, the work of the learner would be much easier, in accordance with the maxim of Horace,

"The mind's impressions are more sharp and clear,
That enter through the eye than through the ear."

In that case the perennial disputes of Psychology, such as the nature of the concept, or the relation of motives to the will, might perhaps be brought to a speedy solution. But in the nature of the things this cannot be. Diagrams or pictures, if used in this department at all, can be nothing more than symbolic of facts that have a meaning for the mind alone. And even as symbols, the use of diagrams or pictures in the mental sciences is very circumscribed. In Logic we have little more than the squares of opposition, and the lines or circles of syllogism. In Psychology their use is almost if not altogether unknown, save in the border-land region between Psychology and Physiology, an example of which is Darwin's treatise on *The Expression of the Emotions in Man and Animals*. The same is true of moral science. The teaching of practical morality might no doubt be aided by pictures. The famous series of pictures by Hogarth, entitled *The Rake's Progress*, is a most impressive moral lecture.

But however this may be, here we have a veritable "Picture Logic," in which the abstractness and dryness of the science are relieved by numerous pictorial illustrations and a considerable admixture of fun. And why not?

"ridentem dicere verum
Quid vetat?"

The work is in the form of conversational lectures by his tutor to an undergraduate of Oxford, who, according to his parent's description of him, "had manifested symptoms of future greatness when a child, and still possessed remarkable ability, if it could only be drawn out." The illustrations are due partly to the ingenuity of the tutor, and partly to the dreams of the pupil, after his brain had been excited by an attempt to master the subtleties of Logic. Some of them are purely mnemonic, as, for example, the "logical hand," at page 60, the outstretched thumb and fingers of which indicate the different kinds of logical terms; or the "logical shirt collar," at page 118, the lines of which indicate the different Figures of syllogism.

We shall now give one or two quotations, although we cannot give the pictures by which they are accompanied. And, first, as to the difference between denotative and connotative terms:

'In my stables I keep a mare known as "Fanny," and a cow known as "Polly." One day I say to my man, "John, we'll change these names, in future if men ask for their names, tell them the *mare* is called 'Polly' and the *cow* 'Fanny'." "Werry good, sir" says John. Next day I add, "John, a further change is necessary; we will call the mare a cow and the cow a mare, and when men ask what they are, say this (the mare) is a cow and the other a mare." But John stoutly refuses, and why? because the names "mare" and "cow" are common terms awarded to certain animals in virtue of their possession of certain attributes, whereas singular terms are mere marks arbitrarily affixed.'

Again, with reference to the fact that the copula of a proposition, *is*, is merely the connecting link between the subject and predicate, and conveys no notion of time or existence:

'To impress upon your mind these facts look at this rough sketch. The copula is the coupling chain between two railway carriages, the subject and the predicate, which form a train, and if Time, Existence or Probability wish to travel on the Logic line they must get into one or other of these carriages. It is unreasonable to suppose that they are to be allowed to travel on the coupling chain—however full the carriages may be they must squeeze in somewhere, or not go at all.'

The correct relation of Logic to Language, as well as the false relation some logicians would put them in to one another, is illustrated thus:

'A friend of mine, named Jones, who lived in lodgings, used to work with a tutor for Latin prose. Jones was in the habit of leaving his productions daily at his tutor's, and calling next morning to see the mistakes; but as Jones was not an early riser his tutor would often step over to his lodgings, and leave the corrected prose with the people of the house, pointing out the faults, begging them to point them out to Jones as soon as he appeared. It so happened that the landlady's daughter was very attractive, and by some accident she always chanced to be at hand when Jones's tutor called. Scandal might have arisen from the protracted interviews in the course of which Jones's tutor pointed out to Jones's landlady's daughter the defects in Jones's Latin composition, had it not been well known that the *primary* object for which the tutor came was *not* to converse with the damsel, but to instruct the pupil, and being unable to see the pupil, he was compelled to employ the aid of a third person as a medium. His relation to the pupil was, so to speak, primary, his relation to the landlady's daughter secondary. After a time, however, Jones left, but the tutor still continued his visits, and ended by marrying the landlady's daughter. So, Logic, led away by the allurements of language, has sometimes neglected thought, the object with which it is primarily concerned, and has thereby become involved in troubles and mistakes, and has fallen into bad repute.'

We shall close with the following, somewhat apropos of some of the Madras Colleges just now:

'It so happened that we had our Logic lecture after supper this time, to enable us to make a sailing expedition in the daytime; and, partly from fatigue, partly from the effects of supper and work, I actually dreamt about Logic again. I thought I was wandering in the parks at Oxford, and I came across an old woman of so pitiable an aspect and such miserable attire that I could not forbear stopping to inquire what she did there and whence she came. She sat with a basket on her lap, swaying slowly from side to side, and took no notice of me. At last she heaved a sigh and began, 'Ah, me! poor Dr. Logic (he ain't what once he was!). Good sir, I'm his errand girl, I takes round what he makes up. Deary me! day after day, door after door, the same old answer. Fust of all I says, "D'ye please to require any of my master's beauti-

ful works? I've two sorts here, I says; beautiful 'results of art' on the right side o' my basket." "What d'ye mean?" says they. "Why," says I, "pertikler kerrect thoughts—just made and ready for use—please to give 'em a look." And they says, "O, then! we wont trouble you—we ain't *out* of them—we've got as many as we want of our own;" and 'ow can I ask 'em to buy what they've got already? Ah, deary me! poor Dr. Logic; he ain't o' much account now-a-days. I catches 'em up 'owever, and says, "Well, you ain't got those others on the left side—these splendid 'results of the science,' the laws upon which them pertikler kerrect thoughts as you've got already dippends; and they says, "no we ain't," and may be they'll take some o' them—that left side's all poor Doctor ever sells! But bless yer 'art alive, sir; there's many of 'em as wont take even them. "We ain't got 'em? no! and we dont want 'em. None of yer humbuggy, cranky, theoretical stuff 'ere—practical results—that's what we want. Come—be off!"

I woke, thoroughly moved to pity, and vowing I would never treat poor Dr. Logic so badly.'

THE PROPOSED POLITICAL, LEGAL AND SOCIAL REFORMS UNDER MOSLEM RULE. *By* MOULAVI CHERAGH ALI. *Education Society's Press, Bombay.*

This book is an attempt to prove that progress in every department of life is quite possible in Moslem States, and that, as a matter of fact, there is now freedom, toleration and progress under Moslem rulers. The author further contends that the ordinary vices of slavery, polygamy, and concubinage, are evils which have arisen since the time of the Prophet, and are distinctly opposed to the teaching of the Qurán. To this bold statement the simplest, shortest and best reply is that the author contradicts the facts of history, and misinterprets the Qurán. The interest of this book, then, does not consist in any historical accuracy, or sound exegesis of the Qurán, but in the evidence which it gives that enlightened Musalmans do feel how evil a thing the political and social system of Islam is, and how necessary it is to find some apology for it. Cheragh Ali propounds a new theory with regard to Muhammadan law. It is that the Shariat, or Sheri, is 'Common Law,' and this can be altered whenever the ruler of a Moslem State pleases. If it were so, no doubt some political and legal reforms could be carried out, but the Shariat is not 'Common Law' in the sense that it can be changed or improved. The decision of the Turkish Ulama of the present day, and of all the Legists of Islam are against such a view. With the failure to establish this novel theory, the whole of Cheragh Ali's book fails of its purpose, for he would admit that with an unchangeable law reform is not possible. Some of the expressions used about the religious toleration in Turkey, about the benefits Islam has conferred on woman, its prohibition of slavery and the like, are so contrary to fact that it is charitable to suppose that the author has neither travelled far nor wide, and that his experience of home and social life is confined to a Moslem Zenana. The chapter on moral reform is the weakest in the book. It is chiefly remarkable for partial quotations, incorrect explanations, and a suppression of the orthodox interpretations. That slavery, polygamy and concubinage are a part of the law of Islam and are practised in Moslem communities are facts which no special pleading can gainsay. It is good, however, that these matters should be discussed, and better still that some Musalmans should now be ashamed of them.

TALES FROM INDIAN HISTORY. *By* J. TALBOYS WHEELER. *Second Edition. London: W. Thacker and Co., 1882.*

This work, we are told in the preface, "is a history of India in the form of tales or narratives, just as the history of Scotland is told in Sir Walter Scott's 'Tales of a Grandfather.'" It is not however confined to real history as it contains a good deal of legendary lore and some interesting sketches of social customs and their results. The book is intended, the author says, "for the people of India as well as for those of the British Isles," and he claims that his experience as a teacher of history in the Madras Presidency College, and as a Secretariat officer in both India and British Burmah has made him "not only aware of what the rising generation of Hindus are anxious to be taught, but what it is desirable that they should know." This latter clause seems to us rather out of place, for surely in spite of his evident self-complacency he hardly imagines that any one anxious to become acquainted with Indian History will be content with this little book. For our own part we felt on reading the book that it would be very difficult to learn much *history* from it, though certainly we obtain very interesting accounts of various historical incidents. We have often heard people complain that Indian History was made up of a series of disconnected incidents and that the links for binding these together were either wanting altogether or at best very difficult to discover. Such an impression will certainly be increased by reading this book. As a collection of Indian tales it is both interesting and useful, and the skill with which the stories are told ought to render the book a very popular one.

The comparison in the preface to "Scott's Tales of a Grandfather" naturally suggests one great contrast between the two books. Scott has to tell, on nearly every page, of the aspirations, the struggles and the victories of the people; while the Indian historian can only speak of the Princes and rulers. The people have no place save as instruments in the hands of their Chiefs. The contrast is a painful one and detracts much from the pleasure one would otherwise have in studying the history of a great country.

The first two chapters of the book are devoted to the traditions of the Rajputs, the war of the Maha Bharata and the legend of Rama. The next six chapters take up the period from A. D. 1000 to 1748, a period of which the history is little but an account of intrigue, murder and rapine. The most interesting chapter in this part is probably the one on Roe's Mission to India in the reign of Jehanghir, which gives us some interesting glimpses of the Great Moghul. The remainder of the book is taken up with the history of British India, and so of course refers to a period about which we have fairly accurate information. There are however in this part of the history many vexed questions which will perhaps never be finally settled. One of these is with reference to the character of Warren Hastings, one of the greatest men India has ever known, and we cannot but think that he is unfairly dealt with in this volume. True, the author adds a note that there is another side to the question, but such a note can do little to remove the impression produced by the text. We have no space here to go into a justification of Warren Hastings' character, but we cannot let the accusations contained in Chapter XI pass without a protest. No doubt some of Hastings' proceedings are fairly enough open to condemnation, but we certainly thought the time was past when anybody

would repeat such insinuations as those about the execution of Nuncomar. The volume ends with a slight sketch entitled "India: Past and Future," which looks back over the dreary expanse of India's history which shows so little real progress, and forward to the time when "generations yet unborn will be married at suitable ages, and those affections which impart freedom to family life, and find expression in a constitutional government, will have full and healthy play, beyond what Hindus have ever dreamed from the days of Manu until now." The book is well printed and nicely got up, and deserves to be widely read.

CHANDRAHÁSA, OR THE LORD OF THE FAIR FORGER: A HINDU DRAMA. *Mangalore: Printed for the Author at the Basel Mission Press, 1882.*

This is a charming work by a Hindu author who does not give his name. Certainly he has no reason to be ashamed of his performance, for in point of language, interest and general good taste, the book would be creditable to a writer with a reputation. The mastery of English which the author has attained allows how much can be done in that way by the people of this country, and how perfect an instrument for the expression of all thought, Oriental as well as Western, that language can become.

But it is not for its correct English that we value Chandrahása, nor indeed for itself at all. It is a pleasant little drama, but there are pleasanter and better to be had. After all, many Englishmen write as good English as this Hindu author. But he has shown a power that lies completely beyond the reach of any ordinary Occidental, the power of mediating between East and West, of making purely Hindu ideas, modes of life and situations, to glow with living interest for the European as well as the Asiatic. This is what we need to enable us to know each other, and we believe that the author of Chandrahása has a power which if wisely exercised may help to bridge the vast gulf between what an Englishman knows and what he does not know, of the Hindu people. It would be unfair to give an analysis of the play, when it is so short and simple. The plot is ingenious, but somewhat puerile, when viewed from the Western standpoint. But for this the author is not responsible, as we fancy that it is borrowed wholly from the original Jaimini Bharata. It is well, too, that minds whose standards of taste are rapidly becoming Anglicized should be recalled to the knowledge of the fact that English taste is not everything. We hope that the author will go on. There are far more difficult tasks lying before him, for which he has shown a rare fitness in 'Chandrahása.'

THE STUDENTS' COMPANION TO THE CHEMISTRY AND PHYSICS PRIMERS. *By* R. V. SUBBA RAU, B.A. *3rd Edition. Madras: Addison & Co., 1883.*

The fact that this little book has reached a third edition shows that it has been found useful by students as well as by teachers of Matriculation classes. It is in the form of notes on the texts of the Chemistry and Physics Primers, and in this way the author manages to introduce a good deal of additional information of a useful and simple kind. Such a book is of course of little use to a teacher who has gone through a regular course of science, but many have to teach these Primers who have themselves received no scientific training, and such are likely to find this book useful. One feature in the book which

we have not noticed in similar productions is the practice of giving the vernacular equivalents of chemical names; this is undoubtedly a very good plan. The book as a whole is nicely got up and is tolerably free from errors; but when we turn to a subject which seems always to mislead young authors in this country, viz., the distinction between solids, liquids and gases we find the ordinary blunders. The particles of gases are said to repel each other, and the gases themselves to have an "indefinite size." Again the distinction between frictional and voltaic electricity is quite wrong. To say "the electricity of friction is in a reposing state stored up ready to burst forth in a short sharp rush; the galvanic action is a steady torrent of the electric agent (sic), and thus better suited for doing work in its passage than the former," is to entirely mistake the relations of the two. It is also comparing them under totally different circumstances, the circuit being supposed open in the one case and closed in the other. An appendix contains answers to the papers that have been set in Chemistry and Physics in the Matriculation Examinations. These answers seem generally very well prepared, but we notice one serious blunder in Ans. (i.), page 93: How is the water to get into the barometer when the end of the tube is under mercury?

CHRIST VERSUS KRISHNA: *A brief comparison between the chief Events, Characteristics and Mission of the Babe of Bethlehem-Judæa, and the Babe of Bimdadun-Mallunapurai; with a concise review of Hinduism, proving its derivation from Christianity.* By L. A. SAKES, M.D., B.M.S., *Jubbulpore.*

The title of this book is its best refutation. It is an extremely fine specimen of the way *not* to compare religions with one another. It is just Theosophy over again, only reversed and somewhat burlesqued. The Theosophists tell us that everything great and noble in human thought was originally Indian. Rome, Greece, Egypt all had civilizations and systems of thought. India has had the same, and India is farthest east. Therefore all Roman, Grecian, Egyptian thought and civilization came from India. Q. E. D. Dr. Sakes proceeds with equal cogency to reason that as there are ideas, names, events, &c., in Hindu Mythology which may by a lively fancy be regarded as parallel with ideas, names, events, &c., in Scripture, and as there was undoubtedly both a Jewish and a Christian diaspora, therefore Hinduism is derived from Christianity and Judaism. It is high time that this notion of everything being derived from whatever the thinker regards as most venerable were given up. If ever it had a day, it has served it, and should now be laid to rest among other antique curiosities. Dr. Sakes is a doctor of medicine, and must therefore have received some scientific training, but his eye has never been trained to appreciate phenomena at their proper value. It is surprising what trivialities he brings forward in proof of his position. Would any man whose mind had not been made up to a foregone conclusion feel the force of Dr. Sakes' whimsical comparison between the story of Krishna's transfiguration and that of Christ? How can Rajah Judistir represent Simon Peter, if the only points of resemblance are that they have both of them two names and both told a lie? If such reasoning were justifiable, Dr.

they had indulged; insects that were disturbed immediately after their entrance being as much confused as those that had been allowed to feast for several minutes. It was found, however, that where the number of translucent spots was fewest, the confusion caused was least, and where they were most numerous and conspicuous it was most utter and hopeless. Dr. Mellichamp was thus driven to the conclusion it was these spots that led the unsuspecting victims astray. They were veritable wreckers lights, leading on to sure destruction. Beneath the glassy surface comes a zone in the tube lined with stout spines, sharp and stiff, and again pointing downwards. The insect in its struggles soon impales itself on these and its fate is sealed. The more violently it wrestles the faster it descends. At the bottom of the tube there is a quantity of fluid which is anæsthetic in its effects. Into this the insect soon falls and the troubles of its life are over.

Such is the mode in which this strange plant captures its prey. Its leaves often become half-full of dead insects in the course of a few weeks. A writer in the *London Quarterly* for October 1876 asserts that in twenty leaves which he cut from plants of *S. flava* he found not less than 4,000 flies in a recognisable condition while, at the base of each leaf, there was a mass of unrecognisable débris. Sometimes the weight of their contents is so great that they break off and fall. If, however, the petiole is sufficiently strong to bear the weight, the contents are gradually decomposed, and a peculiar larva that makes this charnel house its home is developed, which eats through the petiole and so brings the leaf to the ground. In either case it carries to the earth a rich store of nutriment from which the roots of the plant obtain what the soil itself cannot yield.

Other species still more complex and remarkable are the *Nepenthes* or Pitcher plants, whose chief home is from Burmah and Ceylon southward to Australia. These plants, of which many species have been examined —chiefly by Dr. Hooker,—have a contrivance for catching insects in many respects similar to that of *Sarracenia*. The midrib of their leaves is prolonged sometimes to the length of a yard or more and at its extremity is developed a hollow vase-like receptacle which is remarkably similar to the familiar household utensil from which the plant takes its name. These pitchers vary in size in different species, in some being as much as 18 inches high. In most cases they stand upon the ground, the midrib which bears them being sufficiently developed to allow of this. But several species of *Nepenthes* being lofty creepers, pitchers are occasionally found at a

CHRISTIANITY: WHAT IS IT? *A Lecture to Educated Natives. By* ROBERT SCOTT, M.A., *Missionary, F. C. A. Institution, Bombay. Poona: Printed at the Orphanage Press, 1882.*

We do not suppose that Mr. Scott means us to accept his lecture as a full and complete answer to the large question which he has chosen as his title. That question is at once so weighty and so difficult that it would be hard indeed to give it a categorical answer. And yet it is one that presses every day more and more urgently upon the minds of thoughtful men of all creeds. The devout Christian, quite as much as the truth-seeking Hindu, may well be confounded by the intricacy of the matter, and find it almost impossible, in the midst of the marvellous developments of his religion, to formulate to himself its true definition. We are therefore giving him no small praise when we say that Mr. Scott really indicates the leading lines of thought by following which the answer to his question may be found. Although it is true that every man must work out this problem for himself if his solution is to be of any practical value, it is also true that a thoughtful paper like the one before us is of great service in enabling us to put the question before ourselves as it ought to be put.

Mr. Scott is not writing for theologians, (though theologians might do worse than read what he has written) and his arrangement of the subject matter was doubtless dictated by other considerations than those that weigh with writers on dogma. Instead of seeking to unfold the Christian system as a whole, he seizes certain salient and characteristic features, and dwells upon their significance in relation to the religion in its entirety. Nothing for example is more frequently discussed and praised by Non-Christians than Christian morality. Accordingly Mr. Scott speaks first of the Ethics of Christianity, insisting that Christian morality is Christ' that the one implies the other.

"We cannot accept the teaching and reject the claims of the Founder of our religion—the latter determines the value of the former. We cannot accept the goodness of the physician and deny the power of the healer. We cannot look to the career of sacrifice, to the agony and the cross with admiration, while we regard the theology of the Cross as delusion, the fact of the resurrection as fiction 'Not at all or all in all.'"

Again, to a large number of persons both within and without the Church, Christianity is nothing more or less than a theology, a reasoned system to be accepted or rejected, a sort of popular philosophy. This is the view of persons whose religion has passed into a series of dead formulas, and who can think of conversion as nothing more than the exchange of one set for another. Mr. Scott meets the error by the assertion that in this sense Christianity is not a religion at all. His words are well worth quoting.

"No intellectual speculations, no system of philosophy after the manner of the schools, came from the lips of Christ. None belongs to Christianity. Christians may have erred and may still err in binding with their faith their opinions on matters of science. Yet even in mediæval Europe, when Theology swayed the whole field of study, the system of philosophy then wedded to the Christian faith was professedly the system not of a Christian master, but of Aristotle. We are in this country so accustomed to associate with religion, cosmogonies, astrologies, theories of spirit and of matter, and general miscon-

ceptions of the facts of nature, that we are apt to imagine a true religion should give us a correct verdict on all the problems of philosophy and science. In such a revelation of religion there would be no divine wisdom. Man has his faculties of mind and thought. The materials for their exercise are around him in nature. It is his work to investigate, to till this intellectual field. The progress and the health of his mind depend thereon. And in the course of the ages, he rears the wings and the turrets of the temple of science. Christ does not judge the philosophies, even the sophistries, of the schools, except when they touch concrete life and conduct. And Christianity does not pronounce on the problems of scientific or metaphysical speculation. But she frees the spirit of man, and her sons have been the foremost leaders in all the march of mind."

These wise words contain *the* lesson of the present day regarding Christianity, a lesson that it seems to be hard for the world to learn. Christianity is judged by unbelievers, not in the light of what it professes to be, but in the light of their *a priori* notion of what it ought to be. Because they do not find in it exactly what they expected, they turn away from it in despair, without waiting to see whether it may not be something better than they had ever dreamed.

Mr. Scott's exposition of the doctrine of the 'Divine Kingdom' is as full and satisfactory as could be expected in a treatise like the present. There is no idea more prominent in the New Testament, and we are perfectly certain that there is none which is less generally understood. Non-Christian students of the Gospels are constantly puzzled by the self-contradictory explanations of teachers, preachers and commentators, till the algebraic *x* has nearly as much concrete meaning. Mr. Scott has the rare merit of having grasped the idea firmly himself, and is therefore able to expound it without faltering. The whole pamphlet is an example of clear thinking and calmly eloquent writing which we can cordially recommend to all classes of our readers.

We shall conclude with the following striking words upon the doctrines of the Trinity and the Incarnation.

"Is the Incarnation an effort of imagination, the apotheosis of some legendary name in a later and credulous age? Nay; "that which we have heard, that which we have seen with our eyes, that which we beheld, and our hands handled concerning the word of life," said one with a mind rare alike in philosophic and in moral insight. Nothing, indeed, was farther from the Semitic mind, which, in that age, had magnified the distance between man and God, than such a conception. In the Aryan nations indeed we find incarnations: the Apollo of Greece, the avatars of India, the multitude of apotheoses. The Semitic idea in its natural growth we find in Mahomet and Mahometanism: in a prophet ministered to by angels. Yet the former is as far removed as the latter from the one Incarnation for all of mankind, and for our salvation, taught by Christianity. It was the impression made by the life, the words, the resurrection and ascension of Christ, that alone could mould the belief in the eternal Word, "who was with the Father and was manifested unto us."

And the Trinity arises from the Incarnation. Already we know the Father and the Son. Christ spoke of another, the Comforter, the abiding presence of God among his people. And this Spirit is the conviction of inward experience. God has therefore given us a threefold revelation of Himself—in his works, in history, in our hearts: has revealed himself as Maker, Redeemer, Sanctifier. In speculating on this doctrine we may err. We cannot know God fully. We cannot even know a fellowman. In mind, in heart, in action, in diverse ways, we approach a knowledge of a friend. Standing beneath the azure sky or in the cloudless night, we exclaim—"the heavens declare the glory of God:" beneath the Cross of Calvary—"surely this is the Son of God:" looking back through the ages over the strife of evil and good, we know that the Lord reigns. Beholding our own little lives, with all their glory and shame, in this infinitude of space and time, we join the choir who sing, "Glory be to the Father and to the Son, and to the Holy Ghost; as it was in the beginning, is now, and ever shall be, world without end."

NOTES AND EXTRACTS.

On the 10th of August last the Rev. William Miller returned to Madras after a lengthened absence. He was met at the Railway Station by his colleagues and a large number of the students. The Christian College that day had a gay and festive appearance, and the words 'Welcome to the Principal' were not more clearly written over its doors than they were impressed on the countenances of all the pupils, from the humblest school-boy to the gravest student.

Mr. Miller's services were lent by the College Council to the Government of India that he might take part in the labours of the Education Commission. In the spring of last year he served on the Commission upwards of two months in Calcutta, and when he went again in December to resume his labours there, it was hoped that the last day of March would release the members from their laborious duties. But it was soon foreseen that the enormous amount of work to be done would require more time, and accordingly five members of the Commission were selected along with the President to complete the Report. Of the five members, Mr. Miller was one. The rest of the Commission being disbanded, the President, with his contingent repaired to Simla. We believe that the report is still unfinished, but the special part assigned to Mr Miller having been completed, he was at length allowed, at his own urgent request, to leave at an earlier date than the others; and when he returned to his accustomed place, every class in School and College seemed to vie with every other as to which should be foremost and most demonstrative in its tokens of welcome. According to the graceful custom of turning flowers to artistic account on gala days, multitudes of garlands and bouquets were distributed and great assortments of fruit. The good feeling of the boys also expressed itself in more substantial gifts that might be preserved as memorials of the occasion, while the most advanced classes coupled their presents with addresses.

In these addresses the students showed that they had all along watched the proceedings of the Commission with great interest, and they seemed to feel that, important to education as Mr. Miller's position in Madras is, his place on the Education Commission was still more important; for in that the interests of the whole of India, and not of a mere corner of it, are involved, by it all classes of the community would be benefited and all kinds of education would be improved. The temporary loss of the Principal's services to the Christian College might well be borne, they agreed, if ends like these were to be attained.

These addresses made fitting allusion to the bereavement which Mr. Miller recently sustained in the death of his father. To this we would affectionately add our own tribute of respect to the memory of one whose genuine interest in the Christian College has been so often certified by acts of unostentatious kindness.

The report on the British Post Office is always an interesting paper, and this year its interest is increased by the addition of a historical sketch of the developement of the Post Office since the time when King Charles I. commanded his Postmaster of England for Foreign Parts "to settle a running post or two, to run night and day between Edinburgh and London, to go thither and

come back again in six days, and to take with them all such letters as shall be directed to any post-town in or near that road," to the date of the introduction of the Penny Post. A point worthy of notice in this history is that all the great improvements have been brought about by outsiders in spite of the circumstance that Government has claimed a monopoly in the matter of postal communication since the year 1637. In 1784 the average rate at which the mails were conveyed was only from 3 to 4 miles an hour. They were then carried by post-boys on horseback. The next step was to send them by Mail coaches when the speed was about doubled, and about the beginning of this century the speed was upwards of 10 miles an hour on the main roads. The introduction of railways has of course greatly increased that speed even in out-lying districts, and now for instance letters posted in London in the afternoon are delivered early next morning in Edinburgh. The carrying of letters is by no means the only work done by the Post Office, for it has in addition to look after the Telegraph, Money Order and Saving Bank systems, besides various minor operations. The system of Money Orders was begun in 1792 by some Post Office clerks on their own account, but it was found to be so useful that in 1838 it was made a regular part of the work of the Post Office.

Up to this time India has been rather ahead of England in some of the postal arrangements. In the matter of parcels for instance India had a very complete postal system while there was no parcel post in England. This however is now changed and a parcel post has been introduced. This means an immense increase to the work of the Department, and preparations for it have been going on for many months. The Money Order system in India is also more convenient than in England, for here the remitter has nothing to do with the transmission of the order, while there he has to transmit it himself and the person who receives it has to give information as to the sender, &c., before he can get the money. Turning to the statistics furnished by Mr. Fawcett, we find that upwards of 1,280,000,000 letters and 144,000,000 post cards were delivered during the year. This corresponds to 36 per head of the population as compared with 3 per head the year before the introduction of the penny post. In Germany and France the numbers are only 13 and 15 per head respectively. In the Telegraph department the rate of increase is not very great; 32,000,000 telegrams however were sent and there can be no doubt that the proposed reduction of the minimum charge from one shilling to sixpence will cause an enormous increase in this number. The Post Office Saving Bank is a very important institution and its value is fully appreciated as may be seen from the fact that there are some 3,000,000 depositors with deposits amounting to over £39,000,000, of which about £3,000,000 was paid in during the year. Not only is the Post Office in a most satisfactory state as regards the manner in which it conducts its business, but it is also the source of a large revenue to the State. Last year the net revenue was £3,061,748, and this too in spite of a large sum having been spent in increasing the pay of the letter-carriers and sub-postmasters. There is just one other point to which we would refer, and that is the system of giving letter-carriers good-conduct stripes as rewards for efficiency. These stripes carry with them an increase of pay of one, two and three shillings a week. Might not some such plan be introduced into India?

"The Report of the Madras Physical Training and Field Games Association" for 1882 gives us an opportunity of calling the attention of our readers to the work which this Society is doing. The Association was started in 1881 at a large public meeting called together by Mr. Grigg to consider what could be done to encourage physical exercise of various kinds in connection with the schools throughout the Presidency. An influential Committee was then formed which, after a great deal of hard work, has now got the Society into good working order. The object of the Society as stated in its rules is "to promote gymnastic and other physical training and a love for field games among the youth of the Madras Presidency." This is done, amongst other ways, by the establishment of a completely equipped gymnasium at the People's Park, Madras, at which classes are formed for training as gymnastic instructors, young men nominated by the managers of schools and colleges, by arranging for the construction of gymnastic apparatus and by aiding and encouraging the formation of gymnasia in Madras and in the Mufassal (including Native States). Perhaps one of the most important functions of the Association is to provide properly trained instructors for the gymnasia attached to schools. Two classes of certificates are granted by the Association, the 'ordinary' and the 'advanced,' the latter of which can be obtained by none who are not thoroughly qualified to act as instructors. What ought to be a very attractive feature is the annual competition for prizes held in the gymnasium at the People's Park, at which a number of prizes, presented chiefly by native gentlemen, are competed for. We were sorry to notice that very few natives took part in the last competition, but, perhaps that it is to be accounted for by the fact that there were very few native schools last year which had gymnasia in full working order, and we hope that at the next trial there will be a much larger attendance of native candidates.

In looking over the list of subscribers we notice that while there are 84 subscribers in Madras paying Rs 10 each, there are only 39 subscribers in the Mufassal, though the annual subscription for them is only Rs 5. Surely this is not as it ought to be. It certainly does not indicate any very great interest in the work of the Association on the part of those connected with country schools. The expense connected with starting a gymnasium is considered by many school managers to be prohibitive, but this is a mistake. A complete set of apparatus suited for a school of two or three hundred boys can be obtained for Rs. 207, and where such a sum cannot be afforded the horse alone can be got for Rs. 39 and the parallel bars for Rs. 16, and with these two a great deal can be done. No doubt there is a difficulty in getting teachers in many of the Mufassal schools, but that we trust will in course of time be overcome as the number of trained instructors increases. The Association certainly deserves the warmest support of all who are interested in the physical welfare of the youth of our Presidency.

We learn from the *Ceylon Observer* that considerable indignation is felt in that Colony at the attempts which the Buddhists are making to pose before the world as the favourites of Government. A correspondent of our contemporary is specially indignant at a recumbent figure of Buddha with the Royal Arms of England emblazoned above, and is struck with the incongruity of the 'Defender of the Faith' lending her arms to the adornment of a Bud-

dhist temple. We are of course not so well acquainted with Ceylon as the *Observer*, but it does strike an outsider that too much may be made of such an event. The facts seem to indicate that there has been a decided revival of Buddhist religious feeling in the Island, partly at least owing to the efforts of Colonel Olcott. The Ceylon Buddhists have repeatedly shown themselves anxious to commit the British Government to a public recognition of their religion, and opinion has taken alarm at what seems an attempt to lead the worshippers in this particular temple to imagine that the Queen is in alliance with Buddhist idolatry. Surely the good sense of the enlightened Buddhists we hear of over here should lead them to withdraw such a peculiar and offensive expression of their devotion, without recourse being had to what the *Observer* evidently considers the last shift, that of having the subject mentioned in Parliament.

Important changes have been made during the past year in the University of Bombay. Formerly there was a limit of age fixed for Matriculation, which has now been done away with. The notion was to prevent boys from beginning their University course at an age when they are physically and mentally unfit for advanced studies. There is no doubt a serious danger here, and one cannot help pitying some of the students that take their seats upon College benches at a time when they need easy mental work to enable them to develop their physical powers. On the other hand, it is also worthy of mark that our youngest students are frequently the best. As the University system develops itself, the evil will probably die by natural causes, as it has to a large extent in Great Britain. A limit of age fixed by the University is scarcely the right remedy in any case, and we are glad that it has been abandoned in the sister Presidency. Instead of the First Examination in Arts, there has been substituted a First B. A. Examination. A second examination for Bachelors of Science has also been instituted, for which 7 candidates appeared and 2 passed.

The anniversary of Pacheappa's College and the annual distribution of prizes took place during the past month. Rajah Sir. T. Madhava Row presided and delivered a long and interesting address. In the course of the evening, notice was very properly taken of the poor encouragement given to Pacheappa's in the shape of Government Grants-in-aid. We hope that the Trustees will take an early opportunity of pressing the matter upon the attention of the authorities. They have hitherto been influenced too much by the fear of appearing to compete with Government Institutions, and people who have so little confidence in their own educational power could scarcely expect that Government should go out of its way to press greater efficiency upon them. But Pacheappa's has undoubtedly a great future before it, as it has had a most honourable past. Having the advantage of the services of a Principal of untiring energy and great educational success, the Trustees will, we hope, give him that support in the further development of the College which he deserves.

We understand that the Government Female Normal School, now located in Madras City, is to be removed to the suburb of Egmore. The Girls' School at

Egmore, formerly one of the Maharajah of Vizianagaram's schools, but now under the management of the local branch of the National Indian Association, will, it is said, pass into the hands of Government and become the practising school for the Normal pupils. Such an arrangement will no doubt give the school a situation with more pleasant surroundings, but we question if it is likely to be as attractive to the persons for whose benefit it exists at so great a distance from the homes of most of them.

In the recently published volume of lectures and addresses by Colonel Olcott, there are many things which claim most careful attention. We shall not be accused of undue partiality for Colonel Olcott's ways of thinking and speaking, but we hope we are not blind to evident good. There is an address to lady Theosophists in the volume, not from the Colonel's pen, which is both beautiful and striking. Those of us who are familiar with good Christian sermons will recognize not only the arguments adduced, but the very forms of expression in which they are set forth. But people who will not listen to sermons will listen to the Colonel and his friends. Let them read this:—

"The first great truth then that each must take to heart is that this life here is but one day's sail in the vast voyage that all must make, who escaping utter shipwreck and destruction would fain safely cross the stormy seas of material existence to that tranquil haven where all is peace—their birth-place and their home. The second and even more vital truth is, that throughout this entire pilgrimage our fates are in our own hands. We shall perish miserably by the way: we shall win onwards, slow or fast, in storm or sunshine, just as during each fresh departure we act, speak or think."

Is it this stern moral doctrine that is attracting his disciples to the Colonel? Would that it were, for it is a bitter tonic like this that the public conscience needs. The worst of the teaching is its hopelessness. We feel that we have already woven a net for our own feet, that we are even now entangled in it, and that we need a personal God and Saviour to help and bless. But this Theosophy denies us.

It is evident from the 'Tropical Agriculturist' (published by Messrs. A. M. and J. Fergusson, Colombo) that Ceylon planters are not going to allow the failure of the Coffee industry to ruin them, if they can manage by hard work and careful study to supplant the old by new industries. Attempts are being made to cultivate Liberian Coffee, Tea, Cinchona, India-rubber, Cocoa and Cardamoms. Many have no doubt been disheartened by a succession of bad seasons and the great spread of leaf disease, but those who continue to struggle against difficulties and meet them with scientific culture, are sure in the end to score a victory. The existence of such a journal as the 'Tropical Agriculturist' shows that there is still plenty of spirit left in the Ceylon planters, and we trust it will not be long before brighter days dawn upon them.

Messrs. Parker & Co. of Oxford announce "*An Examination of the Structural Principles of Mr. Herbert Spencer's Philosophy* intended as a proof that Theism is the only Theory of the Universe that can satisfy Reason," by W. D. Ground, author of '*Ecce Christianus*.' It is in the press and will be published shortly.

SCIENCE JOTTINGS.

Professor Huxley has been elected to fill the office of President of the Royal Society rendered vacant by the death of Dr. Spottiswoode; Professor Huxley will hold the office till the annual election in November when most probably he will be re-elected.

A proposal has recently been made to employ the sun's heat for cooling buildings! The plan is to employ one of Mouchot's engines worked by the heat of the sun concentrated by large mirrors, to pump cold air into buildings. The chief objection to the plan is that it requires ice which in many places would render it far too expensive. It would however be worth while considering if it were not possible to cool the air by condensation and expansion in the way first proposed by Sir William Thomson and now used on such a large scale on board ships conveying frozen meat from Australia to Europe.

An attempt to form a complete map of the stars by photography is being made by Professor Pickering of Harvard College Observatory assisted by his brother. They find it possible to photograph all stars down to those of the eighth magnitude. The brightness of the stars as shown by these photographs differs very greatly from that estimated by the eye. This is of course due to the circumstance that the stars have not all the same colour and photographic plates are not equally sensitive for all colours.

Experiments are being conducted at the Paris observatory on the use of captive balloons for meteorological observations. The balloon at present in use is a small one, the capacity being only 60 cubic metres and hence it is found to be difficult to use it except in calm weather. When there is much wind the motions of the balloon interfere with the registering apparatus.

Experiments are being made in Paris and elsewhere on the substitution of electricity for horses as a motive power for tramcars. Those made in Paris were with the Faure-Sellon-Volckmar accumulators. These are stored under the seats of the car and are charged with electricity before starting. M. Philipart who conducted the experiments maintains that the cars can be worked by means of Electricity much more cheaply than by horses, and if this turn out to be the case there can be no doubt that many lines will adopt it. In cities like Madras where horses can do so little work we fancy an electric tramway would have a very good chance of success. When the Portrush Electric tramway has worked for a short time we may hope to get some definite information about the cost of this kind of motive power.

A French Scientific journal has started the proposal that the various European powers should unite to occupy Mecca, with the object of stopping the pilgrimages which annually spread cholera over the world. There can be no doubt that this would be a very good thing from a sanitary point of view if it could be accomplished, but there are a good many other things to be considered in such a proposal. Would it not however be possible to take some steps to diminish the evils that spring at present from these pilgrimages? From the analysis recently made of the water from the wells of Mecca there can be no doubt that they contain sewage matter in a very concentrated form and are probably nearly as bad as many of the Temple tanks in India. If the germs of any disease such as cholera gets into water of this kind it is at once rendered a most deadly poison. If the wells at Mecca could be cleared out—and surely that would be simpler than to occupy the town—a great decrease in the evil results of the pilgrimages might be expected.

Sir William Thomson recently delivered a lecture at the Royal Institution on the size of atoms, and gave an outline of the various methods by which we arrive at an approximate estimate of this. We may perhaps give an account of these methods in another number, but at present we will content ourselves with quoting the conclusions arrived at—"The four lines of argument which I have now indicated, lead all to substantially the same estimate of the dimensions of molecular structure. Jointly they establish, with what we cannot but regard as a very high degree of probability, the conclusion that, in any ordinary liquid, transparent solid, or seemingly opaque solid, the mean distance between the centres of contiguous molecules is less than the 1/5,000,000, and greater than the 1/1,000,000,000 of a centimetre. To form some conception of the degree of coarse-grainedness indicated by this conclusion, imagine a globe of water or glass, as large as a football (say of 16 centimetres diameter) to be magnified up to the size of the earth, each constituent molecule being magnified in the same proportion. The magnified structure would be more coarse-grained than a heap of small shot, but probably less coarse-grained than a heap of footballs."

The experiments recently made with a new electric launch were so successful as to render it probable that before long electric will replace steam launches for many purposes. The launch in question was built by Messrs Yarrow for the Electric Power and Storage Company. It is 40 feet long and carries 80 accumulators arranged under the seats and under the floor, thus leaving all the space above the floor open. In its trial trip on the Thames it kept up a speed of about 7 miles an hour while on the measured mile it went at a speed of 8½ miles per hour. Its store of electricity is sufficient to drive it at its full speed for 10 hours, or at a speed of 7 miles an hour for about 12 hours. The weight of the fittings for the electric propulsion is much the same as for steam, but the space occupied is very much less.

C. M. S.

QUERIES.

[All queries for this section should be sent to the Editor, Christian College, Madras, and should reach him not later than the 15th of each month.]

6. (K. S. KOTHUNDARAMIAH)—(1) *What are the reasons generally adduced in favour of the view that Shakespeare is not the author of the plays attributed to him, and that Bacon was the person who wrote them? How far are they satisfactory?*

No satisfactory reasons have ever been adduced in support of this position. The authorship of individual plays is reasonably disputed, and a Shakspeare canon cannot be said to be fixed. But the Baconian authorship is a mere vagary, not deemed serious enough to require refutation by the greatest Shakspearian authorities. Another theory of the same sort is that no one man could have written Shakspeare's plays, and that they are the work of the Jesuits.

(2) *What is the present position of the vegetarian controversy in Great Britain, &c.?*

The vast majority of the people of Great Britain never heard of a vegetarian controversy, and it is certainly not one of the burning questions of the day. Vegetarianism is generally supported on humanitarian grounds that would make man the slave of the brute creation. Science seems to say that the poor in Britain are too vegetarian in their diet for health, while the rich might very well eat less meat than they do. Vegetarianism as generally professed is like the belief that Shakspeare was Bacon or a company of Jesuit Fathers, a mere crotchet.

7. (T. RAMAKRISHNA AIYER)—(1) *If the Thomsonian hypothesis with regard to Shakspeare be adopted as true, is there any internal evidence in the dramatist's writings to testify against it?*

Probably there is a great deal, but as we do not know the 'Thomsonian' hypothesis, we are unable to say.

(2) *Is a science of history possible? How would the advocates of Freewill and Determinism answer the question respectively?*

We imagine that there would be no practical difference in the answer that they would give. The Determinists do not deny the extraordinarily complicated and often incalculable operation of motives, and the advocates of Freewill do not deny a general tendency in mankind as a whole to follow the line of the strongest motives. They would both admit that the difficulty of forming an induction as to what human society may become in the future from what it has been in the past is almost insuperable.

At the same time we ought not to despair of a science of history. All we can say is that it has not yet appeared, and that it never will appear until scholars learn to take all the phenomena into account. The outlines of a Christian Science of History have long been before the world, and the time may come when it will be more than an outline. To the Christian, history is the slow unfolding of the Divine plan, and Christ its central point. He sees that the course of pre-Christian history is not a confused series of isolated events, but a vast preparatory moral process leading up to the Incarnation. In post-Christian affairs, he sees another and still grander series of evolutions, all tending towards the true golden age, when Christ and Christ's spirit shall everywhere prevail.

(3) *What is meant by æstheticism in poetry, and wherein do the 'correct' poets differ from the 'æsthetic'?*

'Æsthetic' and 'æstheticism' are much abused words, of the precise meaning of which it is difficult to be sure. But the nearest translation of them is 'sensuous' and 'sensuousness.' Æstheticism in poetry would then be that poetry which gratifies the senses by descriptions and suggestions of a kind to please the mere animal feeling of pleasantness in beauty. It need not be coarse or prurient (though it often is), but it must delight in the beautiful after a sensuous fashion, and it may violate conventional canons of propriety. 'Correct' poetry, we suppose, would be such as sacrificed the mere feeling of beauty to conventional rules. But there is no reason why poetry should not be both 'æsthetic' and 'correct'. We must again warn the reader however, that no sets of terms are more loosely applied than the terms of literary criticism.

8. A. KANDASAWMI sends us so many questions that we must select—(1) As to philosophers, Professor Knight is generally understood to be a Transcendentalist of a mild type. Professor Croom Robertson is a disciple of Bain. Professor Nichol is not a Metaphysician, but a literary critic and a poet. Professor Flint is a very distinguished writer on philosophical and theological subjects. Both he and Professor Knight are Scottish clergymen. For Vico, see Ueberweg's History of Philosophy (Engl. Trans.), Vol. II, pp. 473-479. (2) As to evolution, it is impossible to give such a list as is asked for. There have been evolutionists since the first days of Greek philosophy till the present day. At present there is scarcely a writer on any subject that is not more or less under the influence of the idea of evolution. There are two principles according to which we might classify modern evolutionists: (*a*) according to the sphere of their speculations, evolutionists in science and evolutionists in metaphysics; (*b*) according to their recognition or non-recognition of a divine operation in evolution, theistic and atheistic evolutionists. It should be noticed however that any doctrine of evolution belongs more to metaphysics than to science, and that atheistic evolutionists are not necessarily atheists in the strict sense of that word. Neither Darwin nor Herbert Spencer, for example, could rightly be classed as atheists, although the system of the latter may certainly be called atheistic evolution.

9. (S. V. RAMASAWMI AIYENGAR, TANJORE)—(1) *Is the infliction of punishment retributive or preventive?*

For an answer to this question see the August number, pp. 126, 127.

(2.) *Is the life of Jesus of Nazareth recorded in any contemporary history?*

Certainly, for we regard the Gospels as contemporary history, and have good reason to do so. Let us however try to meet the querist where he wishes to be met. He evidently regards it as suspicious, that Greek and Roman writers of Christ's own day, should not devote to such a life as his the space which it is now seen to deserve. Had such a person as Jesus lived, he argues, his history must have appeared in the pages of other writers besides the authors of the New Testament. Let our querist remember that the life of Jesus, the Galilean carpenter and religious teacher who was crucified at Jerusalem, would scarcely seem so important to a proud Roman like Tacitus, as does the life and death of the founder of the Christian religion to a modern Hindu. The followers of Colonel Olcott are now at least a hundred times as numerous as the followers of Jesus during his life on earth. Moreover they are drawn from the educated and wealthy classes, while Christ's disciples were of the poorest and least influential. Now we question very much if any historian of modern India outside the Theosophical Society, would regard Colonel Olcott's doings as worthy of a place in history. When Theosophy shall have done what its admirers expect, and East and West embrace each other with the kiss of psychical kinship, then the historians will begin to rub their eyes, and ask who Colonel Olcott was. If this line of speculation be valid, it is valid also as applied to the history of Jesus, only that the case is stronger. Consider the contempt of all the ruling Jews for the doctrine and disciples of Jesus; consider the contempt of all cultured Romans and Greeks for the Jews and especially for their superstition, as they insolently called the Jewish faith, and then ask if it is likely that any contemporary Greek or

Roman historian should write the history of a man whom they would only regard as a low Jewish fanatic. It is one of the most remarkable proofs of the power of Christianity that it so soon *compelled* recognition of itself from the literary world, and that all the contempt of the wealthy and cultured failed to sneer it down.

(3) *Is it absolutely necessary for one to be a Christian in order to obtain salvation? If so, what is likely to be the fate of the myriads of non-Christian people?*

In order to answer this question, we must first come to an understanding as to the meaning of the word '*Salvation.*' Many Christians use it in an unchristian way, as meaning mere exemption from the penalty of sin. Scripture teaches us to give it a far wider meaning, that of deliverance from evil and uplifting into a divine fellowship, which enables us to realise our true manhood. We know of no other that affords this salvation but Christ, and Scripture assures us that there is "none other name under heaven given among men, whereby we must be saved" (Acts iv. 12). And we know none else that offers it. Mere worldliness is the commonest form of life, and that ignores divine communion altogether, as well as denies a high standard of manhood. Some mode of ascetic holiness is the most respectable way of salvation held forth by Hinduism, and that consists not in saving the whole man by disentangling him from sin and restoring him to spiritual communion with God, but in destroying one-half of his nature for the benefit of the rest. The ideal of Christian life is Christ. We are saved in proportion to the closeness of our life to His.

The state of the non-Christian world after death is thus an altogether different question from the question of salvation in Christ only. We hold that those who do not believe in Christ (and very many of those who profess to do so) are losing their chances of salvation, so to speak. Not being in Christ, the highest life is not theirs, and we seek to bring the highest life home to them. That whole races of men should be declining to ever lower levels of life, and bringing upon themselves in ever increasing measure the self-inflicted punishments of guilt, we regard as very terrible, and so we preach the Gospel. But what exactly is the condition of non-Christians in the future state, we know not. We know however that they are in the hands of a just and merciful God, a most consoling thought, but a most terrible one.

The Christian religion does not teach the blasphemous doctrine of the damnation of infants. It does teach that 'God is Love.'

[*Several other questions are held over till our next issue.*—ED. C. C. M.]

CORRESPONDENCE.

TO THE EDITOR,
Christian College Magazine.

TRICHOOR, *16th July 1883.*

MY DEAR SIR,

I do not understand how the Christian College Magazine differs from "The Theosophist" which is open to the exposition of the Theosophy or *Divine wisdom* of Christianity as well as of other creeds. Instead of preaching their *Knowledge*, most priests of all creeds preach their *Ignorance*! The origin and nature of the soul is the theme of religion. The clergy content themselves with postulating the soul *as a mystery* and propound other mysteries for the benefit of that soul!! The clergy are merely the laity who have learned some books, some forms, and some mechanical ministrations and make a profession of sermonising and manipulating the same. Their usefulness is to keep alive the books, the forms and the ceremonies, but whether these are useful or not is the burning question of the day. *Unless the origin and nature of the soul can be explained and realised*, all sacred literature and the professional clergy might as well not exist, for they do no good and cause a large waste of time and money. *I* am a believer in sacred literature affording that *explanation* and in true priests *realising* the truth and able to bring it home to worthy pupils. The life of a *true priest* is exemplified in that of John, Jesus and the Apostles, who took no thought for the morrow, inhabited no furnished bungalows, drove not pair in hand, prayed not for success in murderous wars, fanned not the race prejudices and covetous instincts of the laity, and did not interfere with Cæsar's rights and laws of this world. The Hindu clergy have no organization like the Christian clergy or the Mohammedan or the Buddhist—by organization I mean graded ministers appointed and dismissed and provided with a fixed income. *A true priest of a Hindu is the Brahman proper*, and the hereditary derivation of *the quality and conduct* in more or less perfection accounts for *the Brahman caste*. How can a Christian layman without demonstrable or inherited *merit* be dubbed Reverend, Priest, Bishop, Missionary, &c.?

Please insert this in your Magazine with a full and clear reply, for I think true Christianity preached by true Priests has to be brought home to nominal Christians just as much as to non-Christians.

Yours sincerely,
A. SANKARIAH.

[The *Theosophist* is ostensibly an exposition of ancient Buddhism. Its pages may be "open to the exposition of the *Divine Wisdom* of Christianity as well as of other creeds"; but a periodical that aims at the revival of Buddhism, and that asserts in a series of articles the superiority of Hinduism to other existing religions, on the ground of its being older, truer, and more liberal, can scarcely be expected to take the place of another periodical that seeks among other things to set forth Christianity as the highest revelation vouchsafed to man, and the universal religion of the world. "There are no Scriptures in the world," says the *Theosophist* (October 1882) "which contain such instructions about the nature of GOD as the *Gnánkanda* or the knowledge and worship of one true God." And even of the character of Christ it says, "His moral code was only *less* perfect than that of Buddha." Again, the *Theosophist*, notwithstanding its assertion, which we gladly recognise, that "it is not the teaching of Jesus Christ which has ever been laughed at, still less abused, in these columns, but the attitude, life, and teaching of the Christian Church," does yet to our mind frequently misunderstand and consequently misrepresent Christianity. We might cite several passages in confirmation of this, but our space forbids. Seeing we are not disciples of Colonel Olcott and Madame Blavatsky

though we desire to be *jijnasus* in the truest sense, we may well prefer to have our own Magazine, where we may to the best of our ability give a faithful representation not only of the teaching of Christ but also of the *true* teaching of the Christian Church, as well as offer our remarks on many other topics, literary, scientific, educational and social, which lie beyond the scope of the *Theosophist*. Our contemporary is the organ of the "Psycho-Scientific Brotherhood," which deals with the occult sciences; and as it recognises no GOD apart from Nature, it must manifestly be conducted on totally different lines from a *Christian* Magazine which recognises in the Bible not so much a theosophy—though it is that—as the manifestation of a personal GOD in history.

Our correspondent is rather hard upon "the clergy." We understand by a Minister of Religion one, who, conscious of being called by GOD and the Church to this special work, devotes himself by prayer and study to the exposition and enforcement of the truths of the Bible. That such men, in common with their fellows, should often "preach their ignorance," when dealing with Divine matters, is only what might be expected; and it is just this "ignorance" of the highest things, incident as it is to all finite intelligences, and which has in all ages been so sorely felt by the best of the race, that renders a revelation of Divine truth, and the aid of the Divine Spirit in its study, an *a priori* necessity. That "the clergy" should practise moderation and self-denial, we also admit; but that Missionaries, who are for the most part strangers and foreigners in India, should practise Hindu asceticism, we regard as unreasonable and impracticable on the score of health, as has been proved by some painful and costly experiences. So far as "murderous wars," "race prejudices," and "interference with Cæsar's rights" are concerned, it is our earnest desire to have nothing to do with them.

It will be seen that our correspondent claims for the Hindu priest a superiority and a sanctity far above that which he is pleased to accord to "the clergy," and far beyond what the most *ultra* among them would claim for themselves. "A true priest of a Hindu," he says, "is the Brahman proper, and hereditary derivation of the *quality and conduct* in more or less perfection, accounts for the *Brahman caste*. How could a Christian layman, without demonstrable or inherited merit, be dubbed Reverend, Priest, Bishop, Missionary, &c.?" This is a startling doctrine. Virtue and merit are inherited, and all outside the Brahman caste must be supposed to be of an opposite character. But this we know is opposed to fact, and contradicted by observation. That Brahmans are capable of committing crimes, and are thus no better in this respect than other classes, is clearly recognised in the laws of Manu, though the inequality in the punishments affixed is utterly at variance with right ideas of equal justice. We have no objection to hereditary purity of birth and blood; but the history of the race confirms the fundamental doctrine of the Gospel that "*all* have sinned," and that therefore all alike need the cleansing and renewing influences of the Divine Spirit. Christianity inculcates, as the necessary basis of true religion, a *sense of sin*, in the presence of a Holy GOD; Brahmanism, a *sense of merit*. It is not by any "demonstrable or inherited merit" that a "Christian layman" becomes a "Missionary" or a "Bishop," but by the Grace of GOD, or Divine influence, which the New Testament holds is necessary for the accomplishment of any good work, as it is necessary for the conversion of all sinners into saints. "*Inherited* merit" is a contradiction in terms which we do not understand. Merit is worth or reward deserved or earned by any valuable service; and so we speak of the merits of an author and of the merits of a soldier: but that is surely no merit to a man which he inherits from another. Merit is a quality which cannot be transferred.

Our friend says that "the origin and nature of the soul is the theme of religion," and complains that "the clergy" have nothing to say on this subject, but are compelled to relegate the soul to the realm of mystery. He is of opinion that "unless the origin and nature of the soul can be *explained* and *realized*, all sacred literature and the professional clergy might as well not exist." It is quite true that Christian teachers do not make "the origin and nature of the soul" *the theme* of religion. The subject-matter of religion is the Living GOD who made us, and who is at the same time the object of religion; and we would define religion as personal devotedness to GOD. Without belief in a supreme Power, and the worship of that Power, together with the obligation to obey His commands, there can be no religion. But here, we are well aware, we are out of harmony with Brahmanism. "The Brahman proper" must be *ipso facto* the champion of Brahmanism, and in Brahmanism, Para-Brahm is literally an unknown GOD. He has no qualities, no attributes, no activity. He is neither the object of hope, fear, love, nor aversion. As the Upanishads say, "how can any one teach concerning Brahma"? And it is just here the Bible comes to human aid. Hindu priests as well as other "priests" after all "preach their ignorance," and that on a matter of supreme importance. But the Bible reveals, and makes known, this otherwise unknown and undiscoverable GOD. Infinite Intelligence and infinite Love came to the aid of finite intelligence, and GOD becomes the known, accessible, and loved object of worship and religion.

The soul is the *subject* of religion; but its "origin and nature" belong rather to the domain of Psychology; though psychology itself is limited to the science of the human soul in its connection with the human body. Psychology even does not concern itself with such inquiries as, How or when does the soul come into being? What phenomena may it exhibit in other conditions of being? It simply asks, What does the soul achieve, and what does it thereby show itself to be while connected with a human body?

But here, again, surely our Brahman friend is scarcely true to his traditions. We are reminded of a dialogue we once read. A Brahman and two others (not Brahmans,) were conversing on religious subjects. One of the two addressed the Brahman thus:—"Why do you talk of soul, as if there were but one? I have a soul; you have a soul; even our friend here." "Stop, my dear Sir," exclaimed the Brahman, "We have separate *minds*, but soul is one only—pure and unchangeable." If this be a correct representation of Brahmanism, we are really discoursing in a circle, and have come round again to Para-Brahm who we have seen is unknowable. The essential nature of the soul, and the manner in which it unites itself to the body are matters of *speculation*; they do not constitute the subject-matter of religion. Beyond the fact of the immateriality of the soul, and its self-conscious, self-determining nature, which the Bible from first to last implies by its constant appeal to man's higher nature, its pages remain silent. This, however, it does tell us—a fact

to which our deepest consciousness must ever testify—that the soul's *ultimate* origin is from GOD, and that it is an image or analogon of its Maker. And the Bible tells us—which is altogether a graver and more important question than its origin—something about the *destiny* of the soul.

The speculations of the Christian Church on the origin of human souls have been formulated in three main opinions. The first maintains, as did Plato, the pre-existence of souls: but this view was condemned as a heresy in the 6th Century. The second is the traduction of souls from the parents, along with the body. The third regards each soul as a fresh creation. These are fair and worthy speculations; but what we desire to emphasize is that such speculations do not constitute *religion*. That the soul *exists*, and has wonderful capacities, is for us the one great matter. *That* we all may realize and know. And we need not wait to be religious beings—to worship, love, and serve GOD—till we can comprehend and explain its "origin and nature." As long as we are finite creatures, we shall never get behind all the mysteries of the universe and life.

The *origin* of sin is a mystery, and it may be difficult to define exactly its nature; but sin itself is a reality, and *with that* we have all to deal. Christianity is eminently practical. It is not Philosophy and Psychology. Scripture rarely tells us that which lies on the border of human investigation. It deals with the moral and every-day life of men. Theosophy is essentially knowledge, and this it holds to be the main thing in religion—the position of the Gnostics of the 2nd Century, and found also in the Philosophy of Schelling and Hegel. Religion is thus an effort of the intellect rather than the outgoing of the heart. And this we regard as the fundamental defect of Theosophy, whenever it assumes to occupy the place of religion. Here it must always fail in exerting any influence on the masses. Occult sciences, divine wisdom, can be at best only the portion of a favoured few—the study of only cultivated minds. Religion is of course impossible without knowledge; but intellectual culture *about* religious things is one thing, while genuine religion is quite another. Henry VIII was among the best read Theologians of his day, but he has never been regarded as personally religious. Knowledge, however complete and accurate, may fail to govern the moral nature. Athens, the most cultured city, becomes the most corrupt. What we all want is a moral dynamic which in the midst of sin and temptation will inspire us with the love and *power of being good*. Will the *Theosophist* help us in this?—ED. C. C. M.]

[*We have received a number of communications which are not authenticated by the names and addresses of the senders. Correspondents are informed that unless they give their names, their communications cannot be attended to. If the correspondent wishes it, a* nom de plume *is all that need be published, but the real name is required as a guarantee to the Editor of the writer's good faith.*—ED. C. C. M.]

THE CHRISTIAN COLLEGE MAGAZINE.

OCTOBER, 1883.

IMMORTALITY.

"If a man die, shall he live again?"—*Job* xiv. 14.

THE belief *in* his own immortality is one of the two most common and indestructible beliefs of man. He thinks he was *not* made to die; and neither hard experience nor pitiless logic has been able to persuade him to think otherwise. Death, though inexorable, with lips sealed in eternal silence; life, though a burden, heaviest when passed in luxurious ease; reason, though full of questions it waits in vain to find answered; love, living but to lose, often broken into sorrow or soured into regret,—have never singly or together been able to vanquish the faith that man, though he die, shall live again. The moment most trying to the man is most strengthening to his faith. He never doubts his immortality so little as when *in* the presence of death, never so hates the thought of annihilation or nothingness as when he sees the grave receive the dust once loved, as mother, or wife, or child. The evil that mimics good or works misery may make the cynic; the contradictions of an unintelligible world may create the sceptic; but the silence *of* death is full of the speechless eloquence that conquers doubt. The sorrow that seeks a grave wherein to bury the dead out of sight, rebukes despair and begets the hope that the lost still live, wait to love and be loved anew, when we sleep to earth for ever, and for ever wake in the likeness of God. So has the tree of life grown up to gladden with its beauty and cheer with the celestial songsters that build in its branches, the man saddened by the shadow, wasted by the evil we call death.

The belief, though common as man, is *uncommon* in this—it has been ever greater and stronger than the reasons used to underprop and justify it. But that only proves its higher validity, that the root from which it springs is ineradicable. Nature is here, as elsewhere, wiser and mightier than art: its source and mistress and model. The last word must be spoken as to the meaning of man as a person and as a race before the best word can be uttered as to his immortality. Meanwhile let us mark and respect the wise instinct that can read eternity under and between the lines of time. The Savage, who believes that ancestral spirits sigh in the winds or shine in the stars; the Brahmin, who traces his transmigrating soul through a thousand ages and forms; the Buddhist, who works and prays and hopes for final absorption into the eternal quietude of Nirvana; the Jew, who has gone down to a grave as to a valley made dark by the shadow of the glorious paradise where Father Abraham waited to gather his scattered sons into his bosom; the Martyr, who has gone to the stake as to a bridal; the humble Christian, who has laid him down to sleep the sleep of death, certain he would awake on the everlasting morrow; and the philosopher, who cannot believe that the mind which has grasped the thought of the Eternal and Divine should ever perish, —are all alike in the faith that immortal being is necessary to the very idea of man, and in the hope that the future will be the nobler life. Without immortality man ceases to be human, falls out of kinship with God into fellowship with the brute. With it man rises to his divine dignity, becomes a being clad in garments that perish, but destined to endure as long as God. For mind, however limited, is a latent infinite, dimly conscious of the latency. Earth cannot contain his thoughts, for the immensity without finds an adequate mirror in the reason within. Time cannot bound his hopes, for he has an eye that can peer into the eternal vistas that open to his gaze. Mind, possessed of its *immortal promise*, though not always conscious of its possession, ranges into its glorious future, and brings thence the rich and luscious grapes that are the pledges of its fruitfulness. The coming event casts its shadow before, and the gilded shadow which lies on life comes from the Eternal sunshine broken and thrown back by the *hidden side* of death. We who now stand in its shade can say—

> "The shadow passes when the tree doth fall,
> But we shall reign for ever over all."

The belief in immortality is not a superstition; it is a great and holy and rational faith. It has been enshrined in the religions of men. While the idea of God has been the invisible presence that sanctified the temple, the belief in the life to be has been the pillar of cloud that led and cheered the pilgrims by day, and the pillar of fire that was their companion and peace by night. It has, too, been embalmed in our noblest intellectual creations. The belief has a grander and more imperishable monument in Plato's *Phædo* and *Republic*, than the forgotten kings of Egypt in the pyramids they built. Just as the Spring can make an oasis in the desert, our belief can make the spirit fruitful of great thoughts, bright and beautiful with imperishable flowers. The great poet can soar as he sings when, like Pindar, he can see in mortal man the dream of a shadow, but in his soul the image and kin of God,—at one time dying, at another time being born, but never perishing; or when, like Dante, he builds into everlasting music his faith in a world unseen; or, like Shakespeare, representing man universal alike in his wisdom and folly, in his good and evil, he rises to points of awful and suggestive thought as to what lies around and before us, what follows "cold obstruction," and what dreams may make the sleep of death more vivid and tragic than the wakefulness of life. The belief, too, like the lovely flowers seen now and then amid Arctic snows, seems able to bloom in the strangest places. In ages of unbelief it is one of the last to die, yet it dies only like the last rose of summer, which foretells the first of spring. In the eighteenth century, the pre-eminent century of denial, the one dogma that was strenuously believed and affirmed was the immortality of the soul. In its maintenance men so dissimilar as Voltaire and Rousseau, Lessing and Kant, were agreed. To them faith in God was impossible without belief in the immortality of man.

The belief in immortality cannot exist apart from Theism; what deprives nature of a personal cause must deny personal immortality to man. The beliefs are correlative and complementary; without a living God there can be no continued life of the spirit, indeed no spirit to live. Hence the forms of negation relative to the belief in immortality are as many and as varied as those relative to the belief in God. The scepticism which skilfully clothes denial in doubt, professes, with Hume that as it is unable to say whether God is or is not, so it cannot tell whether man is or is not immortal. Materialism, when coarse and gross, as with Moleschott and Büchner, says roundly "annihilation is better than everlasting life," and imagines that to describe the chemistry of the brain is to give an analysis of mind, that to exhibit the organisation of matter is to write the

natural history of thought. But materialism, when refined, idealised, touched with an "ethical glow," as with Haeckel or Tyndall, is no less fatal to our belief, does its energetic though futile utmost to show mind, emerging from protoplasm, doing its work as the changes in the brain determine, and, finally, as it loses the organisation by which it lives, fading into "the infinite azure of the past." Pantheism can grant no immortality to the individual, but promises to him either, as a mode of the divine thought, an impersonal eternity, or an immortality which is realised by his becoming in the midst of the finite one of the infinite, and so being in every moment eternal. Positivism, allowing spirit no place in its system, denies immortality to the man, but makes atonement by conceding it to the race, though it is a curious inversion of reason to attribute a duration to the effect which is denied to the cause. But Theism in all its forms must affirm with equal emphasis the immortality of man and the personality of God; if either perish the other is unable to survive. So deeply did Strauss—a most representative thinker, because a thinker who had been seized and swept onwards by the successive currents of modern thought—feel this that he mockingly described "God, freedom, and immortality" as the Trinity of modern philosophy, and "of these," he said, "the greatest is immortality." And so he proclaimed the negation of this belief as the final victory of criticism, the last enemy it had to destroy. Enough. The radical nature of the belief is apparent; in vindicating it we are vindicating the theistic conception of the universe. Without faith in man as immortal, faith in God as personal has no principle or promise of life in it.

Such being the relation between the two beliefs, it is evident that our discussion must throughout imply faith in the being and moral government of God, with its necessary correlate, faith in the essential freedom and moral nature of man. These are positions that must be here assumed, discussion of them being manifestly impossible. More narrowly defined our position is this—grant that a righteous God lives and reigns, and that man is His moral and responsible creature, and the belief in immortality becomes rational, inevitable, invincible.

I.

The point from which the discussion can most fitly start is this:—the belief is found in possession, a common and distinctively human belief. Why is it everywhere? whence came it? and how did it begin to be? It is ancient, older than the oldest history; it it universal, common, as nascent or developed, to all races and religions. What is so ancient and universal must be a normal product of mind, the fruit of its spontaneous and instinctive action. Doubt, and still more denial, is here artificial, the result of thought become interpretative of things imperfectly known, while belief is natural. This is shown in its persistent reappearance; there is no belief so hard to vanquish. Men who think they have overcome it, have to be ceaselessly on the watch against it; the attitude of denial can be maintained only by constant vigilance against faith. Here then is the point. How is the origin and life of so old, so universal and inveterate a belief to be explained? If it is false and illusive, why is it so agreeable to normal human nature? why is it so common that the most diverse races with the most diverse religions have come to entertain and retain it? These questions raise the cardinal issue—is it possible to maintain the unveracity of the belief and yet preserve the veracity of human nature? can so universal a belief be pronounced false and yet the nature which has everywhere affirmed it be held true? The attempts to deal with these questions may be divided into three classes:—those that deny the veracity alike of the belief and its source; those that question the truth of the belief but not the honesty of the nature producing it; and those that affirm the truth of both, the veracity alike of the belief and the nature creating it. A word or two on each of these.

1. The first explanation declares that the belief is an invention, the creation of interested persons, priests and kings. Priests found the future necessary to their profession and power, belief in it a grand means of ruling mind. Kings discovered that the best police were the terrors of the world to come, that men were made more manageable and obedient by being threatened with everlasting pains and penalties. And so the king and the priest combined to deceive the people, to rule them by superstition at which they themselves laughed. This miserable apology for an explanation was common enough last century, and may still survive in the lower infidel literature of to-day. But the higher sceptic thought has long turned from it with manly and becoming disdain. Nothing indeed could be shallower than this explanation, unless perhaps the mind that conceived it. The belief created the priest; the priest did not create the belief. Authority may direct and instruct but cannot make faith. If man had no natural tendency to belief, he could never by any policy be made to believe. The cause of a phenomenon as universal and permanent as man must lie

within man's nature, can never be an accident of his circumstances and conditions, like the interests and ambition of a ruling class. Then how did priests and kings become confederates? Did they act simply from their class instincts or meet in a prehistoric parliament and plan their policy for the whole world and for all time? And is it possible that for so many thousand years systematic hypocrisy could inspire the world with the highest virtue, and no one of the hypocrites, however seeming noble, could rise to the manhood that would hate and renounce and denounce the lie? To argue with such a wild and wretched fancy is but to waste words. We may leave it to die of its own baseness.

2. The explanations that question the truth of the belief, but not the honesty of its source, are many and varied in form. They are marked throughout by the same characteristic, the endeavour to find a cause so consonant to human nature as to be capable of universal operation, yet so blind or ill-guided as to produce only false or spurious effects, or simply an erroneous belief. Of these explanations two may serve as examples.

(1.) Men have said—"The belief in immortality is an illusion, the dream of an imagination excited by the darkness of death, or the shadow cast by a vainglorious egotism. Man is too self-conscious to accept death as the end of him; he too intensely loves life to allow the grave to rob him of it; and so at the point where sense fails, imagination becomes active, and life is pictured as continued under other and happier conditions throughout an everlasting future." This is, in effect, the explanation of Feuerbach, of Schopenhauer, and of his disciple Von Hartmann; it is, too, instructively enough, Buddha's, who held that the grasping at life was the cause of man's continued existence. But the belief is too rational to be so explained; it is not an isolated or individual product of the imagination, but stands organically connected with all the conceptions of the intellect, related equally to the ideas of God and man. Change the notion of God, and the belief were changed; and what sensitively responds to every change in our most rational conceptions is a child of reason, not of imagination. Then nothing could so little impel to the creation of the belief as egotism. The more self-conscious a man is, the greater a burden is life, the nearer is he allied to the mania that hates and would destroy it. Where the Ego is mightiest the spirit of the man is best expressed in the words of the old ballad—

> "I would lie down and die
> But for the curse of immortality."

And how can the passion which most fears and can least bear life be the parent of the belief in its continued existence? A race of imaginative egotists were a race pledged to a doctrine of early and utter annihilation.

(2.) But it has been said more recently—"The belief in immortality is a survival of the fantastic fancies of the primitive savage; one of his mistaken or erroneous inferences, drawn from the more striking phenomena of his dreamful sleep." This is Mr. Herbert Spencer's explanation; but ingenuity could hardly have invented one more unhistorical or less scientific. All the ancient religions, with the single exception of Egypt, are against it. A developed doctrine of the future is not a primitive element in the oldest historical faiths. The after-world is a most shadowy place to the Vedic poets, but it stands out in terrible distinctness before the imagination in the *Institutes of Manu*. In Homer the dead live a feeble and dreamlike life; but in Plato the departed are immortals, who live a higher and diviner life than mortal man. No! however the belief may be explained, it cannot be resolved into the mistaken ideas of a savage who has theorised concerning the phenomena of his dreams.

3. The explanation which affirms the veracity alike of the created belief and the creating nature is at once the simplest and the most scientific. The belief reflects the nature; the truth of the one guarantees the truth of the other. It is natural to man to believe in *immortality*: leave his nature to its normal action, and it will create the belief. To conceive death as annihilation is not natural; nature revolts against it. The little child, perennial type of man in his simplest and most spontaneous stage, cannot understand death as loss of being, or think of the dead as otherwise than still alive. Wordsworth's "little maid" is a speaking example of the child-mind the world over, and its belief, translated into the language of man, becomes a sublime "Ode to Immortality." By a divine incapacity of mind death cannot, where Nature is immediate and mightiest, suggest annihilation,—for annihilation is a thought too abstract and repugnant to its instincts to be either intelligible or credible. In such a case, to think of the dead is to think of the living; the very attempt to represent men in thought is an attempt to represent living, not dead men. Nature here speaks, and does not lie; her words are the words of wisdom, truth, and grace.

II.

1. This leads us to a second point. Immortality, as more con-

formable to the reason than annihilation, is more conceivable, therefore more credible. Destruction is indemonstrable. It can never be proved that what makes a man we know, what makes ourselves living and thinking beings, ceases to be when the pulse ceases to beat and the tongue to speak. The most that can be proved is that certain signs interpretative of the man, expressive of his thoughts, emotions and volitions, have ceased to be perceived. There is stillness, silence. The organ thrills no more with its living music; but there is nothing to show that the silence is due to the loss of the noble mind that touched the keys into harmony, rather than to the failure of the pipes and breath to perform their parts. Nay more, non-entity cannot be represented in thought. Nothing is a mere negation that can be conceived only by being abolished, by being translated into something as nearly as possible the opposite of what we call life. Non-entity indeed is simply a contradiction in terms. Its two parts annihilate each other. If death is imagined or defined, it is realised, becomes a state of real positive being. What ceases absolutely to be, ceases to be an object of thought. To think of the dead is to predicate existence, in fact even where it is in form denied.

But it may be urged, "While we must conceive the dead as living we cannot conceive life for ever. Endless or immortal is inconceivable existence, the eternal eluding thought." But think! can you conceive *ended* being, destroyed, perished for ever? Eternal is as easy a conception as temporal being, more easy because more necessary, the ground of all temporal existence. Where spirit is concerned, duration means growth, not decay. Mind does not count its being by seasons or suns, but by thought and action. Organised being has had a past, has a present, and will have a future; but spiritual being simply exists, enjoys an everlasting now. Thought is the life of the intellect,—to think is to be; and thought creates time and space, is not created by them. To conceive rational personal being rightly is to conceive it as immortal. The great miracle, indeed, is not the continued existence of mind, but its beginning to be. That we are here, full of great thoughts as to God and His universe, as to the everlasting destinies of men inclusive of ourselves, that we are here thus and now, and only a few years since were not, were not through a whole eternal past while now we are,—this is by pre-eminence the miracle beside which being continued for ever becomes a simple and ordinary thing. To stand out against the background of this eternal past, not as a

shadow, but as a living and substantial being, is to see our coming as creatures, sons of the Eternal, whose origin is the parent and the prophecy of being for evermore.

2. But it may be thought that so to speak of the permanence of spirit is only to use strong words, not to deal with ideas and truths of reason. Men indeed in these days speak of the conservation of energy, the persistence of force, the indestructibility of matter, and these phrases are held to denote ascertained and indubitable truths of physics. Yet matter has no being save to thought; thought has coined all the terms that describe it, has determined the very forms under which it must be conceived. Withdraw thought, and there were no matter; without the percipient mind, what men call the qualities or properties of matter could not be perceived, and so could not be. *If they cease to be objects of thought they cease to be*, for without thought how could its objects exist? or be in any way conceived, described, spoken of? Thought then is the ultimate reality, more real and imperishable than matter. The persistence of force is *a mental conception*; the indestructibility of matter an idea, a *generalization of mind. It is more rational, therefore, to speak of thought as imperishable than of matter as indestructible.* Men believed in the order of Nature ages before they formulated the notion of natural law, and so the immortality of the soul was as it were an unreasoned or instinctive form of a highly rational belief. In framing it man but followed his nature, believed its testimony, and so confessed that what was akin to the Intelligence which was the cause of all things, could not but partake in its immortality. To be spirit as God is spirit, is to be immortal like God.

III.

We have hitherto been concerned with the subjective source or cause of the belief. We must now attempt to advance beyond this, and discover whether it has any valid objective grounds.

1. The point from which this new discussion can best start is one which grows out of our last position. Mind is imperishable, is so because inexhaustible, capable of continued growth. The longest life does not satisfy it, leaves it possessed of untried and unexhausted possibilities. The machinery through which it works may fail, but thought is often most active when its vehicle of expression is most enfeebled. Man is not alone in his organisation, but he alone confronts nature as an interpreting and conquering spirit. His senses are great not as senses, but as organs of mind. The savage is, as a sensuous being, often much more highly developed than the

sage. The dog and the deer are keener in smell than man. The eagle excels him in strength and distance of vision; the game of the forest or jungle are quicker in hearing. Cultivated senses do not make a cultivated man; their loss is not loss of him. Did he cease to be when they cease to act, then the accident were the essence, the sign the thing signified. What constitutes essential manhood,—freedom, truth, wisdom, virtue, love, holiness,—is not sensuous; and what the senses did not create their dissolution cannot destroy. There is a point beyond which the senses cannot be improved, but there is no limit to the improvement of mind. It has gone on in the race for ages; it may go on in the individual for ever. Imagine a man as old as the race, living in all its centuries, sharing its progress, helping its discoveries, enjoying the pleasures of its accumulated spiritual and intellectual wealth. His mind would grow with every generation, new problems would burst upon him, waking new wonder, bringing new knowledge of nature, and deeper sympathy with man. But the longer this colossal individual lived the more valuable he would be, the vaster his worth alike to the whole and to each of the parts. His memory would be a richer store-house of knowledge than the largest library on earth; his experience would be wiser than the collective wisdom of any parliament or senate; his foresight of the future, based on his knowledge of the past, would far surpass the prevision of the world's combined and organised statesmanship. But if we can conceive mind as so growing for centuries, and becoming valuable alike to God and the universe in the very ratio of its growth, is it not evident that were death destruction it were a too awful impoverishment of the universe to happen under a wise and righteous God? What can grow for ever has been made for everlasting growth; what can so live as to find without ceasing new mysteries and new meaning in life, has been intended for a life without end. The destiny of mind is expressed in its nature; man's capacity for everlasting life declares it to have been the Creator's purpose that he should live for ever.

2. Now to a nature so constituted time is insufficient. The highest ends of man's being are here unattained and unattainable. Within the limits of mortality he is at best a being of splendid promise, and no more. The poet thought he had proved our littleness and discontent when he said—

"Man never is, but always to be blessed";

but he had only proved our greatness. The highest beatitude of man is never a realised state, but in the eternal capability of progress, the possibility of a higher than the highest he has ever yet attained or ever shall attain. Kant thought that immortality was necessary to the very idea of man, for man could not realise the ideal of his nature without beatitude, and beatitude could be only where perfect virtue and perfect happiness were combined, realised in the conscious unity of a perfectly virtuous and perfectly happy personality. But such a result could not be attained within the limits of time; it needed endless duration for its achievement. Yet there is a sublimer beatitude than even this; there is the eternal pursuit of it, the ceaseless progress towards it, the growth in virtue which is a growth in joy, which deepens the more, that the goal retreats the further the nearer it is approached. This is the ideal man's higher nature demands, but to this ideal immortality is necessary. With it the noblest promise of his nature may be fulfilled; without it that promise can only be bitter mockery, all the more cruel that the nature it deluded believed it and achieved its noblest deeds through its belief.

3. But these last words suggest our next position. We cannot shut out God from this discussion; our faith in Him has something to say relative to our belief in immortality. The nature of man prophesies of an immortal future, but the prophecy is God's, though the prophet be man. How can we believe that God would, on so grave a theme, allow the nature He had made to speak illusory things? Imagine earth at this moment voyaging like a vessel through space, and carrying on her crowded decks the accumulated wealth of ages stored in the many millions of living minds. Here genius lives in varied forms, possessed of a mighty passion for work, and working with passion. The poet speaks his thoughts in words that seem to breathe the very breath of life; the philosopher struggles with problems that grow the deeper with time; the preacher proclaims the eternal verities needed for the higher life of man; and the statesman applies to the questions of the moment the principles of eternity. Here moral worth has its home labouring in the brave philanthropist to soften the evils and enlarge the good of earth, in the mother to enrich the hearth with purer affection and truer manhood, in the father to enlarge the resources and liberties of man, in the workman and the mechanic to produce and distribute the wealth that man does not live by, yet cannot live without. Think what earth is at this moment; of the hearts that beat on it, that love, that are loved, that look in sorrow back into the past, or in hope forward into the future; of the millions that, laden with care

or inspired with joy, struggle for life, build monuments that out-last life or look beyond it, *and then ask*, whence? O heaven! whither? what is to be the issue of all? Are these multitudes to be cast overboard and this earth burned and then allowed to float through space like a wasted cinder? Is this to be the end of all? the best and only end a just and gracious God can find for a race He created and loved? It is *enough to ask the question*; surely it needs no answer. The Maker of our race could not mean it to perish in the ruins of its consumed and exhausted home.

4. Beyond this point the discussion may not meanwhile go; yet we must see the significance of the position we have reached. A race that has been created by God must be judged from the standpoint of the God who created it. God made man out of love; were man lost out of being it were a loss to the Love that made him. The being that was created for fellowship with God is God's fellow, and so His immortality becomes the guarantee of man's. We shall live, because God lives and loves the society of the creatures He formed that He might know and be known by. How He desires their society, how little He can bear to lose their love, stands expressed in the act which is the highest act of His grace—"God so loved the world, that He gave His only begotten Son, that whosoever believeth on Him should not perish but have everlasting life."

A. M. FAIRBAIRN.

BERKELEY.

It is one of the commonplaces of philosophy that we cannot know anything in itself, but only the effects which it produces on us, or in other words, its modes of manifestation to us. Thus our knowledge of the world being necessarily limited and mediate, it can never be proved to be external beyond all possibility of doubt. Mankind in general, in every act of sense-perception, recognize a variety of material objects external to themselves; whereas the philosophic idealist or ideaist recognises only a mental picture as being all that is actually before us. No name in British philosophy stands out more prominently in connection with this subject than that of the "beautiful-minded" Berkeley; and we propose in this paper briefly to reconsider the theory associated with his name, and then in a subsequent one, see how it stands related to one or two other hypotheses of the universe.

It is only recently that Berkeley's philosophy has been presented

in its organic unity, and unfolded in connection with his personal history. This is done in a most interesting way in a little volume by Dr. A. Campbell Fraser, Professor of Logic and Metaphysics in the University of Edinburgh, and which forms one of the series of Philosophic Classics for English Readers, now being issued by Dr. William Knight, and published by William Blackwood and Sons. This series, which is to deal with the chief philosophical writers of Europe from Bacon and Descartes onwards, is designed to popularize philosophical discussion, and to exhibit the systems in close connection with the individualities of the writers. It is an extension of the two series already published of Greek and Roman Classics for English Readers, and cannot fail to afford valuable assistance to the student as well as interesting material for the general reader.

George Berkeley, the eldest of six brothers, was born in a cottage attached to the ancient castle of Dysert, in the county of Kilkenny, on the 12th of March, 1685. His parents were Irish by birth, but his father was an Englishman by descent. Very little is known of Berkeley's family, nothing in fact by which we might trace his remarkable mental powers to heredity or to the influences of home. He seems to have been the only one of the family gifted with genius. According to his own account of himself, he was a little sceptic at eight years of age, and, so by nature disposed for the new doctrines, that afterwards took such hold of his nature. When eleven years old he went to the "Eton of Ireland," as Kilkenny school has been called, where he remained four years. Here he was regarded as a precocious lad, exploring the phenomena of nature, which had a strange fascination for him.

At fifteen he entered Trinity College, Dublin, which he made his home and 'obscure corner' for thirteen years. Locke's "Essay on Human Understanding," which was then exciting universal attention, was a class-book in the college; and this, and the writings of Descartes with their vigorous examination of all traditional beliefs, were probably the intellectual influences that turned Berkeley towards the metaphysics of matter, and inspired him with 'a new and revolutionary thought about the true meaning of that reality which we all attribute to the world' about us. He was as great a puzzle to his college friends as he had been to his school-mates; and the opinion formed of him was that he was 'either the greatest genius or the greatest dunce." His character appears to have been a combination of simplicity, humour, enthusiasm, and inquisitiveness. The love of truth was his dominant passion all through life. "Truth,"

he beautifully says*—and these were among his latest words—" is the cry of all, but the game of a few. Certainly, where it is the chief passion, it does not give way to vulgar cares, nor is it contented with a little ardour in the early time of life, active perhaps to pursue, but not so fit to weigh and revise. He that would make a real progress in knowledge, must dedicate his age as well as youth, the latter growth as well as first fruits, at the altar of Truth."

A valuable record of the movements of Berkeley's mind during his college days is given us in his *recently* discovered "Commonplace Book," first published in 1871, and which consists of queries and occasional thoughts in Psychology, Metaphysics, and Ethics. In these private utterings of the early struggles of his intellectual life, we have the germs of the philosophical system he subsequently worked out. The new thought had come to him about the meaning of the word 'real' when applied to the things of sense; and this intellectual secret about Matter presented it in a different light from what ordinary people on the one hand had assumed it to be, and philosophers on the other hand had argued it to be. The material world is to be regarded as ideal or phenomenal only. Matter, Force, Space, Time, apart from phenomena, are meaningless. The things of sense depend on perception. Existence is not conceivable without perception and volition. Things *are* ideas, or as he preferred to say in his later works, phenomena. Locke's distinctive word is 'Idea'; whatever is apprehended is called by him an idea; and it was he who gave Berkeley his starting point, and helped him in the apprehension of this new thought—a thought which was to arrest the deadening influences of a materialistic age, and quicken spiritual beliefs about Man, and Nature, and God.

In 1709, or when Berkeley was 24 years of age, he took orders in the Irish Protestant Church, to which he was loyally attached, though he does not appear to have been at any time a pronounced ecclesiastic, or in any sense an aspirant after titles, power, and money, much less a hot-headed sectarian.

The same year he gave to the world his "Essay towards a New Theory of Vision," in which he explains what is really meant by 'seeing a thing.' The only phenomenon we at first perceive are those of colour, which are obviously dependent on mind, so that ideas or phenomena are really all that we can see. It is by 'experience', learned by 'suggestion', that we come to see outward distances. Visible extension is unconscious induction, or simply 'expectation'. Instead of seeing a landscape at a glance, as we commonly think we do, the sight has become by custom 'habitual foresight'; and we practically translate into phenomena of touch and extension what alone we really see. Thus the things of sense, which lie open before us in the Book of Vision, become a symbolic and 'universal language' addressed to us by the Author of Nature for our proper guidance in all the transactions of life.

* Speaking of "the exquisite grace and beauty" of Berkeley's diction, Sir James Mackintosh says, "his works are, beyond dispute, the finest models of philosophic style since Cicero."—*Ethical Phil.*, p. 132, 4th ed.

This juvenile Essay was followed up the next year by a "Treatise on Human Knowledge", in which the principles laid down in regard to the phenomena of sight were applied to all the phenomena of sense. Visual symbolism expands into natural symbolism. Out of certain impressions of which we are conscious, there issues an 'objective dream' of something real—a sense-experience of the universe—in which we come to know things in their qualities. But the question arises, how is it that these impressions become thus converted into 'objects' of sense-perception? The merely abstract answer given by philosophers to this question, especially the empty answer to the question about the ultimate meaning of the word 'Matter', had, in Berkeley's judgment, only confused the minds of men, raised a cloud of dust, and given birth to scepticism. In proportion as we *have a* superficial or a deep perception of the meanings of the things of sense, do these things conceal or reveal the Eternal Reason of the universe. Unphenomenal and persistent Matter, with its primary or mathematical qualities, existing apart from the conscious mind, as supposed by Locke, was held by Berkeley to be a contradiction, since it assumed the existence of unphenomenal phenomena. We cannot detach phenomena from perception; *apart from perception they cease* to be phenomena. We cannot see what is at the same time unseen. The *raison d'être* of all sensible things is that they may be perceived or known; so long as they are not actually perceived by me or by some other conscious spirit, 'they must either have no existence at all, or they must exist in the mind of some Eternal Spirit.' To ordinary minds, the earth would still continue to spin through space with its seas and hills and forests, though no sentient persons were in existence. "Though no eye should behold and no ear should hear, there would be evenings of silver moonlight on the ocean-marge, and the waves would roar as they broke and retired."*

* Masson's *Recent British Philosophy*, p. 42, 2nd ed.

The common faith of men is that of Natural Realism. But this assigning to Matter an abstract existence apart from the commerce of sense; endowing it with a fictitious substance and potency, and deifying it as an independent entity, even when its secondary qualities might be phenomenalized, as was done by Locke; it was this, Berkeley contended, that concealed the Eternal Spirit and Reason of the universe. Berkeley phenomenalized *all* the qualities of Matter, and maintained that the only persistency and power the universe can give us is to be found primarily in one's own continued personal existence, and in that of other self-conscious spirits, each spirit being percipient of its own 'interpretable sense-phenomena.' The truest and deepest reality, the only being in any sense external to ourselves, is thus Spirit; and the things that we see and touch are only 'the shows of life,' which melt away when reflection reveals the Eternal Spirit beyond; who nevertheless constantly sustains and presents the world of 'ideas,' which are His own ideas, for the contemplation of created spirits, and as the medium through which His attributes and government are made known.

And the fact must not be overlooked that the immaterialism of Berkeley yet found a place for the world of science and all its real achievements. The things we perceive are more than mere isolated phenomena. The visible phenomena 'suggest' other phenomena; and by means of a conviction of the '*common* sense,' developed by custom and experience, we find them grouped in an orderly system of nature, which leads to the belief that phenomenal changes cannot be capricious, and so renders physical science possible. That the universe is permanent in its objects, *i.e.* ideas, was thus, according to Berkeley, rooted in 'faith in the phenomenal order,' which faith was part of the common-sense of men; and it was thus that he sought, with Reid, to harmonize the philosophical theory of the universe with common-sense.

But the main design of this Treatise on Knowledge was to demonstrate on philosophical grounds the existence and attributes of God, and His moral government of the world, together with the immortality of the soul. From effects produced in his senses, Berkeley concluded there was an active power outside his own person; and if activity, then volition. Hence there was an external Will. Similarly, all sensible things, 'or else their archetypes,' must exist out of him; but being phenomenal they can only exist as perceived or perceivable; hence there was an external Intellect: and Will and

Intellect constitute Spirit. A second part of this Treatise was promised, and the manuscript was prepared, but it was unfortunately lost during the author's travels in Italy.

An immaterialistic theory of an essentially spiritual universe could not fail to arouse opposition in Berkeley's day just as it does in ours; and to meet objections he wisely adopted the best method available, viz., dialogue; and in 1713 there was published in London "*Dialogues* between Hylas and Philonous," in which the latter endeavours to convince the former of the phenomenal and evanescent nature of the world, whose constitution and laws manifest the Ideas of an Eternal Mind.

The chief value of this interesting work lay in its meeting by anticipation the objection that gave rise to the universal scepticism of Hume. If the continuous existence of the material world is nothing but a system of phenomena dependent on mind, why should mind itself or spirit be any more than a succession of perceptions? Will not a thorough-going consistency lead us to deny our own existence as well as that of matter, until we behold the dissolution of all things and all beings? Hume denied the existence of *mind* on the very same grounds on which Berkeley denied the existence of matter. Berkeley said, in external sensations I am conscious only of extension, figure, mobility and so forth—of what we call the primary qualities of matter—and the *substance* called Matter is merely imagined for the support of these sensible qualities. Hume said, within myself I am conscious only of impressions and ideas; and the substance called Mind, imagined for the support of these internal states of which I am conscious, may in like manner be a mere fiction.

But for this conclusion to follow legitimately from Berkeley's principles, we must suppose, as Dean Mansel points out in his "*Metaphysics*," and what Berkeley by no means allowed, that the evidence of consciousness in relation to matter and mind is of precisely the same character. But the knowledge of spirit is strikingly contrasted with that which we have of matter. The sceptical conclusion of Hume is valid only when it is admitted, with Locke, that we have no immediate consciousness of self, but merely of its several modes; whereas if it can be shown that the personal and persistent self is directly presented in consciousness, which both Reid and Stewart failed to show, the conclusion may be refuted. This is the position maintained in the Dialogues. Philonous, in reply to the objection of Hylas that 'I' or 'you' can be nothing more than

fleeting ideas, says, 'I have no reason for believing the existence of matter: whereas the being of myself I immediately know by reflection. I know and am conscious of my own being; I myself am not my own ideas, but something else, a thinking active principle that perceives, knows, wills, and operates about ideas. But I am not, in like manner, conscious of the existence and essence of matter. There is no parity of case between Spirit and Matter.'

This unphenomenal side is in fact the constructive part of the Berkeleyan theory, and comes into greater prominence in his later works; and it is just this which Hume and other philosophic critics left out of account. Hume's conclusions were based on an exaggeration of one part of Berkeley's theory, erroneously regarded as the whole; and this has tended to associate the two names together as patrons of a common scepticism. If 'the Eternal Reason which shines through the phenomena of sense' in Berkeley's thought all through his life and writings, but especially in his later years, be overlooked, then it is true that isolated phenomena can give us no world at all, and personal existence itself is nothing but a bundle of perceptions. And it is largely due to the fact that Berkeley's earlier and most productive authorship, which presents the negative side of his views rather than the positive, and in which more stress is laid on 'sense' and 'custom,' has received greater attention than his later works, in which Reason or Intellect becomes more prominent, that such a one-sided representation of his theory of knowledge and existence has been accepted.

In 1713 Berkeley proceeded to London, where he made the acquaintance of Steele, Swift, Addison, Pope, Dr. Samuel Clarke, and others, and where his good heart and fascinating manners gained him a troop of friends. Indeed all his contemporaries agreed in ascribing

"To Berkeley every virtue under Heaven."

In Clarke, the author of the "Demonstration of the Being and Attributes of God," he had previously met with a powerful metaphysical opponent, who regarded the new principles of knowledge as altogether false; but he was disappointed to find that though Clarke failed to refute his arguments, 'he had not the candour to accept the conclusion.'

For the next eight years of his life, he travelled extensively in England, France, Italy and Sicily, returning to Ireland in 1721. Three years afterwards, he accepted the Deanery of Derry. Thenceforth he appears before us in a new character—that of a

philanthropic social idealist. The sad disclosures of national life in England, which followed the failure of the South Sea scheme, led him to look farther West for the development of a true empire; and he conceived the idea of planting an academic home for the training of English and American youths in the Bermudas, or Summer Islands, where he seemed to see 'a better Republic than Plato's, and a grander Utopia than More's,' and from which the light of Christian civilization might spread over the vast continent of America. This benevolent scheme met with general encouragement; and buoyed up by the promised assistance of the English Parliament, he sailed for Rhode Island in his forty-fourth year, to await the further development of his plans. In this rural retreat he spent three years of peaceful domestic life, and became the father of a family. But Sir Robert Walpole's promised help never came; and the romantic episode terminated in 1731 with his return to London.

Here, again, he was soon drawn into controversy, and encountered the theological sceptics or free-thinkers, in the publication of "Alciphron, or the Minute Philosopher," which consisted of seven dialogues, and formed the largest and most erudite of his works. It was a philosophical and analogical argument for religion, setting forth the Eternal Spirit or Reason, who is symbolized in the world of sense, as the only true and deep reality, in the place of deified but unintelligible Matter and Force. The existence of human spirits is assured to us in the phenomena of sense by which we see and hear. We can never see another human spirit; the body only, as phenomenon, is present to our senses; but such phenomena are trustworthy, and through them we become aware of conscious active spirits outside ourselves. In the same manner, we are under obligation to recognise Supreme Spirit in all the phenomena and symbolism of nature; we read His thought in physical laws, and can thus 'see God' in the same sense as we may be said to see our fellow men, *i.e.*, their spirits through the phenomena of their bodies. We have thus the same sort of proof of the existence of God as we have of the existence of other conscious beings like ourselves.

Berkeley found himself once more in his native island in 1734; and shortly after became possessed of the Bishopric of Cloyne, in which 'serene corner' he passed a meditative life of eighteen years. During his residence here, famine and fever invaded the neighbourhood, and large numbers of the poor perished. Idealist as Berkeley was, the world in which he lived was a very real world to him; and he

was ever ready to lend the suffering and needy a helping hand. Sir James Mackintosh sums up his general principles of ethics by quoting his own noble words :—" As God is a being of infinite goodness, his end is the good of his creatures. The general well-being of all men of all nations, of all ages of the world, is that which he designs should be procured by the concurring actions of each individual."* Just as, formerly, he had conceived an 'ideal' Arcadia for the religious benefit of the Western world, so now he conceived an 'ideal' remedy for the bodily ailments of men. He had proposed an intellectual medicine for the materialistic disease of the age in his spiritual theory of the universe ; and a moral medicine for the 'body social' ; and now starvation and death led him to search for a material medicine for the 'bodily organism' of his neighbours. His susceptible and generous nature soon kindled his enthusiasm. The American Indians were firm believers in the efficacy of tar ; and after numerous experiments, he espoused the cause of 'tar-water', had a manufactory erected at Cloyne, announced it as a panacea for all the ills of the flesh, and became engaged in a tar-water controversy. Inquiring as a philosopher into the reason of the virtues of tar, he was led to the conclusion that it was invisibly charged with 'the vital element of the universe', *i.e.*, fire ; and that by means of water this vitality could be communicated to vegetable and animal organisms, and through them to the intellectual and moral life of society. The vital fire, however, could only be a phenomenal cause ; its own true cause must be the Infinite Mind.

This idea was worked out in a very popular volume published in 1744, entitled, "A Chain of Philosophical Reflections and Inquiries concerning Tar-Water, and divers other subjects connected together and arising out of one another," which was followed in a few weeks by a second edition under the name of "Siris," or the "Chain," *i.e.*, of philosophical reflections about the universe. This formed the third and last, as also the constructive stage of Berkeley's thought. The sense-phenomenalism of his earlier writings was only the introduction to a spiritual philosophy ; his mind had turned from reasoning towards contemplation. Greek thought, and especially Neoplatonism, had been gaining his intellectual sympathies ; and proceeding 'from the vital essence of plants and animals to the vital spirit of the universe,' he was led to trace the dependence of all merely phenomenal causes on what transcends nature, and to

* Mackintosh's *Ethical Philosophy*, p. 132, 4th ed.

realize the universe 'only in and through Spirit.' Thus "Siris" is the philosophy of causation, first in its physical phase, and then in its metaphysical. To the eye of science, the universe is a system of interpretable phenomena, undergoing orderly changes, according to certain so-called 'laws of nature' ; but these phenomenal conditions do not give us any real 'cause' ; their antecedents are only caused causes, *i.e.*, effects. Uncaused causation, which is the only true cause, is the origin of all the phenomenal causes that pass before us. All the objects or phenomena of sense, being immediately perceived, are ideas : the cause of these ideas, or in other words, the origin of external nature, is not itself perceived, but only inferred by reason from its perceived effects ; hence the cause or power of these ideas is not an object of sense but of reason. Real power and causation cannot, therefore, be found among phenomena, but must be sought for in a region that transcends phenomena ; and we are thus led up to a Supreme Power which is Spirit, to whose energy and persistence the properties of all sensible objects must be referred. This 'craving for a cause,' which is 'evoked by the spectacle of phenomenal changes,' originates in 'the moral consciousness of self.' In *ourselves* we find 'a first, free, and unphenomenal cause,' for we know what 'I' and 'You' mean : and this was the bridge by which Berkeley passed from the world of phenomena into the world of free spiritual agency. His early endeavours were thus finally reached. The intervening medium called Matter was completely dissolved ; and all law and system in nature were the manifestation of eternal and universal Mind. Mind is the paramount and primeval principle of all things.

Berkeley closed his life at Oxford. He had previously sent his son George there to study ; and had been cherishing for some time past a growing desire to realize in its 'learned retirement' the ideal home of his old age. But he shortly "realized instead the mystery of death." He passed away suddenly, "without the least previous notice or pain," on the 14th of January, 1753 ; and all that was phenomenal of the great and good idealist was hidden from view in Christ Church Cathedral.

T. E. SLATER.

ON ATMOSPHERIC ELECTRICITY, THUNDERSTORMS AND LIGHTNING CONDUCTORS.

As an introduction to the more important subject of the protection of our buildings from the effects of lightning, a short enquiry into what is known of atmospheric electricity may not be uninteresting.

The term potential is one we shall have to make use of occasionally, and it is necessary, to begin with, to try to form some conception of its meaning. It is closely analogous to temperature in relation to the motion of heat, to pressure in relation to the motion of gases, and to level in relation to the *motion of liquids*. Perhaps the motion of liquids is more familiar to us than either that of heat or gases, and therefore we shall make use of this analogy as far as the facts will allow. Difference of level in liquids determines a flow from a higher to a lower level. Difference of potential determines a flow of electricity if we may call it so from a place of higher to one of lower potential.

But the analogy goes further than this. The work done by a quantity of water falling from one level to another is proportional to the quantity of water multiplied by the difference of level. In the same way the work done by a quantity of electricity in falling from one potential to another is proportional to the quantity of electricity multiplied by the difference of potential.

The potential of the earth is usually called zero, but it must be understood that this is much the same as calling the sea level zero, and we have good reason for believing that the potential of the earth not only is different in different places, but also that it varies at the same place from time to time. If the potential of a body is above that of the earth it is said to be electrified positively, and if its potential is below that of the earth it is said to be negatively electrified.

Capacity is another term it will be necessary for us to be acquainted with. In the restricted meaning we shall at present apply to it, it is measured by the quantity of electricity with which an insulated body can be charged by giving it any given potential above or below that of the earth. This in an insulated spherical body, small as compared with its distance from the earth and other bodies, is proportional to its radius. Thus the charge on a sphere of two inches radius will be double that on a sphere of one inch radius when both are charged to the same potential, such potential [illegible]

different from that of the earth; and we therefore say that the capacity of the first is double that of the second.

If we had eight spheres of one inch radius, and merged them into one, they would form a sphere of two inches radius. Let us suppose each of these eight bodies to be charged to a definite potential, different from that of the earth, then the charges would be of course equal on each. Let them then be merged into one sphere of two inches radius. This sphere will then contain the charges of all the eight spheres added together, but its capacity is only doubled, and consequently the potential of the large sphere will be four times that of the smaller ones. The work that would be done by the discharge of this quantity of electricity from the large sphere would be four times as great as that done by the combined discharge of all the eight smaller spheres before they were united, and this four-fold energy has probably been imparted to the charge by the work done in bringing the similarly charged spheres together against their mutual repulsion.

The potential of the air is nearly always different from, and generally higher than that of the earth; *in other words*, the atmosphere is generally more or less positively electrified. Feeble negative electrification is frequently met with, however, especially near the sea, and before and after the passage of clouds. It seems that the air in a zone surrounding clouds is always more or less negatively charged. The potential in cloudless weather generally increases with the height above the ground, and clouds are nearly always of a higher potential than that of the earth, in fact, it has been greatly questioned whether such a thing as a negatively electrified cloud, that is a cloud having a lower potential than that of the earth, has ever been observed.

Apart from all irregularities due to the inductive action of passing clouds, certain well marked daily and yearly variations have been observed in temperate climates. From the observations made at Kew some years ago, it appears that the potential of the air is at a minimum at 2 A.M., from which time it gradually increases until 6 A.M., after this hour it rises more rapidly until 8 A.M., and then again more slowly until 10 A.M., the period of the first or morning maximum. It then declines until 4 P.M., when it reaches its second minimum. At 10 P.M. there is an evening maximum, after which there is a fall until 2 A.M. With regard to the annual changes there are two minima, one in June and the other in August, with a small rise between them. The maximum occurs in February.

Since these observations were made, instruments of much greater delicacy and precision have been invented; and we may hope ere long to have the results of observations of atmospheric electricity, made with Sir William Thomson's electrometers, in all parts of the world; and that many interesting questions on the subject may be solved, which are at present involved in obscurity.

As far as I am aware no connection has hitherto been traced between the variation of the yearly means, and the variation of the frequency of sunspots. Such a relation is not at all unlikely to exist, and it is very desirable that observations on this point should be made in the tropics, and especially in India.

A most important observation was made by M. Quetelet at Brussels, regarding the close connection between the amount of aqueous vapour in the air, and its potential at different seasons of the year. It would be most interesting to know, both from a meteorological and a theoretical point of view, whether the changes in the tension of aqueous vapour in the air precede, are coincident with, or follow those of electric potential.

The following quotation is taken from a lecture given by Sir W. Thomson at the Royal Institution in 1860, and shows the importance of electrical observation of the air, in the study of meteorology.

"The electric force in the air above the roof was thus tested several times during the meeting; and it was at first found to be, as it had been during several days preceding, somewhat feeble positive (corresponding to a feeble negative electrification of the earth's surface, or rather house-tops, in the neighbourhood). This was a not unfrequent electrical condition of days, such as these had been of dull rain, with occasional intervals of heavier rain and of cessation. The natural electricity was again observed by means of the reflecting electrometer during several minutes near the end of the discourse; and was found, instead of the weak positive which had been previously observed, to be strong positive of three or four times the amount. Upon this the speaker quoted an answer which Prior Ceca had given to a question Beccaria had put to him 'concerning the state of electricity, when the weather clears up.' 'If, when the rain has ceased (the Prior said to me) a strong excessive electricity obtains, it is a sign that the weather will continue fair for several days; if the electricity is but small, it is a sign that such weather will not last so much as that whole day, and that it will soon be cloudy again, or even will again rain.' The climate of this country is very different from that of Piedmont, where Beccaria and his friend made their observations,

but their rule as to the 'electricity of clearing weather' has been found frequently confirmed by the speaker. He therefore considered that, although it was still raining at the commencement of the meeting, the electrical indications they had seen gave fair promise for the remainder of this evening, if not for a longer period. There can be no doubt but that electric indications, when sufficiently studied, will be found important additions to our means for prognosticating the weather; and the speaker hoped soon to see the atmospheric electrometer generally adopted as a useful and convenient weather glass."

Another quotation from the same author, equally interesting, is as follows:—

"The weather was alomst perfectly settled, either calm, or with slight east wind, and in general an easterly haze in the air. The electrometer twice within half an hour went above 420°, there being at the time a fresh temporary breeze from the east. What I had previously observed regarding the effect of east wind was amply confirmed. Invariably the electrometer showed very high positive in fine weather, before and during east wind. It generally rose very much shortly before a slight puff of wind from that quarter, and continued high till the breeze would begin to abate. I never once observed the electrometer going up unusually high during fair weather without east wind following immediately. One evening in August I did not perceive the east wind at all, when warned by the electrometer to expect it; but I took the precaution of bringing my boat up to a safe part of the beach, and immediately found by waves coming in that the wind must be blowing a short distance out at sea, although it did not get so far as the shore."

It has for long been supposed that the electrification of the atmosphere is either due to, or closely connected with the evaporation of water; and Professor Tait, while giving this hypothesis a verdict of *non proven*, goes so far as to say he sees no reason against it. Whatever may be the cause, however, of the electrification of the atmosphere, there is some reason for believing that it is the molecules of water vapour which are the charged bodies affecting the electrometer, rather than those of the oxygen and nitrogen of the air; and the condensation of these molecules of vapour into the particles which form clouds must be attended with an enormous rise in the potential of the agglomerated particles, above that of the molecules of which they are composed. To quote from a lecture given by Professor Tait in Glasgow.

"We do not know the mechanism of the precipitation of vapour as cloud, and we know only partially that of the agglomeration of cloud particles into rain drops; but of this we can be sure, that, if the vapour particles were originally electrified to any finite potential, the cloud particles would be each at a potential enormously higher and the rain drops considerably higher still.

For * * * *, the potential of a free charged sphere is proportional directly to the quantity of electricity on it, and inversely to its radius; so when eight equal and equally charged spheres unite into one sphere of double the radius, its potential is four times that of each of the separate spheres. The potential in a large sphere, so built up, is in fact directly proportional to its surface as compared with that of any one of the smaller equal spheres of which it is built."

"Now, the number of particles of vapour which go to the formation of a single average rain-drop is expressed in billions of billions; so that the potential of the drop would be many thousands of billion times as great as that of a particle of vapour."

Prior to, and during the passage of the vapour which has recently been causing such wide spread wonder by its effect on the appearance of the Sun, Moon, and Stars, when near the horizon, the air during certain hours in the day has been observed by Professor Michie Smith to be strongly negative. This is a most unusual observation, and it led him at once to suspect that something unusual was either happening, or about to happen. No rain I believe fell during the time the phenomenon lasted. It has been suggested that this vapour had its origin in the recent volcanic disturbance at Java, and it is not at all unlikely that, if so, it may have been strongly negatively electrified at the time of its formation.

In studying a subject so little understood as atmospheric electricity, a working hypothesis is of much value, so long as it is regarded solely in that light, and is not allowed to influence us unduly. It is in this light that I wish the following considerations to be regarded.

It has long been known that the potential of the air is much higher in cloudless than in cloudy weather. May not the mutual repulsion of the electrified molecules of vapour tend to prevent their precipitation as cloud particles. If this be the case, strong negative electrification should act as powerfully in tending to prevent the formation of cloud as strong positive electrification.

Trees are known to act very powerfully in neutralizing the electrification of the atmosphere, and hence, if our hypothesis be sound, diminishing the mutual repulsion of the molecules of vapour. May we not seek in this direction for a possible explanation of diminished rainfall following the destruction of forests.

Other considerations supporting the hypothesis occur to me, but I refrain from referring to them at present. Only observation and experiment can be relied on to support or refute it. I have said and quoted enough, however, to show that it is at all events reasonable, and if it can be shown to be sound, it will I believe lay the foundation of one of the most important generalizations in the Science of Meteorology.

G. K. WINTER.

ROMAN COINS IN SOUTH INDIA.

The following observations have been suggested by the recent discovery of some Roman coins in the Madras Presidency. The circumstances of the *find* were as follows. One afternoon last August (1882) while busy in my study, a native friend entered and placed on my table six small pieces of flat metal, almost round, and a little larger than four anna pieces, very black-looking, and much covered with earthy matter. To the enquiry what are these, an answer to the effect that they might be old Indian coins was returned, and then other matters were talked about. During this conversation one of the pieces of metal was rubbed, quite mechanically, a few times over the cloth on the table, and when my eye next fell upon it, in silvery sheen, and in somewhat antique Roman characters there appeared to my astonished gaze the letters MAX...PONT. I at once saw that the black lumps in my hand were Roman coins, and when they had been cleaned by acid, and "the image and superscription" brought out, there was no further room for doubt. I learnt that a sowcar had about a hundred of these coins, and arrangements were made to obtain possession of them as expeditiously as possible. It seems they were dug up by a famine cooly in 1878 while engaged in deepening a water course near Karur in the Coimbatore District; and that there were about 500 of them in an earthen pot. Two-thirds were melted to make bangles, and what fell to me was the remainder. I have since obtained a copper or brass coin—one of a thousand—found in a *chatty*, near the same spot some 15 or 16 years ago. If it spoke to me as distinctly as its Roman neighbours what new light might we have on early Indian history! I have also, purchased along with the Roman coins, three of a different type, Saluka or Panch coins, sup-

posed to belong to a period when Buddhism prevailed in South India. Would that these were more voiceful! Beyond the *chakram* and *tree* stamped upon them, I fear there is nothing to show when, where, or by whom they were issued.

My object in writing this paper is to endeavour to excite interest in the vast number and variety of ancient coins still to be found in the bazaars of South India, and thus to save from the crucible what may be of permanent historic value. "By some antique coins are looked on merely as antiquarian curiosities, but viewed in a proper light, they become most valuable historical records, and have a national interest. The coins of the Roman Empire have been appropriately entitled a state Gazette."* "While it is conceded that the South of India possesses a large number of remains of great archæological value, little has yet been done to furnish any detailed information on the subject. In relics of the age of sepulchral cromlechs, dolmens and stone circles we are especially rich, but hardly anything is known about them. Inscriptions, many of great historical value, lie unnoticed in almost every village in the Presidency. * * Remains exist in great numbers throwing light on popular religious cults, and traditions of 'prehistoric' ages." † It is from such sources that the history of the past is to be discovered and written. How little can the candid enquirer glean of the state of things in the South of India during the early centuries of our era, to say nothing of times more remote? Continued and wide observation of facts in connection with any branch of science leads to comparisons and generalizations. In like manner when from a number of sources we find mention of a certain king or event, by putting the notices together we arrive at length at a pretty distinct idea of the man, or the circumstance, and we chronicle it as a fact in history. In this way old traditionary errors are exploded, and things as they really were find their right place in the nation's annals. One writing on Geology speaks of "the life history of the earth as deciphered in the *fossils* of the successive strata." How much this is akin to the relation of numismatics to general history. The habit of observation needs to be cultivated, that nothing of moment may slip past us. There is an endless variety of old coins floating about in the bazaars, and annually it is to be feared hundreds if not thousands of them, precious in the cause of truth, are ruthlessly melted down to make earrings, or bangles. One

* Catalogue of Coins, Government Central Museum.
† Circular letter of R Sewell, Esq., M.C.S.

reason why the three Buddhist coins mentioned above came into my hand was that the silver was poor, and they did not yield much in melting.

My Roman coins are silver *denarii*—the New Testament *penny*. For five centuries after the founding of Rome, that is up to the third century B.C., the Romans had copper money only. In B.C. 269 silver coins were struck, and during the ascendancy of Julius Cæsar a gold coinage was introduced, the commonest piece being the *Aureus*, equal to 25 *denarii*. The weight of the *denarius* varied. In the time of Augustus 84 were struck from a Roman pound, making each coin to be about 60 grains. Several of those in my possession are about 58 grains in weight, showing that the lapse of time has told very little upon them. And with respect to other matters the same remark applies. The letters of the inscriptions are clear, and the 'image' of the Emperors is very bold and distinct, suggesting the inference that soon after they left the mint these coins were buried, and so suffered little loss by passing frequently from hand to hand. The mode of coining seems to have been pretty much as follows:—The pound of silver was divided into 84 equal parts; which were made into balls. Each ball was then placed between two dies, and the upper one being struck a powerful blow with a very heavy hammer, the coin was produced. If the edge of one of these coins be examined it will be seen to present very much the same appearance as the edge of a small ball of clay or dough would have when flattened between the palms of the hand. There are small fissures and cracks all round, and the shape is not perfectly circular. Sometimes the die fell pretty evenly, at others it fell a little to one side, as no collar was used to confine the metal after the fashion of the present day. The writer on Numismatics in the Encylopædia Britannica is of opinion that the art of coining was borrowed by the Romans from the Greeks; not merely the mechanical part, but also the artistic; and he adds that, as is usually the case with copyists, their imitations fell far short of the originals. Be that as it may, the denarii under consideration are not to be despised for want of artistic merit, and if we may regard as portraits the heads of Augustus and Tiberius thereon impressed, they must both of them have been remarkably fine looking men.

Twenty seven of the coins belong to the reign of Augustus, and ninety to that of Tiberius. Although all the former commemorate the same event they are not all from one die. On the obverse of these coins is a laureate head of Augustus facing to the right, and

beginning from the right hand side of the bust the inscription runs as follows:—CAESAR AUGUSTUS DIVI F. PATER PATRIAE. On the reverse side stand two draped figures, each grasping a shield and spear which are grounded between them. Above the shields are a *lituus* or divining rod, and a *simpulum* or small vessel for pouring libations of wine to the Gods, which from its small size gave rise to the proverb *excitare fluctus in simpulo, i.e.*, 'much ado about nothing.' Below the figures we read C. L. CAESARES, and following on from the right, AUGUSTI F. COS. DESIGN PRINC IVVENT. It would not be far wide of the mark to say that every figure and letter on this coin is pregnant with historical interest. Dr. Bidie characterizes it as "of very great historical interest and value."

It may be premised that the date of the coin is A.U.C. 752 or B.C. 2. Our attention is then called to the massive head which is the most striking feature of the denarius. Whose image is it? The answer is that of Cæsar Augustus. Born on the 23rd September B.C. 63, Cæsar was now 61 years of age. He was the son of C. Octavius and Atia a daughter of Julia the sister of C. Julius Cæsar. His proper name was C. Octavius, but having been adopted by Julius Cæsar he assumed, after his patron's assassination, the name of Caius Julius Cæsar Octavianus. He was then in his twentieth year, and for 40 years afterwards the history of Rome is very much a record of his doings. The first period of his public life terminated with the battle of Actium where he destroyed the power of his rival Antony, and brought Egypt to his feet. This was in B.C. 30. Cæsar was then in the prime of life and the zenith of his power. On his return to Rome he was honoured by a most magnificent triple triumph; and the expenditure of money during the following year shows what spoil Egypt had yielded to his grasp. More than 300 shrines were built or repaired, and the money market at Rome was so flooded that the interest on money sank two-thirds. The name and power of *Imperator* was offered to him but this he refused. He elected, however, to be called *Augustus* (the name which appears on our coin), "this name was intact; it had never been borne by any man before, and Octavius required the influence of no other man's name to recommend his own. But the adjunct though never given to a man had been applied to things most noble, most venerable, and most divine. The rites of the Gods were called *august*, the temples were *august*; the word itself was derived from the holy *Auguries* by which the divine will was revealed; it was connected with the favour and *authority* of Jove himself, and courtly poets could play

still further upon it in strains which our language cannot faithfully re-echo, and pray for the Roman Commander that he might *increase* in years, and *increase* in power. '*Augeat* imperium nostri ducis, *augeat* annos.'"*

The letters DIVI F. standing for DIVI FILIUS follow next in order. It is not easy to find when this title first appeared on the coins of Augustus. It is found in an inscription at Ancyra supposed to date about five years before Cæsar's death, and probably was used on coins at least as early as this. The most obvious meaning to be attached to the words points back to the *apotheosis* or consecration of Julius Cæsar. When the Senate met after his assassination it was decreed that as Romulus, the founder of the city, was now worshipped as the one of the Gods, in a temple built to his honour, so all the rites of the ceremony denominated *consecratio* should be observed at Cæsar's obsequies, that henceforth he should be regarded as a deity. This did the Senate with no very good grace, but the actual apotheosis was a scene which poets and historians have vied with each other in their attempts to describe, I can only refer those who are not familiar with the circumstances to Antony's speech in Shakespear's 'Julius Cæsar', to the pages of Merivale or some other such historian. Suffice it here to say that the consecrated Dictator was henceforth known as Divus Julius, and Augustus describing himself on this coin as son of Julius Cæsar calls himself *divi filius*, son of the *divine*. If it should appear, however, as the evidence seems to suggest, that this title was only used towards the end of Augustus' career, then it may have a further reference to a growing inclination to worship the Emperor while he was yet alive. "Neither Julius nor Augustus suffered themselves to be actually worshipped in the city, or even within the limits of Italy, while they graciously permitted themselves to be adored as Gods in foreign countries." About B. C. 14, Drusus the younger brother of Tiberius had command of an army in Gaul, and in order to secure more fully the allegiance of the northern tribes, who after a fashion acknowledged the sway of Augustus, hit upon the device of building a temple, for the worship of the image of the Emperor. It was situated at Lugdunum, the modern Lyons, at the confluence of the Saone and Rhone, and on the 1st of August of that year, it was consecrated with great ceremony. Crowds of Gallic and German chiefs attended; a noble Aeduan acted as Pontiff; and thus was inaugu-

* Merivale's History of the Romans under the Empire, Vol. iii., Chap. xxx., p. 416.

rated that day, a worship of the Emperor which spread rapidly to many parts of the Empire.

The words PATER PATRIAE conclude the inscription on the obverse side of the coin. This title 'Father of the Country' was given to Augustus in A. U. C. 752, or B. C. 2, and is one of the marks by which the date of our coin is fixed. I cannot do better than transfer from Merivale's pages the description of what took place on that occasion, when the title was formally offered to him. "When the Emperor appeared once more, surrounded now for the thirteenth time, with the ensigns of the chief office of the free state, the enthusiasm of all classes burst forth with extraordinary acclamations. They had already endowed him with every power, every distinction, every dignity they had officially to give; but the man who, after so long a tenure of power still preserved to them the forms of liberty deserved the highest title of reverent affection which human nature can bestow. The appellation of *Father of his Country* was the dearest to the feelings of every genuine Roman; it had been heard indeed sometimes to resound from the lips of the multitude among the praises of Augustus; but now for the first time it was solemnly pronounced by the voice perhaps of the Tribunes, and formally recorded. It was engraved over the gate-way of the imperial residence, in the interior of the Senate house, at the foot of the Emperor's statue, and in the precincts of the Forum. A public festival was decreed upon the occasion."* And we may add numerous coins were struck off to commemorate the event, two of which we are now considering. The Emperor's speech on the occasion is handed down to us: "Conscript Fathers," said he addressing the Senate, "my wishes are now fulfilled, my vows are now accomplished. I have nothing more to ask of the immortal Gods, but that I may retain to my dying day the unanimous approbation you now bestow upon me."

We now turn over the coin, and on the reverse side are confronted by two figures standing, each grasping a shield and spear. We ask who are these; and read off the answer C. L. CAESARES, or Caius and Lucius Cæsar. The fruit of the four marriages of Augustus was one child, daughter of Scribonia, called Julia. At an early age she was married to Marcellus her cousin. After his death Julia was married again to Vipsanius Agrippa one of her father's most trusty generals, and to him bore two sons who

* Merivale, Chap. xxxvii, 276 p.

in the year B. C. 17 were adopted by the Emperor, and received the names of Caius and Lucius Cæsar. They were henceforth brought up in a manner befitting their high position and hopes. When only 13 years of age Caius was introduced to martial life and served during a campaign in the field. The next step was to make him, in B. C. 6, chief Pontiff, the signs of which office we have before us in the *lituus* and *simpulum*, the divining rod and laver. The next year Caius being now 16 years of age assumed the *toga* as a sign of his having reached man's estate, and two years later, very soon after his grandfather had been hailed as Father of the Country, Lucius also was led into the Forum and presented to the citizens clad in manly attire. On that day the Emperor presented to each of his grandsons a silver spear and shield; holding these they "rode at the head of a cavalcade of noble companions", and were greeted with the distinguished appellation of *principes juventutis*, Princes of the Roman youth. Moreover they were made *consules designati*, or designated to be consuls, although they were by several years too young to hold that office. The aged Emperor's cup of joy seemed full that day, and he little thought how soon the light of his eyes would be darkened! Lucius, the younger, was in A. D. 2 sent on some mission to Spain; on the way he was taken ill and died at Marseilles. Caius survived him but a short time. In B. C. 1, he was appointed commander of an army sent to quell disturbances in Armenia and Parthia. On his way to join his command he called at Samos and had an interview with Tiberius then living there in sullen retirement He then proceeded to Jerusalem where he installed Archelaus king of Judea in place of his father Herod. He remained in the east conducting military movements and negociations for peace until A. D. 3 when he received a slight wound, which however proved fatal, and he died at a port of Asia Minor whither he had gone to take ship to return to Rome. Perhaps because he was the elder of the two, and thus heir-apparent to his grandfather's authority, he was his special favourite; and his early death must have been a heavy blow to Augustus who only a short time before, on his 74th birth day, writing to the youth calls him "*meus ocellus jucundissimus*," "My darling little eye." In Pisa there is a cenotaph erected in memory of these two young Cæsars by the towns-people which has engraved upon it a long and curious inscription to their honour.

On the second coin we have a laureate head of Tiberius facing to the right, with the following inscription TI CAESAR DIVI AUG

F. AUGUSTUS. The two letters TI stand of course for Tiberius, a name given to him by his parents Claudius Nero and Livia. The cognomen of Cæsar was probably added when his mother became the wife of Augustus, or when on the death of the young man Caius, the way to the throne in succession to Augustus seemed open to him. He was not by birth a member of the Julian family, but belonged to the Claudian *gens*, a family illustrious in the annals of Rome. When he succeeded to the throne he was of mature age, being in is 57th year, and though he reigned for 23 years there is not much of historical note to chronicle respecting him. In person he is spoken of as eminently handsome, "his body and limbs developed in the most admirable proportions, and his countenance regular, animated and expressive." He was fair in complexion, and had an abundance of hair at the back of his head, which was said to be a family characteristic. He was highly educated in Greek and Roman literature, but his bearing was unconciliatory and disagreeable; and after he came into the full possession of authority his evil disposition developed itself in harshness, suspicion and cruelty. The last few years of his life were spent in the island of Capreæ where he gave full rein to almost frenzied wickedness, and was at last in the year 37 A. D. hurried out of the world by his most trusted servant. On this coin too we have evidence that, like his predecessor Julius, Augustus was deified after his death. Tiberius calls himself *Divi Augusti filius* son of the divine or deified Augustus, and to clothe himself fully with the mantle of his predecessor he takes also the title of the *August*. On the reverse side of the coin we have a female figure, seated on a chair of state. In her right hand is a spear, and the left holds a branch; the inscription is PONTIF MAXIM, an abbreviation of Pontifex Maximus. The Pontiffs were a college of priests whose origin was as remote as the founding of the city. They were originally four in number, but in the time of Tiberius there were as many as fifteen. The derivation of the word *pontifex* is curious, being from *pons* a bridge and *facere* to make. Some think this refers to the keeping in repair of a certain sacred bridge across the Tiber.* Others connect it with the performing of a sacrifice followed by the immersion of certain clay figures which were thrown into the Tiber on the Ides of May from the Sublician Bridge,† not unlike the 'taboot' of the Mahommedans in our day. The Pontiffs "judged in all cases relating to sacred

* Ramsay's Roman Antiquities. † See Smith's Dictionary.

things; and in cases where there was no written law they prescribed what regulations they thought proper."* The chief Pontiff was invested with extraordinary powers, and it is not surprising that when, on the death of Lepidus, Cæsar claimed the office, it was never afterwards permitted to be held by any save the chief of the state. By virtue of that office every act of the Emperor was enforced by the sanctions of religion, he being the head of affairs both civil and religious. The seated figure is probably a representation of Victory. She has in one hand a weapon of war — at rest however,—and in the other the palm branch of peace—peace the fruit of victory.

This thought naturally leads to the contemplation of the realm through which the victorious armies of Augustus swept, and where for the time being the arts of peace were alone pursued. Let us take our stand at the centre of authority—the seven hill'd city—Rome, and in imagination try to realize the bounds of the empire over which the Roman eagles flew at the beginning of our era. Toward the setting sun, over the Tuscan sea, fruitful, beautiful and populous, lay Spain and Portugal, the Roman Hispania, the Greek Iberia. To the North West, stretching from the Pyrenees to the shores of the German Ocean—the home of many wandering tribes—was Gallia, the modern France and Belgium; and beyond 'the silver streak' towered the white cliffs of Albion, three-fourths of which were part of a Roman province. A line drawn from Ostend on the Straits of Dover, to Odessa on the Black Sea, following the mountain ranges that separate Bavaria from Prussia, and form the northern boundaries of Bohemia and Hungary, would pretty accurately show how far north Roman authority had spread. Further east, Asia Minor and Syria, as far as the Arabian desert, was subdued. Looking southward, from the pillars of Hercules on the West, all along the northern shores of Africa, was a broad belt of country culminating in the East with Cæsar's last and wealthiest acquisition—Egypt. What a wonderful field of vision! What Kings and princes, what cities and towns, what masses of population have we passed under review! But there is one thing common to them all: their annals and legends are various; the languages spoken amongst them are not diverse as dialects merely, but spring from different stocks; and the colour of their skin, and the shading of their creeds are as variegated as the leaves of a forest in autumn,—yet all acknowledge one head, a paramount power. It has been calculated that about

* Adam's Dictionary.

this time the population of the empire would not be less than 85,000,000, about half being in Europe and the remainder in Asia and Africa.

One feels inclined at this point to stop, and make a few inquiries about the barbarous tribes who had given the Roman generals so much trouble in far off Britannia; and also to wonder what the state of that country might be which had given birth to a general who, not so many generations before, had fought his way to the Indus, and even into the north of India. Where had Greek culture, independence and warlike spirit gone? With Egypt we must deal a little later, but all we can do now is to add a few general observations respecting the Romans as a whole and their capital city. The population of Rome was probably under a million and its area about two-thirds that of the city of Paris at the present day. The better houses, of which there were a large number, were built somewhat widely apart; the poorer people lived in hovels crowded together in a most miserable fashion. Augustus boasted that he found Rome all mud, and left it marble, but this did not reach to the poor. No doubt, however, there was much truth in his boast, and at the time of his death it was a grand city bespeaking the wealth, intelligence, culture and sway of its inhabitants. Distant as the time is of which we write, we have abundant evidence of the manners, customs and general life, of the people; and amongst other sources of information that dug out from the overthrown city of Pompeii is of vast importance. How many such treasure houses have yet to be unearthed in this land! The age that produced a Livy, a Virgil, a Horace and an Ovid—whose works we read with pleasure to-day—was eminently one of refinement and culture. But there was one other characterestic we must note. It was an age of enterprise. Men travelled freely from Spain to Syria from Gaul to Mauritania or Egypt, and the experience gained in navigating the Mediterranean, which was practically a Roman lake, was afterwards of abundant service in more adventurous and distant voyages. Our minds are called to consider a gigantic power built up during seven and a half centuries from the utmost obscurity, a power which was not altogether a combination of brute strength, but a mighty intellectual force, the ebbing waves of which have left their watermarks in almost indelible lines on every shore they touched, nay as in the case of the coins before us, far beyond the regions where the power was directly manifested indications are left, mementoes which bespeak the magnificence of the Roman empire under the early Cæsars.

HENRY LITTLE.

A SIREN SONG.

"Toute notre dignité consiste dans la pensée. C'est de la qu'il faut nous relever, non de l'espace et de la durée. Travaillons donc à bien penser: voila le principe de la morale."—PASCAL.

Oft when some bewildering thought,
Into strange confusion wrought
With all the future and the past,
Stirs from their accustomed sleep
The aspirings, wild and deep,
Which so often make us weep
That the darkness is so fearful
Round this vapour of a life,
And that vanity and strife
In its course are always rife;—
Then, while tears bedim the eyes,
How often will the fancy rise
That 'twere far a better fate
To resign this fever'd being
With aspirings vainly high
For some less ambitious state,
Where, nought doing, little seeing,
Lapp'd in slumber we might lie,
Living still, but in a dream,
Caring not if aught be real
Or if all doth only seem;—
Thus to live all slumbrously
And, peacefully midst peace, to die.
Then will Fancy wield her power,
And she bodies forth a song
Such as in some mystic hour
Might avail to bind the soul
With enchantment softly strong.

"What boots it thus still wearily to toil
Seeking what thou can'st never never find
In fever'd thought's tumultuous turmoil,—
An answer to the questionings of the mind.

Seek thou no more what thou hast sought too long
All vainly,—such soft peace as Nature knows ;
But listen, listen now, to Nature's song,
And as thou listen'st thou shalt find repose.

She woos thee to her peaceful silent shades
Where age on age unrecked of slumbers by,
To sunny meadows and long woodland glades
And silver brooks that dance melodiously ;

To purple tracts of far-extending heath
Where thought's disturbance need no more intrude
Where each soft breeze imparts with every breath
The healing calm of restful solitude.

Then Nature's voice there speaking to thy heart
Shall soothe thy questionings and fears away,
Teaching to drain joy's cup ere life depart
Nor stretch beyond thy bound,—the passing day.

Cease then from all thy toilsome bootless thought ;
Not thus can shortlived man to peace attain ;
Receive from Nature's hand what thou hast sought
By crossing Nature's law,—but sought in vain.

In her embrace, afar from wordy strife
Thou'lt calmly see the days and years glide by,
Her peaceful joy suffusing all thy life,
Then in her peace embosom'd calmly die."

So softly sounds the song,
And awhile it charms the soul ;
But I ask again erelong
Is this a worthy goal,—
Thus in soft ease to lie
Half dying while I live,
Scarce knowing when I die ?
Nay forward, forward ever !
Renew, Renew the toil !
Rather the painful labour
And the agonized turmoil,—
Rather the din of battle
Though around no pæan swell,
Than selfish thus in a world like this
All aimlessly to dwell,

Be hush'd ye treacherous voices !
Ye siren thoughts away !
Nerved by a higher summons
I heed not now your lay.
My path lies still o'er yonder plain
Red with battle and heap'd with slain,
For the City of Truth beyond I see
Though armies of foes in my front there be.
Be hush'd ye voices that tempt delay
From the search and the conflict I will not stay.

L. L.

LITERARY NOTICES.

THE TRUTH OF THE CHRISTIAN RELIGION *as established by the Miracles of Christ. By* RAM CHANDRA BOSE. *London : The Religious Tract Society, 1882.*

The title of this volume hardly gives a fair account of its contents, as it is *more than* an evidential treatise on the miracles. No doubt the first part of the book deals largely with this subject, but the author does not anywhere confine himself exclusively to one line of evidence. It is really a useful handbook of Apologetics in the form of lectures. Generally speaking, addresses of this sort which have been really effective when spoken, seem tame and uninteresting in print, but this is not the case with Mr. Bose's lectures. They bear evident marks of having been originally constructed with a view to rhetorical effect, but no one can complain that they are mere sound and fury, a cento of glowing periods needing the living voice to make them live. On the contrary, it is marvellous to see how so many facts and complicated arguments are compressed into discourses which are really popular and attractive.

Mr. Bose has, we think, mastered the subject of miracles, although we do not think he is always wise in the statement of his arguments. He strikes a very true note when he says in the first lecture that the question of the possibility of miracles is best answered by an appeal to facts and not by an *à priori* discussion. This is the true Baconian method and those thinkers who reverse it are really, whatever their pretensions in science may be, nothing but reactionaries and obscurantists. It was always thus that the advances of science in the past were hindered, by men who argued *à priori* that certain things could not be, and shut their eyes to the fact that such things really were. The pith of Mr. Bose's apologetic seems to be this. 'We can show that certain things happened in the past, which account for the Christianity of the present. Our opponents will not accept the facts on the evidence, nor can they account for the phenomena of Christianity without them.' We are not aware that this mode of presenting Christian evidences can be improved.

But why should a writer and thinker of such evident power weaken his statement of a very strong case by such an argument as that which we find on page 23—the argument that the existence of false miracles necessarily proves the occurrence of true miracles? The whole passage is extremely weak, and yet we are almost certain that Hindu readers will be inclined to think it exceptionally good. "What" says Mr. Bose, "does the existence of counterfeit coins prove? Do they not prove somewhere the existence of genuine coins? If genuine coins had not existed, false coins could not possibly have been stamped and circulated. If the originals had never existed, the copies could not possibly have been brought into existence. This is as clear as noonday light. The occurrence of false miracles necessarily proves the occurrence of true miracles." It is the old story of imperfect analogies, of mistaking illustration for argument. Again, Mr. Bose, if he does not raise a false issue at any rate gives a false impression when he pours the vials of his wrath upon the doctrines of God's immanence in the world and His transcendence above the world. Any attack upon these doctrines as giving a false view of the relations between the Divine Being and His world needs to be supplemented by a careful statement of the Christian view that God is both immanent in and transcendent over the universe. To affirm the one without the other is to deceive and mislead, to affirm both at once is the only position from which the pure theist can maintain himself against practical atheism. To contradict both without an explanation of the relations between the two is not to do justice to the theistic position.

One more adverse criticism and we are done on that head. It is a pity that one who usually reasons with such calmness, and who is at no loss for arguments with which to support his positions should allow himself to fall into the tone of petulant bitterness, which Mr. Bose adopts even towards dead antagonists. What relevancy to Hume's argument against miracles, can there possibly be in a reference to that writer as 'a nihilist in theory and a libertine in practice, a philosopher whose moral perceptions were so decidedly blunted that he looked upon adultery not only as a pardonable freak of passion, but a virtue'? And it certainly does not mend matters to add 'but we have nothing at present to do with his character.' It is our contention now that such references to opponents are to be studiously avoided by Christian apologists. They lower the tone of controversy, they are really unmistakeable marks of the 'odium theologicum' and they ought to be left to the secularists, who seem anxious to establish for themselves a monopoly of controversial abuse.

It is pleasant to turn from these slight and venial faults to the undoubted merits of the book. Mr. Bose is a man of extensive reading, if not of erudition in the strict sense of the word. He has the commonplaces of Christian evidences at his finger ends, which is just what the ordinary enemies of Christianity have not. Among Hindus we fancy that there is a widespread feeling that the origins of Christianity after all occupy pretty much the same position of authority as the origins of Hinduism. They are pretty well satisfied in their own minds, that whatever the value of primitive Aryanism may be, the historical religion called Hinduism has no claim to be accepted by educated men. This view they apply without further reflection to Christianity. It is astounding what ignorance subsists among so-called educated Hindus of the external and historical proofs of Christianity, and we are sure it would be

a revelation to many of them if they were to read Lectures V, VI, VIII, and IX in this volume. They would find that Christianity treads firmly just where the footsteps of other religions falter, that she not only claims to be a historical religion but actually stands erect upon a solid basis of facts.

Mr. Bose has carried his studies into a region where few of his countrymen can follow him, the region of continental and especially of German apologetic and anti-Christian literature. This is particularly necessary at the present day, for if it be true that all English religious thought in and out of the Church, has been for many years nourished on scraps of German, it is equally true that anti-Christian thought in this country nourishes itself largely on second-rate second-hand German and French unbelief. It is most satisfactory to find, therefore, that Mr. Bose has really made himself acquainted with all the leading movements in the theological thought of Germany for the past century. His lectures on the 'Natural explanation of the ascendancy of Christianity' and on 'the mythical explanation' (Lectures XIII and XIV) deal very fully and fairly with the views of Paulus, Strauss, Schenkel and Rénan. Nowhere else will the Indian student be able to find in shorter compass an account of these great and already mostly extinct controversies which raged around the 'Wolfenbrüttel Fragments,' the 'mythical theory' or the 'theory of tendency.' We believe also that the view taken is substantially correct, except on one point. Mr. Bose is sometimes betrayed into the peculiarly apologetic error of devising conscious plans for people who had none. The thirteenth lecture reads rather too much as if all the rationalists from Lessing to Strauss had really consciously and of deliberate purpose, set themselves to destroy the foundations of the Christian religion. That there is a certain amount of unity among them is true, but it is unity of tendency rather than of purpose. It would be hard to find a set of people more given to contradict each other than they have all been. The task of the Christian advocate with regard to such writers is clear;—he should leave them alone to destroy each other, as they always do. It may be truly said that every rationalistic theory as yet has been destroyed by the other rationalists.

Want of space forbids us to enter more fully into Mr Bose's really valuable work. The lectures on the Resurrection and on the Conversion of Paul deal with classical places in Christian evidences, and do it well.

THE LAWS OF WEALTH. *By* HORACE BELL, *Civil Engineer. Calcutta: Thacker, Spink & Co.*, 1883.

This is a little book on a great subject. Some would even raise it to the rank of the greatest of all subjects, and their maxim is:—"Seek money first, good friends, then virtue next." But this is to give far too high a place to wealth. Important as it is, it is not all-important; and in our inmost hearts we cannot but subscribe to the truth of this other maxim; "Seek first the kingdom of God and his righteousness." Still it is useless to unduly disparage the importance of wealth; as a means of life and comfort and usefulness, it must ever bulk largely in the minds of men.

The production of wealth is an art, and also a science. It is regulated by general laws, and the knowledge of these is the science of Political Economy This book treats the subject in a scientific way, although it only professes to

give the mere outlines of the science. Its scope and topics may be gathered from the headings of the different chapters. These are: (1) The production of Wealth; (2) Value and Money; (3) The cost of our wants; (4) Interest and Profit; (5) The Rent of Land; (6) Taxation.

The principal sources of wealth are stated to be, Land, Labour and Capital. We think the sea might have been included in the above list. It is a most important source of wealth. The chapter that treats of money contains, we think, one mistake, which is probably a mere slip. It is said that, if money happens to be very scarce, the prices of everything will rise. This is surely the reverse of the fact. We hardly think the expression, "The cost of our wants," is justifiable. It would certainly be more correct to say, "the things that we want." In the chapter on Interest and Profit, a much needed lesson is read to the natives of India, on their reckless borrowing, at high interest, of money, not to be applied to productive objects, but to be squandered on useless "tamashas." A word is said in behalf of money-lenders, who are regarded as greedy and hard in their dealings, far beyond men in other trades. But the fact is that high interest is caused by bad security. Because the money-lender so frequently loses his principal, he must make up for such losses by increasing the rate of interest. Many people object to taxation, as being exaction of money for nothing. In reality taxes are the price paid for the benefits of government. If there were no government, there would be no security for life or property; consequently there could be no wealth. The Government of India are now conceding to the people considerable powers in the way of fixing the character and amount of the taxes to be paid by them, and of determining the purposes for which these taxes shall be spent. "The experiment is a bold one, and its success depends mainly on the wisdom and, above all, the patience of the educated classes of India."

The Preface says; "The object of this little work is to present some of the leading features of the science to the minds of the middle classes in India, in simple language and by the use of expressions and illustrations which will be readily understood in this country. The principal hope of its utility rests on its being possibly thought worthy of translation and thus reaching a far wider circle of readers than it will in English." We shall be glad if the verdict of criticism sanctions translation; and meanwhile we venture to recommend the book to English-speaking natives of India, as a suitable introduction to the science of Political Economy.

"HERE'S RUE FOR YOU" *Novelettes English and Anglo-Indian. By* MRS. H. A. FLETCHER. *Thacker, Spink & Co., Calcutta,* 1883.

The bill of fare promised in the title page of this volume has certainly been strictly adhered to. We have 'rue' in abundance served up to us in each of the eight novelettes. It can hardly be said, however, to belong to the kind of tragedy which carries much sympathy along with it. We are introduced to the heroine of the first story at the end of a seemingly hot matrimonial dispute. The quarrel itself we are mercifully spared. The opening tableau presents to us the couple as they stand opposite to each other with "a kind of dumb ferocity." The husband's good-looking dark face is "one enormous sneer" as he attitudinizes "gripping a chair back." After this forbidding glimpse of Captain Campion we are perhaps expected to sympathize with his wife, Ruby of the "small kittenish face," in the serious flirtations which she carries on with an admiring Captain on the hills, and which forms the staple of the tale.

The story which follows "*Whom the Gods love*" is perhaps the least objectionable of the others. We are told that the hero has "something in his appearance that suggests the idea that he may have some title to the much profaned name of gentleman." That is a relief to begin with. He is in love with a young lady of "a rarer type," with the eyes "green as *green flame*" which have been so fashionable with some novelists of late. But as Jack Comyng is only a "well-bred pauper in H. M.'s 150th Regiment living on credit and nothing a year" the green-eyed young lady has jilted him in favour of a wealthier suitor, Mr. Henry Armitage, while her heart is still with Jack. This gentleman frequently assures Beryl, for that is her name, that he is much satisfied with her, the only thing that could impair his satisfaction would be if he ever found out that she could love another better than him. Beryl, however, keeps her own counsel, till Jack is on the point of being drowned. She then reveals her secret by frantically urging her accepted lover to save him. So disconsolate is he at the revelation that he voluntarily drowns himself while he is the means of saving the discarded Jack. Beryl seems to repent in the end and wishes it to be understood that she is to remain faithful to her *dead* lover. *Nemesis, A gathered Rose, At Sea,* and *Esther,* are the stories which follow. They all, it seems to us, deal with, and harp on, situations which are unprofitable and unpleasant to say the least of it. The more such situations are kept in the back-ground the better, if novels are to prove pleasant and wholesome reading even in whiling away the "tedium of a long railway journey or the monotony of a wet afternoon on the hills." Our author has evidently chosen Balsac and Ouida as her models, and as usual she has copied their faults more faithfully than their excellencies. We regret this the more as there is a decided ease of expression and movement about her stories, and she shows in parts considerable power of graphic description. She might learn from some artists as skilful and less tainted how to "wake the soul by tender strokes" of purer art, and surely it would be better if her strength were given in future to the pourtrayal of that which is "pure and lovely and of good report."

EPISODES IN THE LIFE OF AN INDIAN CHAPLAIN. *Sampson Low, Marston, Searle and Rivington, London.*

This is the work of a former Madras Chaplain who wisely "desires to be unnamed." The book is composed of materials which originally formed the subject of instruction, or amusement of the author's children.

As a sort of journal for friends and relatives the book is good enough, and might have been printed for private circulation, but that the greater ambition of the author in presenting his work to the public generally is likely to meet with any success is very doubtful. The first chapter gives an account of the author's boyhood and entrance into life, the last an account of his entering upon an Incumbency in England, matters of no importance to any one besides himself and his family. This Chaplain served in Burmah, Kamptee, Bangalore

and Trevandrum. A brief account is given of these places, and some incidents, illustrative of travel, &c., amusing enough for children, are told. Had the author kept to the idea of making a book for children, a good deal of the contents of the present work would have been useful; but he has departed from that plan, for he enters upon other subjects with which children have no concern. The best part of the book is the material employed for padding. The result is that we have neither a book for children, nor a book for intelligent readers.

The author does not seem to have acquired any such knowledge of the languages, habits, and religions of the people of India as would justify his writing a book about it, and as for, the 'episodes' in a singularly prosaic life, all that can be said is that it is a matter of surprise that he found a publisher to print them. Add to a strong sense of self importance, a narrow sectarian spirit, and we have before us a man exceedingly ill suited to become a popular author. The reader might naturally expect that an 'Indian Chaplain' would have given some interesting account of the work of the great Missionary Societies in South India. The S. P. G. is scarcely mentioned, and the C. M. S. but with an ill concealed sneer. All other agencies are, apparently, beneath the notice of an Indian Chaplain, who yet can devote pages to a description of the outward form and ornaments of a small building for Native Christians; but then he himself was the designer of 'ruby cross' and 'altar properly vested.'

We regret that we cannot look favourably on the book in its present form. We think, however, that, if the author had avoided showing his sectarian spirit, and had learnt a little about the progress of Mission work in the land in which he dwelt, he might have produced an interesting book for children, for he writes in an easy attractive manner. The book is well printed and is illustrated with some good engravings.

A Moral Reader *from English and Oriental Sources. By* Roper Lethbridge, C.I.E., M.A. *Calcutta: Thacker, Spink & Co.*

It seems a first principle that for the work of life every part of our nature should receive culture. It has never been denied that youth of a school-going age should be subjected to intellectual instruction and discipline; it is now pretty generally agreed that they should likewise have the benefit of physical training; but, even when it is admitted in words that moral culture is equally necessary, there is so much diversity of opinion about the method of carrying it out, that very little of a systematic kind has ever been attempted. Some think that pupils should be sufficiently influenced by intercourse with teachers of upright character as to render formal instruction in morals unnecessary and that, in short, morality should be taught to the young by example and not by precept. We welcome this book as a recognition of the principle that moral instruction of a systematic sort is required in our schools.

In Christian schools of course the principle has been always recognized. The Bible has always been a ready text-book and there is none like it. Judged even by its literary qualities, it is far more suitable for use in school-classes than anything which is likely to be compiled from other English or Oriental sources. But there is no denying the fact that in Government schools the principle of perfect religious neutrality must reign supreme and the Bible, even

and simple, is therefore ineligible for them. In these circumstances some such book as Mr. Lethbridge's, embodying "the great principles of morality and good conduct that are common to all religions", becomes a sort of necessity.

The contents are arranged under the well-known ethical divisions of Duty towards God, Duty towards self, and Duty towards others; and religion is recognised as "the basis of all morality and the only foundation of true happiness." The book is made up for the most part of extracts which are culled from a great variety of authors. It "has been compiled impartially from Hindu, Muhammadan, Parsee and Buddhist, as well as Christian sources; and whilst I hope," adds the writer, "it may not be found defective in any important point, I am confident that nothing will be found in it to offend the most sensitive conscience."

The work is of a kind which it is extremely difficult to do well and we cannot say that Mr. Lethbridge's effort is so successful as we should have wished. The book is intended for children of a school-going age but it is of a standard which could be profitably read only in High Schools, being far too difficult in style for less advanced classes. But even for the standard we have indicated, the book contains too much abstract exposition of ethical terms and principles and too little of those forms of composition which are alone fitted to present ethical instruction to youthful minds in an attractive manner and with abiding results; such as Fable, Parable, Anecdote, Ballad, Proverb, Dialogue and the like. There is a lack of simplicity and concreteness, in many of the extracts. Who for example would dream of preferring, as Mr. Lethbridge does, Johnson's turgid paraphrase of the well-known passage in the English Bible about the ant, to the simple yet elegant picture sketched by the accurately observant author of the Book of Proverbs?

In any future edition of the work that may be called for, we trust the compiler or the publisher will invent a less slovenly method of acknowledging the sources from which certain extracts or translations are made. Some of these acknowledgments are, to say the least, misleading. It is made to appear, for example, as if the text "Lay up for yourselves treasures in heaven, where thieves do not break through and steal" were a translation from the Sanscrit. We do not suppose the compiler intended that it should so appear; and we regard it merely as a piece of unskilful editing. Still it fairly lays him open to a charge of dishonesty—a charge which has in fact been made. The idea or general plan of the book is however, on the whole, good, and the execution, though in some respects faulty, is creditable. It is a beginning in a field in which comparatively little has been done; and, like all incipient attempts, it may be improved upon by experience. In all schools where the Bible cannot be received, we should be glad to see some such work as Mr. Lethbridge's in regular use.

Examination Papers in Arithmetic, *with Full Solutions and Miscellaneous Questions for Practice, for the use of Candidates for the Middle School Examination. By* Daniel Lazarus, B. A. *Madras: Addison and Co.* 1883.

As far as our experience goes Arithmetic is not a subject which is studied in

the Madras Presidency. No doubt boys go through a course of what is called Arithmetic which consists of learning the clumsiest methods by which it is possible to solve any given problem. The book before us is an admirable exponent of this system and will accordingly, we doubt not meet with a hearty welcome. But any one who desires to see real Arithmetic taught cannot but lament that such a book should be offered as a model to the youth of the country.

This may seem strong language. Let us therefore take a few examples which illustrate our objections. Wherever a question is set involving decimals the first step taken is to change the decimals into vulgar fractions. This we know is done in most schools in Madras and what is the result? Decimals are looked upon only as a system invented for the purpose of torturing the young intellect and not as a method of simplifying arithmetical operations. This bad habit is, we think, encouraged by Examiners who seem to think it necessary to insert circulating decimals in almost all questions; in which case—though even then it is often much simpler to retain the decimals—there is some excuse for changing them into vulgar fractions. In the book before us the horror of decimals is seen nowhere so clearly as in questions involving the reduction of fractions of sums of money to decimals, as for instance, question XXV. 6, where each of the sums is reduced to shillings and pence and then the sum of these reduced to a decimal! Example XXIV. 6, seems to show that the author himself is not familiar with the working of decimals, for when he has to add three decimals together he does it in two operations and then in reducing the decimals of poles to yards and feet goes all wrong and gives as an answer 1 yard, 432 feet! In no part of the book so far as we can see do decimals get a fair place and this in itself would be quite enough to condemn it. But there are many other things to object to. Take for instance the system of 'scoring out' used in working fractions. No Examiner, we imagine, would give much for a question worked in the way shown, where we get in some cases as many as five lines of scoring out one below the other! Another very serious fault is the treatment of proportion. Here we find our author pandering to the depraved taste to which so many teachers in Madras have fallen victims, and when he does happen to work a question by proportion he thinks it necessary to give an alternative by the 'rule of thumb' method.

Had Mr. Lazarus set himself to teach proportion—and we do not consider a bare statement of the proportion enough—he might have had some excuse for turning author. But as he has failed to do this, and has only attempted to perpetuate the blundering systems at present in vogue, we cannot see what useful end his book is likely to serve.

ON DUTY UNDER A TROPICAL SUN. *By* MAJOR S. LEIGH HUNT *and* ALEXANDER S. KENNY, M.R.C.S.E., A.K.C. *London: W. H. Allen and Co.* 1882.

This little book is intended chiefly for the use of those who are called to make a temporary residence in the tropics and who do not know the simple rules of health that have to be observed in hot climates. It is one which may be read with advantage by all who are coming to India for the first time, as it gives plain and simple directions how best to preserve health by attention to

diet, clothing and the like. Special stress is laid on the prevention of disease and instruction is given for the treatment of the more commonly occurring forms, which will doubtless be found useful by those who are far from medical advice. The counsel given seems to be sound and in most cases at least so simple that there need be no difficulty in following it.

"INGE VA"; *or the Sinna Durai's Pocket Tamil Guide. By* A. M. FERGUSON, JUNR. *2nd Edition. Colombo: Messrs. A. M., and J. Ferguson* 1883.

This is an attempt to teach the Tamil language—or at least as much of it as is needed for the common purposes of every-day life amongst a Tamil-speaking people—without imposing upon the pupil the necessity of mastering the Tamil letters. The work is on the whole well done, and if it is desirable that such books should be published, the one before us is at least more likely to be useful than some we have seen. It is not uncommon for *male* authors of similar books to pay a left-hand compliment to the opposite sex by entitling their works "The Lady's &c." Mr. Ferguson, however, more acutely observant of human character, writes for the "*Sinna Durai*," and we are bound to say that in our opinion that young gentleman's energies might be employed upon a better, if slightly more laborious, method of learning Tamil than the mastery of words and phrases tortured by expression in an alphabet utterly unsuited for the purpose. We are no friends of such transliterated "royal roads" to any language. The amount of patience and perseverance necessary to become perfectly familiar with the Tamil alphabet is after all but very slight when compared with that which the other parts of the language demand, if even a merely colloquial knowledge of it is to be attained; and the advantage of its use is so enormous as contributing to a correct pronunciation that the loss in using Roman letters is infinitely greater than the gain. Further the Roman alphabet, to be even an approximate representation of Tamil sounds, needs to be so largely assisted by dots and dashes and italics, that it becomes almost a new alphabet, the acquisition of which is obstructed by all the associations which gather round its primitive forms. While, therefore, acknowledging the skill and ability with which the work before us has been produced, we would certainly advise the "Sinna Durai" to discard it until he has learnt the Tamil letters, and then to employ himself in transliterating it back again. By this means a large number of useful colloquial forms will be fixed in his memory, and a book produced which we would strongly recommend Messrs. Ferguson and & Co., to publish.

We have also to acknowledge—

TALES FROM INDIAN HISTORY. *By* J. TALBOYS WHEELER. *A cheap School Edition. Calcutta: Thacker, Spink & Co.* 1883.

LORD RIPON'S POLICY. *Observations on the Criminal Jurisdiction Bill. By* B. KRISHNA SINGH, *author of "Mysore as it is" etc. Bangalore: Caxton Press.* 1883.

THE NAMES OF BIRDS IN THE MARATHI BIBLE. *By the Rev.* H. J. BRUCE. *Satara : The Columbian Press.* 1883.

Report of the Christian Evidence Society. London : 1883.

Report of the Gujarat Tract and Book Society. Surat : 1883.

NOTES AND EXTRACTS.

The subject of the professional training of teachers is becoming more and more prominent at the present day. There are two opinions on the subject of normal training diametrically opposed to each other, and both equally false. The one is that no man can be a good teacher without it, and the other that no man can be made a better teacher by means of it. Both opinions used to be pretty widely held and pretty strongly expressed, but they may now be regarded as rather out of date. The fact is that while a clever man with a turn for teaching will in a few months give himself a normal training by trial and failure, such a training is acquired at the expense of his pupils, and very often to the permanent ruin of his own prospects as a teacher. On the other hand no amount of normal training is likely to make a teacher out of the listless and uninterested subjects that frequently offer themselves as candidates for vacancies in schools, whose only desire is to get a piece of temporary bread, and whose only hope is a speedy escape from a wearisome profession. But it is possible in some instances at least to rouse these apathetic persons to a sense of the dignity of their work, and we know of nothing more likely to do so than an opportunity of seeing that teaching is a profession, having scientific rules and methods of its own. As for the born teacher, he too will benefit by a normal training for he will confine the experimental part of his career, to the prepared field of the Normal Practising School, leaving his own future pupils to benefit by his successes without having to suffer from his failures.

The establishment of Normal Schools on a more or less elaborate scale is becoming more and more common in India. Indigenous education in this country will bear improvement, but we cannot afford to have it removed and replaced by the more costly European article. It is, therefore, of great importance, by the establishment of elementary Normal Schools and by offering small stipends, to induce as many of the ordinary *pial* teachers as possible to put themselves under normal training for at least a few months. In this way we believe that the character and intelligence of these teachers will be raised, while there will be considerably less waste of public money than at present. Now that the system of Results' Grants is developing itself, there are every year more and more of these elementary schools coming under its operation, and earning considerable sums. It is a notorious fact that children may be pushed on to pass the standards required of them without having received very much real education, and that many *pial* school-masters, with the worst possible methods, are able to earn grants sufficient to make it worth their while to continue their operations upon suffering youth. If once a race of teachers, trained in the art of teaching could be raised up, it is pretty certain that education would advance easily, rapidly and cheaply, among the masses of the people.

The question of how teachers of a higher class should be trained for their equally difficult work is one that has yet to receive a satisfactory answer. The only institution that professes to offer such a training in this part of India is the Government Normal School, and its past history shows that the educational authorities have never hitherto had a very clear notion of what they wanted. The Normal School has been conducted by various educational officers of great ability, but the constant changes must have prevented their having much satisfaction in their work. Of recent years, things have in some respects improved, in others they have retrograded. It cannot be regarded as a step in the right direction, for instance, to lay upon the shoulders of the present admirable Principal, Mr. George Duncan, the whole weight of so important an institution. The opening up of the school, to teachers outside the Educational Department was an important step in advance, but hitherto there has been little desire on the part of school-managers to avail themselves of what it offers. They seem to argue that as they have been able to secure fairly efficient teachers without Normal training in the past, they may continue to do so in the future. Nor has the Normal School curriculum been presented in a very attractive way. It is a sort of Procrustes' bed, which must be applied to all teachers indifferently, whatever their previous history may have been. The crude matriculate, the anomalous F. A. and the full fledged graduate of the university all have to submit to the same treatment, and spend the same length of time in the School. It may be said that as a Normal School this institution has nothing to do with what a man knows, but only with teaching him how to impart it to others, and this is doubtless true. But any two men for example, may be all equally ignorant of some particular subject, and may yet stand on a very different level as to their capacities for mastering it. The ordinary cooly and the Madras B. A. may be both of them profoundly ignorant of scientific agriculture, but the B. A. will very probably be able to master the subject somewhat more quickly than his illiterate fellow-student. More than that, it will not be too much to say that until the labouring man has undergone some portion of the previous mental discipline enjoyed by the graduate, he will be altogether unable to grasp certain parts of the subject. So it is in the Normal School. And so long as all teachers are practically placed on the same level, so long will the curriculum be largely a waste of time, and wholly unpopular with advanced students. Instead of a Normal School training being something to look forward to with pleasure, it is regarded as a twelve months' purgatory by the student, and as a necessary preliminary to drawing an enhanced salary grant by the school-manager. The institution of special lectures on School-management, the Psychology and the History of education, by Mr. Grigg towards the beginning of the present year was one step in the direction of providing a higher and more intellectual training for advanced students, but more needs to be done. What is required is something to raise the status of the Indian teacher, to make him feel that he is a member of an honourable profession, and to give him some honest pride in his work. So long as teaching is regarded as the stepping stone to something better in the future,

so long as the teachers of the High Schools of our Presidency City are mostly students of law, drudging unwillingly at school work until they can pass the B. L. Examination, we have little cause to hope for any great improvement of public feeling. Short-sighted managers and heads of institutions may prefer the present state of things as enabling them to secure graduate-teachers at the cheapest possible rate. But things and people are generally worth about as much as they cost, and it is to be feared that the majority of these legal aspirants are not all that could be desired as teachers. From the enlightened managers' point of view then, the present condition of the educational world cannot be regarded as satisfactory. Nothing will ever be so, until teaching becomes as much a profession as law or medicine, and its members are animated by a genuine *esprit de corps*.

The meeting which Mr. Grigg convened on the 11th of last month to consider proposals for connecting the teaching profession with the university was therefore opportune, and likely to prove useful. A large number of gentlemen engaged in educational work, about one half of whom were connected with the Government Educational Department, met the Director for the purpose of hearing his views and considering the whole subject. After a full discussion, the following motion was carried unanimously. "That in the opinion of this meeting it is desirable to move the university to institute an examination in the History, Theory and Art of teaching, and to grant diplomas to candidates passing the examination." There was considerable hesitation among the gentlemen present as to the exact nature and scope of the examination contemplated, and it was ultimately resolved to hand the whole matter over to a Committee. This Committee is to draw up a memorial to the University together with a scheme of Examination, and is to consider specially the following questions:—

"(1) Whether the examination shall include as an essential part, tests in practical skill in teaching and in the management of a class.

(2) Whether only graduates of universities should be admitted to the examination.

(3) Whether it be also a condition of admission to the examination that a candidate be certified to have passed through the complete course of a superior training institution for masters, or be certified to have been employed continuously as a teacher for at least two years in a college recognized by the university as affording proper facilities for enabling a candidate to prepare himself for the practical as well as the theoretical tests." When the Committee has finished its labours, another meeting will be held to consider its report, before finally approaching the university on the subject.

In the August number of the *Harvest Field*, there is an article by 'IYENGAR' which is so full of sound common sense, as well as of clear thought and lucid expression, that we need make no apology to our readers for the following lengthy extracts. The subject is "*Educated Hindus*," their present position, and the dangers by which they are beset. After pointing out that there are at present two distinct parties in Hindu Society, the one, and by far the larger "still,thoroughly conservative—bound to be so, alike by instinct, education, habit and interest" and the other—the "party of progress"—much smaller in numbers, but much greater in present power and future promise, Iyengar proceeds:—

"Partly for my own clearer apprehension, partly also for the sake of being helpful to my brethren, and not least for the sake of those Europeans who are genuinely interested in us, and wish to be, not lofty patrons, but honest friends, I have determined to set down one or two of the dangers which seem to me to be attendant on our present transition state.

Among the best and most honest of us, not a few are tempted to an abrupt and unreasoning dissolution of all the old ties. This is not difficult to understand. All change represents dissatisfaction, and whether that dissatisfaction arise from the fickle, unresting disposition of the persons concerned, or from the discovery of some lack or untruth in that which is condemned, the result is the same. The anxiety for change focuses and enlarges the faults of the old, and just to that extent shuts out from the vision all that was good and true in it. It is very natural, but nevertheless I protest that nothing is to be gained by a wild, hasty and reasonless renunciation of the whole past. For the past is not all untrue. No nation, creed, or system has ever been built upon absolute unmitigated falsehood.

Sympathetic and well meaning Europeans have probably fostered, in some cases, this unfair estimate of the past, by a very indiscriminate denunciation of it. Let the evil be admitted and denounced; but we do not improve our position in the eyes of thoughtful men, or our chances of success in the long run, by burying the good along with the bad. There is caste, for instance. We chafe under it, and should like to shake free our limbs from the rusty shackles. But surely the chances of a wise use of our freedom, when it does come, will be all the greater for recognising the permanent truth which, under the name of caste, has been exaggerated into so tyrannous an error. No one will challenge the broad basis on which caste rests. In the nature of things there must be distinctions between man and man. The man of limited experience, narrow intellect, and dull emotion, will ever belong to a class distinct from the man of eager mind, ready sympathies, and wide experience. Even in the details of caste distinctions there is the indictation of necessary truth. The scholar and teachor are, in fact and nature, higher than the man whose strength is in his muscle, and whose pride is in his physical courage. Then, too, the man who endures hardships and faces death to defend his home and his country, is surely on a higher platform than the merchant, to whom personal interests are the first consideration. The whole idea is sound enough, and the error has been in exaggerating the idea; in lifting natural distinctions, which may well exist in common with the truth of universal brotherhood, into stiff impassible barriers, with the sharp pikes of religious penalities fastened to the top, threatening to lacerate those who would fain leap over.

It will not be supposed that I plead for caste as at present in vogue. Nor must I be understood to condemn those who, believing that the system is chiefly or altogether bad, have left it and thus become martyrs to their convictions. But what I do affirm is this,—that birth has a distinct value, and imposes definite obligations; and he who, out of impatience with the evil, lets go any part of the good, or lives unworthily of it, is degrading himself and effectively hindering that general progress which he professes to seek. Let the largest concession to truth be made with the least possible change. * * * The sum of what I here contend for is, that to be effectively liberal we must be wisely conservative,—*though only on those points where principle is not at stake.*

The intense impatience of the past, which is observable among so many of us, is just the measure of that eager readiness with which we embrace whatever differs from it. And here it is, perhaps, that the greatest danger awaits us as a body. We belong to a race accustomed for generations to repose on the authority of tradition as infallible, and consequently unaccustomed to exercise individual judgment; and the strong temptation is, *from indigenous authority to fly unreflectingly to the most popular foreign authority.* There is a danger of our accepting ideas, not for what they are in themselves, but for the sanction

which they obtain from great names. And that is not the whole statement of the case. The more special and remarkable phase of the danger is the tendency, in rebelling against the venerable orthodoxy of India, to accept and follow with jaunty enthusiasm any popular and authoritative leadership against *all* orthodoxy *everywhere*. It would not be difficult, I think, to make good this assertion in reference to matters political, while as touching questions philosophical and religious it is manifestly true.

I wonder whether this has ever occurred to Christian missionaries when seeking to account for the tardy success which they seem to win amongst us. We can only judge of things from our own standpoint. We are told, for instance, that in England the mass of the people are Christians, but that there have risen a few subtle, independent men, of much patient courage, who, in spite of constant opposition from Christian orthodoxy, are bent on giving to their country and the world a more reasonable and elevating creed. Not unnaturally, some amongst us regard these men as occupying, in relation to the mass of their countrymen, a position similar to our own in relation to the mass of *our* countrymen, and our *sympathy* is at once guaranteed. We know too that their ability is sufficient to secure for their works a place in our University curriculum, which embodies the highest in literature that we have yet been made acquainted with, and their *authority* is thus rendered indisputable. So they become as gods, whose words are oracles; and after listening to them, we are tempted to look with lofty pity on missionaries, as the amiable propagators of an orthodoxy which, like our own in India, is, as we believe, doomed to gradual supersession. In no other way can I account for the astounding fact that so many of us exalt the teachings of Mill and Spencer, Huxley and Tyndall above those of Christ.

Something, however, may be said on our behalf. We belong to a country where, until very recently, history has quite lost itself in myth. Our historical sense is awaking but has not yet been developed; consequently our perspective is uncertain, and our idea of proportion is confused. Doubtless it will all come right by and bye; but in the meantime our ready acceptance of popular and authoritative unorthodoxy may throw some ugly barriers a little ahead in our path, and needlessly multiply the difficulties of those who come after us. We need a mind more judicially calm, while yet thoroughly earnest; habits of more patient and profound investigation, and the willingness and power to look at all teaching apart from the question of time and men.

I have now mentioned two dangers which are incident to our present state of transition. The first, inasmuch as it touches matters of practice, threatens only the recklessly bold amongst us. The second, having only to do with matters of opinion or conviction, touches us all. There is one more, with the mention of which I will close. It is the danger we are most of us in of undervaluing the obligations imposed upon us by conviction. To very few except the rashly enthusiastic does it seem to have occurred that conviction and deed should, with all true men, be interchangeable terms. On some points we have certainly seen truth which was not seen by our ancestors, which is not now seen by our vernacular brethren. We are proud of our perception, much as we are proud of our general scholarship. Among budding Bachelors of Art, or in the presence of sympathetic Europeans, we love to air these lofty principles of ours, knowing that thereby we gain the credit of being enlightened leaders of native opinion. Moreover, it is very soothing to ourselves. The consciousness that my ideals are correct, advanced, and even noble, is a very considerable and comforting support to my self-respect. My practice may be far from perfect, and that in itself would be rather a disturbing thought. But then I turn affectionately to my unimpeachable principles, which, as the country advances, are sure to find scope and opportunity for their embodiment, and I am consoled. How elevating to reflect that when the world reaches its ideal state, its general principles will be nothing higher than those which now I delight to expound and discuss wherever opportunity offers!

But as to present personal practice of our own creed,—why that is a different matter. We can and do argue the justice and necessity of widow re-marriage most felicitously; but how many of us seek straightway to marry our sons to eligible virgin widows? We denounce the evils of child marriage; but who

of us will refuse to give our daughters until they are eighteen years of age? So much for our faithfulness to social truth. When we come to religious truth, I fear matters are still worse. We interpret undoubted difficulty to mean impracticability, or even impossibility, and then rest, waiting for the 'good time coming.' This is the saddest aspect of all, in connection with us as a body. A judicial separation has been proclaimed, and is being maintained, between conviction and practice. Some, I know, very feelingly urge that we should be considerate for our friends who are less enlightened, and try to educate them up to our standpoint; and that plea must be accepted and emphasised *on all non-essential points*, as I have already shewn. But the royalty of truth demands the reverence of hearty obedience wherever it concerns our own personal practice, *at whatever sacrifice that obedience may imply*. Hitherto we have ingeniously consulted expediency, rather than courageously, and for ourselves, followed right. And hence we are lacking in moral force. Like a spavined show-horse, we are fair to look upon, but inefficient when the highest demands are made.

This is not flattering, but I fear it is true. There is much that is good to be said about us, much in us that is worth development. But I was anxious to find some of the dangers and weaknesses of our position, and these, which I have here set down, have struck me most prominently. They are certainly deplorable, but they are also as certainly removable; and I know some whose sorrow at their existence is stimulating effort towards their annihilation.

The attention of Semitic scholars has been much directed of late to certain fragments of leather which contain the text of the book of Deuteronomy in a very ancient character. If genuine, the date of this MS. would not be later than the ninth century B.C.; and, as the oldest MS. of the Hebrew Scriptures which we possess is not older than the ninth century A.D., it is evident that a text upwards of a millennium and a half older than any existing codex would be a "find" of rare value.

The fragments belong to Mr. Shapira, a collector of curiosities and antiquities in Jerusalem with whom there are few of the European and American travellers that visit Jerusalem every year in hundreds but have had some dealings, great or small.

It seems, according to Mr. Shapira's own account of the matter, that, at a time of persecution in 1865, certain Arabs took refuge in a cave near the Arnon and there they found bundles of something wrapped in linen. Peeling off the covering, they found only black fragments which they threw away as worthless. But one of their number, wiser than the rest, picked them up believing them to be talismans. The possession of these fancied talismans made him rich in his own eyes and in the eyes of his neighbours.

It was in July 1878 that Mr. Shapira first heard of them through a friendly Sheikh by whose intervention the fragments ultimately came into his possession. With this promising treasure, Mr. Shapira wended his way to Berlin, where a few scholars, to whom he submitted it in the hope of getting a great price, pronounced it, after a brief consultation, to be a forgery. Undaunted, however, Mr. Shapira next veered towards London and submitted his fragments to the Trustees of the British Museum, who requested Dr. Ginsburg to examine and report upon them. The examination to which they were subjected has been very thorough and they have been conclusively demonstrated to be forged.

It is needless here to go into the details of the proof; but the external as well as the internal evidence is so complete that Dr. Ginsburg is able to show how the forger or forgers went to work. The materials on which the writing is

made were got by cutting up old rolls of the Pentateuch such as Mr. Shapira occasionally obtains by purchase from impecunious synagogues in Judea or Yemen, such as those which he sold a few years ago to the British Museum. The forgers, for four or five must have been engaged in the business, then proceeded to write with ink the text of Deuteronomy, not in ordinary Hebrew but in the so-called Phœnician character, copying with great care the mode of writing to be seen on the Moabite Stone, so as to make the new MS. appear to be of the same age with that most ancient lapidary document. A few 'various readings' were of course skilfully introduced, but the examiner is able to show exactly whence even they were borrowed and how they were manipulated to suit the forgers' purpose.

The forgers in this case have rather overshot the mark, they have attempted too much, they have aimed at too high an antiquity. True, 'there is nothing like leather'; but it would require no ordinary application of chemical agents to preserve leather for twenty-seven centuries in the climate of the Land of Moab. The fragments are said to have been smeared with asphalt, oil and spirit to counteract the brittleness and to prevent their suffering from wet. But "it is only in the dry rainless Theban desert," says Captain Conder, "that really ancient papyri (some 3,000 to 4,000 years old) have been found, or are likely to have survived, and the condition of such papyri before they are unrolled is very different from that of the supple leather of the new MS. which, however, is not unlike the forged MSS. which have been offered for sale at Nablus" and in other Syrian towns.

Further inquiry may lead to the discovery of the actual forgers. The Sheikh who gave the first information about the fragments died, we are told, soon after they fell into Mr. Shapira's hands and with him perished the last trace of the Arabs in whose possession they had been held. So there is no hope in that quarter. Possibly they were mythical personages at the best. The investigation, if it is pursued at all, must be on independent lines. Meanwhile Mr. Shapira has gained for himself an unenviable notoriety from the part he has played. Ten years ago M. Clermont-Ganneau discovered and established that certain Moabite potteries sold by Mr. Shapira to Germany had no better than an apocryphal claim to antiquity; and now his connection with this shameless transaction, which Dr. Ginsburg has so thoroughly exposed, has only brought to light a new method of "handling the word of God deceitfully."

In the September number of the *Harvest Field*, there is a remarkable article by Mr. Krishna Bihari Sen, Editor of *The Liberal and New Dispensation*, written at the request of Babu Keshub Chunder Sen, and intended to be an authoritative exposition of the attitude which the Brahmo Somaj sustains to Christianity. It is a reply to two articles on the same subject by Mr. Job Paul and Mr. Edward Rice which had appeared in the same Magazine.

"The Brahmists" says Mr. Sen "have accepted Christian truth in a more special sense than Hindus or even some Christian sects have any idea of. More than fifteen years ago it was the fashionable practice of young Bengal to decry Christ and abuse the missionaries. More than a decade of active preaching has dispelled this mournful, anti-Christian spirit, and now almost every school-boy admits that there is something sublime in the life of the great founder of the Christian Church. Coming to the Brahmo Somaj of India we find its organization is framed upon an essentially Christian basis. Its missionary staff is Christian, being guided entirely by the principle of "Take no thought for the morrow." In its mission office mottoes are found on the walls which are all Christian. Almost every Brahmo household has a picture of Christ. The only life of Jesus in Bengali is by a missionary of the Brahmo Somaj of India. Its truly evangelical work, the lives and conversation of its members, breathe distinctly the spirit and influence of Christ. The Brahmo Somaj has recognised the spiritual significance of Baptism, and the Sacrament forms a part of a Brahmo's daily spiritual existence. Thus we are already more Christian than Christians will give us credit for; and if in spite of this Mr. Paul is determined to see in us more persistent hostility than he finds in orthodox Hindus, it is evident that nothing short of the adoption of the Christian name and the acceptance of Christian dogmas will satisfy him. Now there is a God of history, an active Providence working out his benefi-cent purposes for the redemption of our Indian humanity. If it be His sublime design to bring over India to Christ, it may be that the consummation will be brought about in a way and in a shape little dreamt of by our critics. In the history of grand providential movements it is the unexpected that always happen.

But it may be asked, Why, if you are so loyal to Christ, do you speak with any enthusiasm about Chaitanya, Sakya Muni, and Muhammad? Is not Christ enough and all-inclusive? * * * The two prophets whom the theists of the New Dispensation have taken seriously to study, whom they have recognised as their masters, and whose spirit they have most successfully cultivated, are Jesus and Chaitanya. It is these that have influenced our church to a most material extent, and has the homage paid to both been followed by any amount of indifferentism? The answer to this question is to be found in facts. The new Dispensation has been preached before women and the masses, before orthodox Hindus and the most enlightened classes of natives, and before all the overpowering influence of Chaitanya has asserted itself. Hundreds and thousands of men, brought together in large assemblies, have been addressed, and they have been powerfully affected by the Vaishnavaic spirit of the preaching. The annual procession of the Brahmo Somaj in January is a sight worth seeing. A devout Vaishnava remarked to the present writer that the Brahmo Somaj had actually brought back the age of Chaitanya to Bengal. That shows at any rate the reality of the Vaishnavaic revival in our church. It has produced no indifferentism; on the contrary it has given fire and enthusiasm to our preachings; and it is certain that the Brahmo Somaj has obtained a new life since Chaitanya entered into our folds. On the other hand as regards Christ, I have shown that the Brahmos have seriously accepted him as their Master. The inference is clear, that so far at least as the simultaneous culture of the spirit of these two masters is concerned, the Brahmos have lost nothing, but have gained everything by the process"

Speaking at the Crystal Palace, on the occasion of the distribution of prizes for religious knowledge to the children of the London Board Schools, Mr. Mundella took occasion to correct the impression so wide spread amongst those who know nothing of the subject that the Board Schools of England give only a secular education. It appears that almost all the Boards in England and Scotland are giving a distinctively religious education and that the number of complaints that have been made against this is extremely small. In the schools under the London Board, in which 300,000 children are taught, there has been but one complaint in the three years during which Mr. Mundella has administered the education act.

"There are" said Mr. Mundella, "two or three points which I wish to advert to on this occasion, and to which I wish to call the attention of this audience. The first thing I want to impress upon those who do not realise what the school board work is, is the fact that the Education Act of 1870 in relation to

religions teaching is doing a work which the country never expected of it and which religious bodies themselves throughout the country appear scarcely to understand. We are constantly having the question raised in reviews and in speeches in public as to the supposed deterioration of religious teaching in consequence of the existence of board schools. For instance, "Is the Christianity of England worth preserving," is the title of an article written by an eminent ecclesiastic, and the conclusion given is that the Christianity of England is endangered by the teaching in board schools. Another eminent person has said that we were a Christian nation in our teaching until the passing of the Education Act of 1870. Now, I want to point out what truly has been the influence of the Act of 1870 upon the teaching of religion in Great Britian, and that the board school system has greatly benefited the cause of religious education." * * *

"I find that when that act of 1870 was passed there were in the whole of the elementary schools of Great Britain—in which term I include Scotland—less than 2,000,000 of children, while the number to-day in the like schools is 4,700,000; and in a parliamentary paper that has been moved for it will be found that practically these 4,700,000 children receive religious teaching in the public elementary schools of the country. It must be a poor Christian heart which cannot rejoice that here in London 300,000 children are gathered in the board schools, and that daily they hear Scripture truths, hear their duty, and hear the lessons of morality based upon this teaching of the Scriptures."

Professor Sydney Colvin, late Director of the Fitzwilliam Museum, at Cambridge, has been appointed Custodian of the Department of Prints and Drawings in the British Museum. There is in this department by far the finest collection of engravings in the world, a collection which has been growing ever since Sir Hans Sloan, the founder of the Museum, bequeathed his enormous library containing several hundred volumes of prints to it. Since his day many similar bequests have been made, one of the latest—Mr. Felix Slade's collection—having been estimated at over £20,000. This Collection is described as containing "a Collection of rare and choice specimens of etchings and engravings, wherein nearly every artist of distinction is represented." The stores of the Print Room have, however, until comparatively recent years been both ill-kept and ill-displayed. Up to 1835, the largest annual grant made to this department, was £250; since that time it has been increased to £1,200, £1,500 and for some years £2,000. The appointment of Professor Colvin and the entertainment of such a staff as he is sure to demand will probably mean an annual expenditure of three times that amount; but the artistic stores of the room are well worth it. Prof. Colvin it is understood is to have an entirely new suite of appartments, the arrangements of which for the effective display of his master-pieces will give congenial employment to his artistic taste which has wrought such good work at Cambridge.

Dr. Leitner, Principal of the Lahore College, is endeavouring to establish in England a "Punjab Institute" with the double object of preparing young native gentlemen for "the Universities, the learned professions, the Civil Services &c." and arranging for their conveyance to England and back and residence there without loss of caste. The former object may be good and probably meets a felt need;—Dr. Leitner knows the wants of his own province best. But the latter is surely a step in a wrong direction. If its accomplishment be possible—which we very much doubt—its result will be to hinder much of the good which residence in England would otherwise do. Caste is sufficiently tenacious of life, and does not need the tonic influences of English countenance; and hitherto Native Gentlemen who have been anxious to reap the benefits of western culture by a residence in Europe have not found caste an insuperable obstacle. It would be better in our opinion to leave things as they are, and let the desire for travel, which must inevitably grow with the growth of education, be, as it has been in the past, one of the many influences which are silently at work undermining a system which at its best works much evil and little good.

A new weekly Brahmo paper of eight pages called *The Indian Messenger*, has been started in Calcutta under the editorship of Pandit Sivanath Sastri M.A. It is really an offshoot of the *Brahmo Public Opinion*, which paper has changed its name to the *Bengal Public Opinion*, and will henceforth concern itself mainly with political and social questions, leaving everything distinctively religious to be dealt with by the new venture. This change will doubtless be hailed with pleasure by many who take an interest in the progress of the Brahmo Somaj. The special aim of the Messenger is declared to be—

"To represent more fully than could ever be done before, the internal religious life of the Bramo Somaj, to seek to unite the several theistic bodies in this country, to help in preaching the principles of theism, and generally to promote the interests of piety and godliness in the community; but it will also contain such other important items of general news as may interest its readers, editorial notes reflecting on the working of other religious, social and philanthropic associations, and occasionally on leading political topics in their moral and religious aspects, heads of scientific and literary information, gleanings from devotional works, notices of important theological and religious publications, and selections from current theological and devotional literature."

The President of the London branch of the British Theosophical Society has given the following somewhat remarkable definition of Theosophy, or rather of the 'Divine' in which Theosophists believe:—

"Theosophy is the science of the Divine. In this age the word science is readily understood; not so the word Divine, We, Theosophists, understand by the word Divine, the hidden, interior and primal quality of existence; the noumenal as opposed to the phenomenal. Our relations to the Divine we hold to be relations not to the exterior, but to the within, not to that which is afar off, but to that which is at the heart of all being, the very core and vital point of our own true self. To know ourselves, is, we hold, to know the Divine. And, renouncing utterly the vulgar exoteric anthropomorphic conception of Deity, we renounce also the exoteric acceptation of all myths and legends associated therewith replacing the shadow by the substance, the symbol by the significance, the great historical by the true ideal."

As far as this means anything, it is Pantheism; but Pantheism stripped of everything whereby it has ever fascinated and chained the mind of man. The world of phenomena is no longer an outshining of the Divine radiance, and all that we can know is *ipso facto* non-Divine. The name "Theosophy" then becomes one of the greatest misnomers man has ever perpetrated. No wonder that with such a definition we should be informed that the knowledge of the Divine belongs to "Seers and Poets only"!

The report of the Education Commission has we are informed been signed by all the members and very few dissents have been recorded. This is re-

markable considering the intricate nature of many of the problems which the Commission has had to solve, and the great variety of interest and sympathy represented upon it. It speaks well for the thoroughness of the work that has been done, and the exhaustive discussion to which every problem has been subjected, that the majority of the twenty-one Commissioner's are able to accept the Report in its integrity—and this we believe is the case. Great additional weight will thereby be given to the Commission's recommendations. We trust that the Government of India will not long delay the publication of the Report for those who have followed the proceedings of the Commission with interest will be impatient to know the results which have been reached.

The celebration of the quater-centenary of Luther's birth, says the (*London*) *Athenæum*, is producing a crowd of books, pamphlets, photographs, oleographs and engravings upon Luther and Lutheran subjects in Germany. The hymn "Ein feste Burg ist unser Gott" has been adopted as a *fête* prelude, and choruses and part-songs innumerable are being issued for the singing unions by various composers. Medals have been struck with the words "Dr. Martin Luther. 1483—1546," and on the reverse his words, "Here stand I; I can no other. God help me." One artist has produced a portrait which is being printed in oil colours, and he claims that the likeness is entirely new and original, shunning the antique and crude painting of Cranach, but retaining entirely the true portrait! Statuettes after the various Luther monuments are also being largely manufactured for "hut and palace, school and house, poor and rich," and even lanterns for illumination with Luther's portrait are announced.

Early in October Messrs. Macmillan and Co. will issue the first number of "*The English Illustrated Magazine*" which promises to be a marvel both of excellence and cheapness. The most popular writers have been engaged to contribute to its pages, which will also be illustrated by the best engravers in Europe. Even the initial letters and tail-pieces are to be works of art. A special paper is being manufactured for the Magazine, which, by a process of semi-sizing while in the mills will be made capable of receiving impressions *dry*, and thus the fullest justice will be done to the most delicate engraving. The contributors to the first number are F. W. Maitland, Grant Allen, Algernon Charles Swinburne, J. Comyns Carr, William Black, T. H. Huxley P. R. S., and Charlotte M. Yonge. Amongst the engravers we notice the following well-known names—Theodor Knesing, J. D. Cooper, W. Cheshire and O. Lacour. The price of the Magazine is to be sixpence.

The Trustees of the Gilchrist Scholarship Fund have announced their intention of admitting candidates from Ceylon as well as from India to compete for the scholarship of £150 per annum held at the University of London. The reason for this change is said to be the extremely small number of candidates who have come forward in past years.

An illustrated work entitled "*Ceylon in 1883*" by Mr. John Ferguson of the *Ceylon Observer* is announced and will shortly be published by Messrs Sampson Low and Co. Mr. Ferguson has chosen a subject on which he is well qualified to write, and a book of the kind indicated is much needed. We shall expect to find it both valuable and readable.

SCIENCE JOTTINGS.

M. Pasteur, believing that cholera germs enter the body not by the air passages but by the digestive canal, has issued a paper of 'precautions' to be used by the members of the French scientific expedition to Egypt. The following are some of the most important. Water must be boiled and when cold shaken in a half filled bottle. It should be drunk from glasses which have been previously heated. All alimentary substances should be well cooked and fruits should be eaten in their natural state, but previously washed with water that has been boiled and preserved in the same vessel or transferred to another previously heated. Bread should be cut in thin slices and submitted to a temperature of 150°C for twenty minutes or more. All the vessels employed for culinary purposes should be heated to 150°C or more. Bed linen and towels should be plunged into boiling water and then dried. Bath water should be previously boiled and when cold treated with one part in 500 of Thymic acid, or one part in 50 of Carbolic acid. When handling the bodies and soiled linen of patients it is well to cover the mouth and nostrils with a mask containing cotton or wool which should be heated to a temperature of 150° after each exposure to contagion.

The cholera epidemic in Egypt has called the attention of people in England to the question of how the spread of such diseases can be best prevented. All agree that the disease is to a large extent propagated through the water supply, and in the "Nineteenth Century" for August there is a very good article by Dr. Frankland on "Cholera and Water supply." The article is primarily intended to call attention to the danger to which London is exposed through the contamination of a large part of its water with sewage matter. Dr. Frankland points out that in previous years when cholera reached London a distinct relation was traceable between the purity of the water and the virulence of the epidemic in any district. In India we are much exposed to the double danger of impure water and contamination by the germs of cholera and it seems to us that the necessity of having a supply of pure water cannot be too often or too strongly insisted upon. We have all seen temple tanks and other sources from which water is drawn so foul that no name but 'sewage' could be fitly given to it. Very great *precautions* ought to be taken to protect wells and other sources from all infiltration of sewage matter and, unless there can be no doubt about the purity of the water, boiling and filtering should be resorted to. As regards filtration however Dr. Frankland calls attention to the very common and dangerous fallacy that when once a filter has been procured no further care is required. This is far from being the case for if the filter is not kept clean and frequently renewed it becomes a source of danger instead of safety. The best kind of filter according to Dr. Frankland is that in which spongy iron is used, and the next best is one with animal charcoal. The spongy

iron filter retains its powers far longer than the charcoal one and is found to be absolutely fatal to all bacterial life.

An International Geodetic Conference is to be held in Rome during this month to discuss the adoption of an international common meridian and common time for Railway and Telegraph purposes. Great Britain will be represented by the Astronomer Royal and Col. A. R. Clarke C.B., R.E., F.R.S. There can be no doubt that the adoption of some common meridian, it matters little what, would be a very great convenience but it seems very difficult to get all nations to agree on what that meridian ought to be.

The Ischian earthquake, followed as it has been by the Javan eruptions and other less important earthquakes and volcanic eruptions, shows that the earth's seismic forces are very active at present. The earthquake at Ischia was preceded by many warnings such as rumbling sounds, rise in temperature of the waters of springs, &c., but the inhabitants of the doomed town were afraid to say anything about them for fear of frightening away their many visitors. The earthquake itself was by no means very severe but its focus being directly underneath Casamicciola and the houses being very badly built the destruction was terrible, several thousand lives being lost. This disaster, terrible as it was, seems small compared with that caused by the Javan eruptions. There the so-called tidal wave has destroyed several towns and many thousands of their inhabitants and the topography of the Straits of Sunda seems to have been quite changed. Mount Krakata, which was considered to be an extinct volcano, has been in active eruption for some months past, and about the 27th of August the eruption became very violent and some of the other inland volcanoes seem also to have become active. On the morning of the 28th the amount of ashes that had been thrown into the air was so great that Batavia was in almost total darkness. About the same time, as far as we can learn, Mount Krakata disappeared below the waves and sixteen new volcanic cones came into existence. The consequent violent disturbance of the sea caused several earthquake waves, which, breaking upon the low lying shore, destroyed the towns of Angir Tjerihgin and Telok Betong. The disturbances of the sea level were propagated as far as the Indian coast and were observed at many ports. At Galle the sea receded so far as to show the wreck of the 'Erin' and then returned about 3 ft. higher than its usual level. At Cape Comorin the sea receded for a very long distance variously estimated at from one to two miles. The fall was so sudden as to leave large fish floundering on the sandy bottom. In about a quarter of an hour the sea returned in one wave, but the return wave does not appear in any way to have encroached on the sand. At Muttum the sea fell about 10 feet. At Negapatam between 1 and 3 P. M. on the 27th there were three sudden rises of the tide to 2 feet during an ebb tide with a fresh down the river. The rise was caused by a 'bore' running up the river. At Cocanada at 6 P. M., during ebb tide, the river suddenly rose about 2 feet and then fell very rapidly. At Masulipatam the sea came in with a great rush between 3 and 4 P. M. on the 26th, this was repeated on the 27th. At Madras the tide gauge gave a record of a large number of disturbances; between noon on the 27th and noon on the 28th there are at least eleven distinct maxima and minima of the tide, and the normal tidal curve is completely changed in appearance. The waves show a very remarkable regularity occurring at intervals of almost exactly two hours. We owe the above information to the courtesy of the Master Attendant, who has placed at our disposal all the information of his department on this subject.

From the 8th to the 12th of September the sun at rising and setting had a most remarkable appearance, being bright green when near the horizon and a pale silvery white when higher up. For at least an hour it was possible to look at the sun with the naked eye without being dazzled, and at the same time the definition was so good that a large sunspot which happened to be present at the time was distinctly visible. This phenomenon, which is certainly very rare, was seen over a large extent of country and of course gave rise to all sorts of wild theories. The hypothesis most generally accepted is that it was in some way due to the great eruption in Java, and there are many things which tend to support this. The cause certainly lay in our own atmosphere and had nothing to do with the sun itself. Spectroscopic evidence goes to show the presence of a large amount of aqueous vapour but as the observations are not yet fully reduced we will not at present enter into any details. Associated with the appearance of the sun were very magnificent cloud effects before sunrise and after sunset which were evidently due to the same cause, and a remarkable condition of the electrification of the air preceded and accompained these phenomena. Readers of this magazine in the districts at some distance from Madras, especially in Bombay, the Central Provinces and Burmah, will confer a great favour by sending an account of any observations they have made to C. Michie Smith, Christian College, Madras.

C. M. S.

QUERIES.

10. (C. A. Hessing, Paumben.)—*How do you reconcile the Book of Genesis with Modern Science?*

A question on which scores of bulky volumes have been written can hardly be considered fit for a place among our queries. Nevertheless we may give an outline of what we regard as the true answer.

First, however, it is necessary to settle the preliminary question of how much we are to expect from an inspired writer in the book that we Christians claim to be the Bible of the human race. Our readers know that we have always refused to admit the mechanical view of inspiration and revelation to which infidels try to pin us down. We hold that revelation has been a historical process, the process of the education of the human race, and that inspiration is the direct influence of the Divine Spirit upon its human teachers, fitting them to do their special work at their own time and in their special circumstances. What are the demands which science can make upon such an author and his work? It will not do to say simply that, as the office of revelation is to teach religion, it has nothing whatever to do with science. "There is one scientific obligation which would seem to be incumbent upon revelation at every period

of its development," says Newman Smyth, "and that is the obligation of helping on the advance of the human mind in knowledge by its whole tenour and spirit; and this obligation involves a wise precaution and method in the accommodations of its teachings to human ignorance from time to time, so that the permissible and necessary adaptations of revelation to an early age may not become fixed as barriers in a later age. Providence cannot be expected to outrun its own work, and to violate its own benign law, which makes knowledge always the reward of labour: but on the other hand we should expect a providential revelation so to frame the first lessons of human childhood, that the world when come to age would not have to unlearn them." This much we are to expect, and this much we hold that we have in the Mosaic account of creation. Look at what has been called the elementary scientific virtue of the Biblical story. In the first place it is free from mythology, and those superstitious conceptions of nature found in all other ancient cosmogonies. There is no personification and deification of natural powers, as in the Vedas and other ancient Sacred books. All the powers of nature are regarded as the creatures and the servants of the Divine Will. God is represented as above nature, and man, made in God's image, as above it too; a conception which must be grasped before man dares face nature with scientific curiosity. Those who want to see what was the natural view of creation apart from revelation will find it in the so-called Chaldean Genesis; which as Smyth well remarks, is "as remote from the simplicity of the Biblical conception of nature, as the science of our day is beyond the discussions in natural history which Plutarch used to carry on with his friends."

Not only does Genesis give us the proper scientific view of the relation of man to nature, but it gives that for want of which all antiquity was powerless in science, viz., the conception of fixed law. The Hebrew seer believed and taught the unity and self-consistency of the Creative Might. True he believed in miracle, or rather that all events and processes are miraculous, but that belief fixed his mind more and more firmly on the conception of a Divine kingdom whose law prevailed throughout. Here at the very beginning of Revelation we have the idea of law set forth. In this first lesson of revealed religion to man, we have thus two powerful stimuli to correct thought regarding nature.

Is there then anything in our first lesson that needs to be unlearned? At first sight there seems to be, but on further investigation it will be seen that in all probability we are now only beginning to learn the deep lessons of Genesis. We shall find not only that its elementary teaching is consistent with science and has performed great services to the development of the human mind, but that it really touches the hardest problems with unfaltering hand.

1. We are told that 'in the beginning God created the heavens and the earth.' Science has certainly not compelled us to give up that position. We still prefer it to the hallucination that an atom of homogeneous matter, somehow stirring itself, did it. Nothing can ever be detected in nature that is likely to let us off from the necessity of believing with Moses, or else stopping belief altogether.

2. Three things are said in Genesis to have had a spiritual cause, matter, life, soul. Whatever may have happened in the case of other phenomena, these three are declared to have originated supersensibly, by the Divine

activity. Modern science can say nothing to show that this position is false. Matter in its present form is not an eternal thing. Life has never been produced as far as human experience goes, except from life. Still less has soul, the spiritual in man, been found in the crucible of the chemist. Science has simply no account of them to give. But Moses, representing the human intelligence, reason and conscience, refers them to God, and science cannot ask him to retract.

3. Genesis tells us of a gradual creation, a continuous creative process. "This world, according to the Bible was not finished in a day: it was not thrown into existence ready-made, and fitted up with all the modern improvements. It was a progressive work. These are the *generations* or growths of the heavens and the earth when they were created (Gen. ii. 4)." It is rather strange, is it not, that this unscientific old Hebrew poet should have got hold of the correct scientific principle, of which there is no trace elsewhere in his age? "Were the first chapter of Genesis," says Smyth, "some newly discovered remnant of Arabic literature, or a hieroglyphic just deciphered from some Egytian monument, it would be hailed as a remarkable anticipation of some of the chief results of modern science."

But our enquirer has yet another objection. It is true that Genesis teaches man's superiority to nature, the spiritual origin of matter, life and soul, something like a conception of law, and a kind of development in creation. It is also admitted that science seems in no hurry to make Genesis abandon these positions. But it is urged that Genesis teaches more, especially that the world was created in seven literal days, and that the falsehood here implied has been opposed to the progress of the human intellect. If this could be shown, we think that a strong case would be made out against Genesis. Let us see. Come back to our starting point of an educative revelation, intended for the childhood of the race. What is demanded of such a revelation? evidently not completeness, or finality, for that would defeat the very end of an educative revelation. But for one thing it must be *memorable*, easily carried in the mind and available for the regulation of thought. Now it lies upon the very surface of the Bible narrative that it was constructed with a view to being easily remembered. We should not forget how all-important this was in an age when books were unknown. The most perfect and elaborate theory of creation would then fail of its purpose, unless it could be carried in the mind, and be easily transmitted orally from one generation to another. No more natural device for securing what was necessary could be thought of than that of Genesis—dividing the whole process of creation into the days of a creative week. Thus the question as to whether the 'days' of Genesis were literal a figurative is really quite irrelevant. The book was not teaching, and apparently was not for long supposed to teach, anything about the time occupied in creation. That was a lesson which there was no moral need for man to learn by revelation, one that he might safely be left to find out for himself. The book of Genesis is essentially a *popular* account intended to produce popular moral and religious effects. The device of the 'days' is simply the method of the lesson. At the same time it should be remembered that the word translated 'days' is used in Genesis itself very flexibly. For example, it is applied in Chap. i. 8, to a single creative period. In Chap. ii. 4, it is applied to the whole time of the creative process.

"If the word has since been fixed in theology, and made to bear the burden of a false science, that was not the mistake of Moses, but a limit put upon revelation by the ignorance and perverseness of the human mind." It is a noteworthy fact too that in the rest of the Bible, there is 'no trace of any six-day theory of the making of the world.'

The whole subject is treated with great freshness in 'Old Faiths in a New Light' by Newman Smyth, D.D., from which the main lines of this argument have been drawn. We cannot do better than sum up in the words of this brilliant writer. "The Biblical account of the creation meets the necessities of the elementary instruction of a race chosen from idolatrous surroundings to become the bearer of a divine Gospel to mankind. The teaching of the Bible on its scientific side, is so free from superstition, so correct in its understanding of the alphabet of nature, so retentive in its grasp of the elementary truths of the creation—its spiritual origin, its unity, continuity and divine order—that altogether it presents a unique literary phenomenon,—one which must have a cause, but whose cause does not appear in the conditions of the times or the historical environment of the Bible. The simplest explanation of this literary wonder of antiquity (if upon other philosophical grounds we are not prevented from giving it) is that some special divine providence was at the source of this marvellous life in Israel; that in some manner provided for in his own laws the God of history gave to the children of Adam those greatly needed rudimentary lessons himself, in some of his many open ways of suggestion to the soul of man, taught the human reason these elementary truths of the creation. * * * Cleared of false interpretations, relieved of the suspicions cast upon its truthfulness by imprudent defenders, known in its genuine worth, and prized for its really exceptional virtues and grand character, the Mosaic Genesis is found to have been all the while, the firm, steadfast friend both of science and religion."

[M. A. STUDENT—(MASULIPATAM), R. M. (ERNAKULAM) *and* A STUDENT (ANANTASAYANUM) *have sent queries unauthenticated by their names. We can therefore pay no attention to them.*

A STUDENT OF RELIGION (TRIVANDRUM) *will be answered in our next issue.* —Ed. C. C. M.]

THE CHRISTIAN COLLEGE MAGAZINE.

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THE GREAT PROBLEMS OF RELIGION SOLVED BY JESUS CHRIST.

By Religion I mean the recognition of our dependence on God, the Supreme Being, and the knowledge and fulfilment of the duties arising therefrom. Or, in other words, the recognition of our relationship and accountability to the Deity, and the knowledge and fulfilment of the duties which result from that relationship and accountability.

By Problems of Religion I mean those great questions respecting God and man in relation to one another, both in the present and in the future, which have exercised the human mind more or less in every age and in every part of the world.

I.

The first of these great problems is,—'Who is that Great God whom all should worship?'

There is something in the nature of man or in the circumstances in which he is placed, or in both, which leads him instinctively to recognise and to adore some Being or Beings as Supreme. It is as natural for man to worship as it is for him to eat and drink, to walk and sleep. And as man *naturally* hungers and thirsts for food and drink, so he *spiritually* hungers and thirsts for God. An old Hebrew Poet says, "As the hart panteth after the water brooks, so panteth my soul after thee, O God. My soul thirsteth for God, for the living God." (Ps. xlii. 1, 2.) This is the sentiment of man in every age and in every clime from the balmy breezes of the Nile valley to the scorching heat of Hindustan, and from the frosty shores of

the Arctic regions to the more temperate zone of Europe. This sentiment, this panting, thirsting, and yearning after God, "the living God," is pathetically expressed in the 121st Hymn of the Xth Mandale of the Rig-Veda, sung by an old Rishi more than three thousand years ago.

1. "In the beginning there arose the Golden child—
He was the one born lord of all that is. He established the earth, and this sky;—Who is the God to whom we shall offer our sacrifice?"
2. "He who gives life, He who gives strength; whose commands all the bright Gods revere; whose shadow is immortality, whose shadow is death;—Who is the God to whom we shall offer our sacrifice?"
3. "He who through his power is the one king of the breathing and awakening world;—He who governs all, man and beast;—Who is the God to whom we shall offer our sacrifice?"
4. "He whose greatness these snowy mountains, whose greatness the sea proclaims, with the distant river—He whose these regions are, as it were his two arms;—Who is the God to whom we shall offer our sacrifice?"
5. "He through whom the sky is bright and the earth firm—He through whom the heaven was established,—nay, the highest heaven,—He who measured out the light in the air;—Who is the God to whom we shall offer our sacrifice?"
6. "He to whom heaven and earth, standing firm by his will, looking up, trembling inwardly—He over whom the rising sun shines forth;—Who is the God to whom we shall offer our sacrifice?"
7. "Wherever the mighty water clouds went, where they placed the seed and lit the fire, thence arose He who is the sole life of the bright Gods;—Who is the God to whom we shall offer our sacrifice?"
8. "He who by his might looked even over the water clouds, the clouds which gave strength and lit the sacrifice;—He who alone is God above all Gods;—Who is the God to whom we shall offer our sacrifice?"
9. "May He not destroy us—He the creator of the earth; or He, the righteous, who created the heaven; He also created the bright and mighty waters;—Who is the God to whom we shall offer our sacrifice?"

The question "Who is the God to whom we shall offer our sacrifice?" in this ancient hymn is very touching. The reply is given in each verse; and yet the repetition of the question seems to indicate a craving for more illumination, for more certainty! The physical attributes of God are known and dwelt upon in order to excite confidence in the worshipper; but His moral perfections are all unknown except His "righteousness:" in the last verse He is called "the righteous, who created the heaven."

Another Vedic Poet sings in the same melancholy strain of uncertainty respecting the Great First Cause, the God whom all should worship. "Who knows the secret? Who proclaimed it here? Whence, whence, this manifold creation sprang?—The Gods themselves came later into being,—Who knows from whence this

creation sprang?—He from whom all this creation came. Whether his will created or was mute, the most High seer that is in the highest heaven, He knows it, or perchance e'en He knows not." (Rig-Veda x. 129, 6, 7.)

"Who knows the secret?" Who can tell who is the true and living God is the great question of the ages, to which man by the mere exercise of his own mental powers could give no satisfactory answer. The ancient Hindus in the Vedic age, ignorant of Him, personified and worshipped the great elements of nature which either struck them with terror as the thunder, the lightning and the storm, or pleased them as the sun, moon, the stars, the rain and the water. Hence the Gods of the Veda are the phenomena of nature deified, such as *Dyaus*, the sky or the shining one; *Varuna*, the firmament; *Indra*, the watery atmosphere; *Surya*, the sun; *Chandramas*, the moon; *Ushas*, the dawn; *Maruts*, the storms; *Ap*, waters; and *Nadi*, rivers. And modern Hindus worship deified heroes and imaginary monsters such as *Brahma*, *Vishnu* and *Siva*; *Ganesha*, *Kartikeya*, *Rama*, *Kishna* and others. But all these, as Professor Max Muller has graphically said, "are masks without an actor, the creations of man, not his creators, they are *nomina*, not *numina*, names without beings, not beings without names."

The natural yearnings of the soul after the "living God" the Great First Cause, the help of the helpless, and the comforter of all, can never be satisfied by the adoration of Gods such as these. No, those yearnings can only be satisfied by knowing and worshipping the *true God*, the *Paramatma* of all things.

Now the great mission of Jesus in this world was to reveal that true God, 'Our Father in heaven'; and hence in reply to the request of one of his disciples, "Show us the Father", He said, "He that hath seen me hath seen the Father" (John xiv. 8. 9); *i.e.*, he that hath seen me hath seen a perfect revelation of the Father; for I am the express image of His person, and the brightness of His glory! He that hath seen my works hath seen the works of the Father, works of love, mercy and goodness; for "what things soever the Father doeth, these also doeth the Son likewise," (John v. 19) 'He that hath heard my voice hath heard the voice of the Father; for I and the Father are one.' Jesus, therefore, addresses the whole world, saying, 'All ye that hunger and thirst to know God, "the living God" come to me and ye shall have your hunger satisfied; believe on me and ye shall have your thirst quenched.' (John vi. 35.) Jesus Christ alone is the only full revealer of God.

II.

Another problem which has baffled the greatest minds in every age is the existence of evil in the world. Although the world is very beautiful in many respects, and a very desirable home to dwell in; yet, no one can be blind to the fact that it is full of suffering, sorrow, disease, and death! What is the cause of all these? Why is this pleasant world marred with so many sighs and tears? Various answers have been given to these questions from time to time. The ancient Persians tried to account for the origin and prevalence of suffering by supposing the co-existence of two creators. One good, *Ahura-Mazda*, the author of all that is good and lovable in the world, the other evil, *Ahriman*, the author of all that is evil and hateful; but that a time will come when the good creator will vanquish the evil one, which will result in the cessation of all sufferings and sorrows. This theory, however, cannot satisfy the thoughtful mind; for one cannot conceive of two antagonistic creators, the power of the one limited by that of the other, producing anything except chaos and confusion which certainly this universe is not.

The Hindus have three philosophical systems, each of which tries to account for the existence of human suffering. According to the *Nyáya* the cause of all suffering is activity—actions whether good or bad are followed by their fruits, which must be recompensed in some birth; and hence deliverance from suffering is only attainable by cessation from all actions. Now, a little consideration is enough to convince the most superficial thinker that *activity*, as such, need not necessarily produce suffering. We can easily conceive a state of the soul in the future where its actions may produce nothing but joy and felicity. Besides, cessation from all actions is equal to cessation from conscious existence; and hence deliverance from suffering and cessation from conscious existence are identical. According to the *Sankhya* the cause of all suffering is resolved into the union of pure spirit with *prakrit*, plastic matter, or nature; the thoughtful mind, however, cannot understand how the union of pure spirit with nature, which is devoid of moral qualities, can produce such dire consequences as the sufferings which man is heir to. The *Vedanta* recognizing no existence but one, God, is obliged to create *Maya*, illusion, to account for all seeming existences. The universe and all things therein, according to this philosophy, are not real but phenomenal; and hence there is neither real pleasure nor real pain: all is illusion, deceit! But this theory when applied to actual experience crumbles to pieces. When I have an excruciating headache, I know that there is no illusion there, but a terrible reality; when I look down the open grave of my father or mother, I know that there is no illusion there, but a dreadful reality.

Now, all these answers to the great question 'What is the cause of so much suffering in the world?' are not satisfactory. The great problem, the existence of evil, is not solved. Man writhing under sufferings is still crying—why am I thus afflicted? And none can tell him except the great Teacher of Nazareth.

Jesus Christ has told us plainly in various ways the cause of all evil, but in none has He done so more strikingly and pathetically than in the parable of the prodigal son;—"A certain man had two sons: And the younger of them said to his father, Father, give me the portion of goods that falleth to me. And he divided unto them his living. And not many days after the younger son gathered all together, and took his journey into a far country, and there wasted his substance with riotous living. And when he had spent all, there arose a mighty famine in that land; and he began to be in want. And he went and joined himself to a citizen of that country; and he sent him into his fields to feed swine. And he would fain have filled his belly with the husks that the swine did eat: and no man gave unto him. And when he came to himself, he said, How many hired servants of my father's have bread enough and to spare, and I perish with hunger? I will arise and go to my father, and will say to him, Father, I have sinned against heaven and before thee, and am no more worthy to be called thy son: make me as one of thy hired servants. And he arose and came to his father. But when he was yet a great way off, his father saw him, and had compassion, and ran and fell on his neck and kissed him," and ordered him to be clothed with the best robes, a ring to be placed on his finger, and shoes on his feet. He also made a great feast and invited his relatives and friends to rejoice with him, "For," said he, "this my son was dead, and is alive again, he was lost and is found." (Luke xv.)

Now, that son leaving his father's house and proceeding to a far country to live according to the inclinations of his own heart, unrestrained by the authority of his father, is an apt representation of man going astray from God, his Heavenly Father, to live according to his own desires. That son, of his own free will, left his father's house, despised his father's love, disobeyed his father's commandments, and lived a profligate life in a far country. The result was hunger, nakedness, misery. In like manner man has broken the laws of God, physi-

cal, moral and spiritual, and the result is a world full of sufferings and sorrows. Let man come back to God like the Prodigal to his father and he will be happy again. Jesus then has solved the great problem, 'why there is so much suffering in the world,' by showing that it is all due to living apart from God and in antagonism to His will.

III.

'How can a sinful man come back to God, be reconciled to Him and be happy?' The end of all Religions, Philosophies, Sciences and Arts, is to make man happy. The wisest in every age and among all nations have considered this problem, and have devised many plans for the attainment of this end, but in vain. The priest has tried his hand, he has prescribed a host of intricate ceremonies to be performed, but alas! the performance of such ceremonies has failed to bring mankind to God, and make them happy. The legislator has come forward with many admirable laws, as in India and the ancient Roman world, but those laws have failed to stem the prevailing corruption and to renovate the world. Lastly, the philosopher has tried his hand, and has prescribed knowledge (*nyanam*) and meditation (*tyanam*) as the best means of obtaining bliss; but he also has failed, simply because he was unable to attain to the knowledge of the Highest.

The Hindus have been called a "Nation of Philosophers," and India "the cradle of philosophy." But what has Hindu philosophy done towards the elevation and happiness of the people? Has not Hindu Philosophy sanctioned the greatest curse that can befall a nation, caste? And does not Hindu Philosophy sanction and even justify the worship of everything in the heavens above and in the earth beneath from the glorious sun to the lizard and the rat? and from the moon and stars to the beasts and creeping things? How can a people be happy when writhing under the tyranny of caste, and grovelling in the dust in adoration of a cobra? And yet, this is what the priest, the philosopher, and the legislator in India, all agree in promulgating as the means of making men happy? The consequences are obvious everywhere in the prevalence of poverty, ignorance, superstition and misery! And ah! how much more so it would have been were it not that a Christian Government is in the land!

Jesus Christ alone has pointed out the way which leads to God and to happiness. "I am the way, the truth and the life, no man cometh to the Father but by me." (John xiv. 6.) "He that believeth

in the Son hath everlasting life; and he that believeth not the Son shall not see life, but the wrath of God abideth on him." (John iii. 36.) Again, "He that cometh to me shall never hunger, and he that believeth on me shall never thirst," *i. e.* he shall have all the wants of the soul supplied. (John vi. 35.) The way to God then is Jesus Christ, and whoever will come to God through Him will be received by God as His children and be made happy.

But it might be objected that the most devout believers in Christ are subject to as many sufferings and sorrows as others. True: but they are not unhappy. Christ himself has said,—"In the world ye shall have tribulation," but their tribulation is sanctified for their good, so that they are able, like the Apostle Paul, to rejoice in tribulation and thank God for considering them worthy to suffer in behalf of truth and righteousness, to suffer like Christ in behalf of humanity. Look at the mother! what will she not suffer for the babe in her arms, not only without a murmur, but with the consciousness of pleasure that she is allowed to do so! And so exactly is the feeling of every true Christian when suffering in this world; for he knows, like the Apostle Paul, that "the sufferings of this present time are not worthy to be compared with the glory which shall be revealed in us." (Rom. viii. 18.) And he always hears the words of Christ encouraging him in all his sorrows "Be thou faithful unto death, and I will give thee a crown of life." (Rev. ii. 10.)

IV.

Another question which has perplexed the human mind from the earliest time is, "If a man die shall he live again?" Is the soul immortal? Is there a future state of existence? and if so, is it a state of rewards and punishments? Man has always had some vague idea that his life is not bounded by the tomb. He has always dreaded the idea of ceasing to be; and hence has speculated much on his destiny after death. In the Rig-Veda, which contains the oldest record extant of the beliefs of man unaided by Revelation, we find passages where the immortality of the soul and life after death are proclaimed with a remarkable degree of certainty. Thus we read: "He who gives alms goes to the highest place in heaven; he goes to the gods" (R. V. 125, 26.) Again, "the kind mortal is greater than the great in heaven" and even the idea, so frequent in the later literature of India, that immortality is secured by a son, seems implied in the following passage: "O Maruts, may there be to us a strong son, who is a living ruler of men: through whom we may cross the waters on our way to the happy abode; then may we come

to your own house." (vii. 56, 24) One poet prays that he may see again his father and mother after death (i. 24. 1); and the fathers (pitris) are invoked almost like gods, oblations are offered to them, and they are believed to enjoy, in company with the gods, a life of never ending felicity (x. 15, 16.) The following hymn addressed to Soma, the deified moon-plant juice, contains a beautiful description of life after death, expressed in simple language with child-like confidence :—

> "Where there is eternal light, in the world where the sun is placed, in that immortal imperishable world, place me, O Soma!"
>
> "Where King Vivasvata reigns, where the secret place of heaven is, where the mighty waters are, there make me immortal!"
>
> "Where life is free, in the third heaven of heavens, where the worlds are radiant, there make me immortal."
>
> "Where there is happiness and delight, where joy and pleasure reside, where the desires of our desire are attained, there make me immortal." (R. V. ix. 113.)

It is evident from these passages that the old Rishis of the Vedic age had an obscure belief in the immortality of the soul, and in a future state of rewards in heaven. They also believed in a place of punishment, in a pit (Karta) into which the careless and those who offer no sacrifices are hurled down. (R. V. ix. 73, 8; i. 121, 13.) One poet prays that the Adityas may preserve him from the destroying wolf, and from falling into the pit. (R. V. ii. 29, 6.)

Now, these passages show the yearnings and beliefs of man in the infancy of the world, and no subsequent philosopher has advanced one step in placing the doctrine of a future state on a more solid and certain basis. In India it has degenerated into the present doctrine of the "Transmigration of souls;" a sad caricature of the original conception of the Aryan mind. In Greece, where philosophy flourished more than in any other part of the Western world, it never rose higher than a vague idea or a hope that death does not end all.

Jesus Christ alone has authoritatively "brought life and immortality to light by the Gospel." He has placed the doctrine of a future life of rewards and punishments beyond the possibility of a doubt; and thus has confirmed the vague beliefs of the ancients, and satisfied the yearnings of the human soul everywhere.

Jesus Christ then has solved the great problems of Religion; has fully answered all the great questions that have perplexed mankind in every age. Let all nations therefore come to him, make him their Teacher, Redeemer, and Guide; and they will find by experience that He alone is able to satisfy the cravings of their soul, and make them happy for time and eternity.

MAURICE PHILLIPS.

BERKELEYANISM, MATERIALISM, VEDÂNTISM.

Having given, in a previous paper, a sketch of Berkeley's life and philosophic thought, we propose now to see how his view of the universe stands related to the Materialistic hypothesis on the one hand, and to Indian Vedântism on the other.

We have seen that the one aim and end of Berkeley's reflections was to identify the true reality of the universe with that unphenomenal power to which all things are at last to be referred; in other words, to realise Supreme Intellect or Spirit, who is both revealed and concealed in the shows of sense—a truth which philosophical speculation makes us aware of, and which we realise practically, in the divine life of religion. In this ontological quest, Berkeley swept away 'the metaphysical substance' called matter; and affirmed that we are conscious *only* of our own ideas. It is true that consciousness says nothing about the existence of matter, as such, so that we are equally incompetent to affirm or to deny. We have clearly no right to assert the existence of any other kind of matter than that which is presented in consciousness; Berkeley went further than this, and affirmed the non-existence of material objects, maintaining that '*ideas*,' which are the immediate objects of perception, instead of being 'only appearances of things' are 'the real things themselves.'

The materialistic hypothesis of the universe treats external phenomena in a two-fold manner, *i.e.*, as both parts of consciousness *and* material objects. And in enquiring how far this assumption is valid, we would refer those of our readers who wish to pursue the subject further, to a valuable posthumous work by the late Professor T. M. Herbert, entitled, "The Realistic Assumptions of Modern Science Examined,"* a volume of an elaborate character, and not so widely known as it deserves to be.

Physical science accepts the Realistic conception of the world—that of a boundless material universe, extending in space, and existing through time—or in other words, it assumes that material phenomena *are what they seem;* and it follows this assumption to its natural issues. But here a difficulty at once arises. The material world is presented to us only in states of consciousness. The various objects that surround us exist for us only so far as they stand related

* London. Macmillan and Co.

to our faculties of consciousness, and are modified by them. That which is out of consciousness is out of the field of human knowledge altogether. "All our knowledge," says Professor Huxley, "is a knowledge of states of consciousness. 'Matter' and 'Force' are, so far as we can know, mere names for certain forms of consciousness." It follows, therefore, that when we say we see the material world, and assume it to be before us, we really see only phenomena of mind, *i.e.*, appearances consisting of feelings. But all the conclusions of physical science are based on the presumption that the material universe *is* before us, and *is* what it appears to be; and the 'facts' thus apprehended are called the conclusions of 'positive' science, the only certain facts indeed which we can know.

And yet, strange to say, science itself proves that the world *as it is* cannot resemble the world *as we know it*. For consciousness, according to modern conclusions, has its seat in the brain; and the objects and changes of the external world are telegraphed by the mechanism of perception to the brain-centres; and the sensations we receive are, we are told, 'at most *non-resembling signs* of external objects.'* The world is thus known to consciousness only through its representative signs or symbols, which do not resemble the things they signify; and it is with these 'signs,' and not with external objects, that science really deals, and on which it bases its conclusions. Even Sir Wm. Hamilton, the resolute advocate of our direct apprehension of the external world, says that "consciousness is a knowledge solely of what is now and here present to the mind;"† and he admits that if consciousness were only seated *in the brain*, our knowledge of the external world could only be indirect, *i.e.*, a subjective, ideal, or representative cognition of external things. Seeing then that consciousness, according to Realism, *is* confined to the brain, it follows that all so-called material phenomena must be essentially mental in character, and we perceive only modifications of mind; and that in treating them as material, which for all practical purposes science must needs do, we make an assumption which, legitimate and necessary as it is within certain limits, is only a supposition respecting appearances, or certain '*non-resembling signs* of external objects.' But this conclusion disproves the supposition on which the materialistic hypothesis proceeds, *i.e.*, that external objects *are what they seem to be*.

How then is this inconsistency which materialistic science fosters

* Professor Helmholtz. † Notes on Reid, p. 810.

to be explained? When, according to such science, we speak of external phenomena, we imagine we are dealing with certain material objects outside us, *and also* with certain feelings of the brain, or mental states, which those objects excite. But science can find no trace of such feelings in the brain; and to suppose that thoughts and feelings *could* be generated in a material structure, among purely physical processes, would be to affirm 'a rupture of physical continuity.' Yet this is what the materialistic hypothesis represents as taking place. According to it, both mental and material phenomena—a double set of processes—belong to one scheme of things; consciousness, in some way or another, emerges among the movements of the brain: but the harmony of these two sets of facts—psychological and physiological—has not yet been exhibited, nor is it likely it ever will be, since there is an essential nonconformity between them. Conscious states cannot appear in the same series as objects *beyond* consciousness. It is quite legitimate for science to treat the mental signs of external objects *as* material objects, and deal with them accordingly, in a scientific manner; but it cannot consistently posit among them, and superadd to them, thoughts and feelings which it never finds. And the perplexity referred to arises through the erroneous supposition that the two things *are* before us in external phenomena—material objects as well as a mental picture—whereas it is the mental picture that is alone before us. It is only when the material world is assumed to be an external reality *distinct* from the consciousness which perceives it, that these parallel sets of material and mental processes exist, and give rise to the difficulty before us. The material world is confessedly known to us only as the hypothetical cause of our perceptions; and it is assumed to be such, simply because something different from our perceptions, and outside them, seems necessary in order to account for them. But if the material world and our perceptions of it are found to be the *same things* wherever they meet—if the physical and psychical processes are identified—there is no such necessity, and consequently the sole ground for supposing that an external world exists, is, on the present hypothesis, taken away. If one of the two must be renounced, it is obviously the hypothetical external world which must be surrendered. The extreme materialism which identifies thoughts and movements, merges the material universe in those states of consciousness in which alone it is presented to us. Matter is annihilated if it be *identified* with mind: to recognise a single mental fact, as such, is to dismiss the materialistic hypothesis.

We see then that, while the uninstructed mind supposes it sees only external objects themselves in every act of sense-perception; and while Berkeley, and idealists in general, recognise only the mental picture; the scientist counts *both* among phenomena, though in reality, and on his own admission, it is only the appearances presented in symbol with which he deals, *i.e.*, with nature *as apprehended by us*, and not with nature *as it is*. The mental signs are the only phenomena before us; but Realism assumes—and on this assumption science proceeds—that we are face to face with external objects; and accordingly treats certain conscious states as being what they are not, *i.e.*, as outside us. This may be necessary for all practical purposes; but we may not combine with conscious states so regarded, others not so regarded, *i.e.*, thoughts and feelings which are recognised as mental. We may treat for the purposes of science, certain conscious phenomena as material; but all mental states, as such, stand on another plane altogether. To try to combine them—to attempt to occupy at one and the same time 'the diverse points of view of the physiologist and the psychologist'—is to become involved in a hopeless perplexity. The only way out of the difficulty is to drop the materialistic assumption, and recognize, with the student of mind, that even material phenomena are mental; a position which, we have seen, physical science itself is compelled to take.

Professor Herbert describes the position thus:—'Science seems, then, to be placed in the following dilemma: if, according to its professions, it confines itself to phenomena, it *deals only with feelings*, and has nothing to do with the inaccessible world beyond them, the world of Ontology. If, on the contrary, it takes cognisance, as is always assumed, of the world which lies outside consciousness, it *transcends phenomena*, and deals with the real world behind them, which, on its own showing, cannot resemble the signs by which alone it is apprehended. There seems to be no alternative—if we accept the scientific account of perception—between confessing that science cannot transcend feelings, which amounts to Idealism, and asserting that it deals with the world behind phenomena, which is to constitute it an Ontology.'* But the world of ontology—of things-in-themselves—is the world unrecognised by science, and altogether inconsistent with Positivist professions; it is accordingly relegated to metaphysics. Materialistic Realism, therefore, when

* Modern Realism Examined, p. 305.

carried to its logical issues, lands us in the Idealistic conclusion, *i.e.*, that the objects of external perception appear to us what we know they are not, 'like the objects of a landscape painting,' which presents to us land, and hills, and water, but really consists of paint and canvas; a conclusion recognised even by Professor Huxley, for he says, "it is an indisputable truth that what we call the material world is only known to us under the forms of the ideal world."* If this be so, it is clearly inconsistent to ascribe to external perceptions both a phenomenal *and* a 'positive' character.

We see then that Realistic science, on its own showing, confirms Berkeley's view of the universe, that its assertions can be valid, *only* within the limits of phenomena, or respecting things as they seem, and can have no validity in regard to that which is beyond: and this is to abandon the reality of materialism, and the supremacy of its laws.

The conclusion thus reached throws light on many important ethical questions, such, *e.g.*, as the controversy respecting human freedom, which has arisen through confusing the two questions as to what man *really is*, and what he *seems* to be. From the materialistic standpoint, human actions, like everything else, are subject to physical laws; and if the external world were what it seems, man would be their irresponsible slave—as indeed he is often proclaimed to be—a mere automaton. But this is to violate the boast of physical science, that it deals only with phenomena, and not with realities, and that such phenomena are not even *like* the realities beyond them; from which it follows that the laws which may hold good of the phenomena cannot be extended to the realities themselves. Man, therefore, so far as his physical organism is concerned, and, in this sense, as a part of the world perceived, may be wholly subject to physical laws; but since the world perceived does not even resemble the world which is, the conclusions applied to man's physical organism have no force at all in regard to spirit and spontaneity, which find no place in the physical system or in the world of mere phenomena; and thus the 'incredible reduction of man to a mere machine' imposes upon us no longer.

From what has been already stated, we are now in a position to see that, though the objects of perception are restricted to phenomena, it does not follow there can be *no* recognition of anything external through them. We move, it is true, in a world of phenomena; but if we are not to recognise anything beyond this, we find

* Macmillan's Magazine, May 1870.

ourselves landed in extreme idealism. The extreme form of materialism, on the one hand, and the extreme form of idealism, on the other, can be avoided only by the inference that the effects which we characterise as objective are due to some external power or unknown something which is capable of producing them. From 'the sense of resistance to our efforts,' which these mental effects bring with them, together with their permanent nature, and 'their coming and going not being subject to our control'—not to speak of Professor Tait's argument for 'the objective reality' of energy, as distinguished from the motion it produces, *viz.*, that its quantity is constant,* the inference is inevitably suggested to us that these effects are due to non-phenomenal causes, *i.e.*, to power 'not ourselves,' which we call external. Our conception of matter merges in that of power; and its simple persistence resolves itself into 'the continued activity of the power manifested by its effects.' We may not assume with Realism that material *phenomena* are material *objects*; but through the phenomena being symbolic, we virtually identify them with some *reality* they stand for. As Berkeley says in his dialogues between Hylas and Philonous:—'I am not for changing things into ideas, but rather ideas into things; since those immediate objects of perception, which, according to you, are only appearances of things, I take to be the real things themselves.' We thus of necessity *transcend* phenomena, and recognise, as Berkeley does in "Siris," *efficient* cause or power—primarily in our own consciousness, and then in other intelligences like our own, till we rise to a Supreme Intelligence; and in this way we escape the extreme idealistic conclusion in which materialism lands us. To reject the inference of such an external power because it transcends phenomena, and yet to assert the external reality of mere phenomena, while science itself affirms that the objects we perceive form a purely mental picture, is 'the inconsistency of modern Positivism.' But this inconsistency is exposed for us, and overborne by the admission of Mr. Herbert Spencer himself, who says:—"We are obliged to regard every phenomenon as a manifestation of some power by which we are acted upon; though Omnipresence is unthinkable, yet, as experience discloses no bounds to the diffusion of phenomena, we are unable to think of limits to the presence of this power; while the criticisms of science teach us that this power is incomprehensible. And this consciousness of an incomprehensible power, called Omni-

* Lecture on *Force*, delivered at Bradford, 1876.

present from inability to assign its limits, is just that consciousness on which religion dwells."*

We are thus brought back, through the philosophical conclusions of an opposite school of thought, to what we saw was the one aim and end of Berkeley's devout reflections, *i.e.*, to the necessity of identifying the true reality of the universe with that unphenomenal power to which all things must at last be referred; in other words, we are led to realize Supreme Intellect or Spirit, who is both revealed and concealed in the shows of sense—'incomprehensible' indeed and 'unknowable' in His essence, but manifested in the phenomena of the universe, and in and unto the creatures who have been made in His image.

Let us now turn, and very briefly, to another hypothesis of the world, one to which the train of thought we have been pursuing very naturally conducts us, and observe the relation of Berkeley's philosophy to the system of Indian Vedântism.

The Vedânta school of philosophy, *i.e.* the Veda-end—the end of the Veda—has lived on from about 500 B.C. to the present day. Prof. Max Müller has remarked in his latest Lectures:—"If the people of India can be said to have now any system of religion at all, apart from their ancestral sacrifices, and their Srâddhas, and apart from mere caste observances, it is to be found in the Vedântic philosophy, the leading tenets of which are known to some extent in every village."

It will be needless to reiterate here at any length the teachings of this system. There is but one real thing in the universe—the supreme Brahma. He is the internal Spirit of everything that is. The universe *is* Brahma, and has no existence apart from him. "I am the Sacrifice: I am the Worship: I am the Drug: I am the Incantation: I am the Fire: I am the Incense." (Gita, IX.) This doctrine of identity is expressed in many beautiful figures—such, *e.g.*, as the sparks proceeding from the fire, and the web which the spider spins. Brahma is the 'material' cause of all the objects of the universe; the very substance of which they are composed. This was the prime doctrine of the system, and that which has given rise to all the difficulty which students have found in explaining it. The highest God, the Creator, is the highest Self—the *Paramâtman*—which is an expression of the purest and highest subjectiveness—the Self in which each individual self must find his own

* *First Principles*, § 27.

true Self. This oneness of the subjective self *(pratyagâtman)* with the objective Self was recognised as underlying all reality ; and this fundamental idea of the Vedânta is worked out with systematic completeness. Brahma, in his essential nature, is Intelligence ; and when he evolved from himself the universe—making it 'for sport'—he placed it under an illusion, *máyá*, which prevents man from knowing his real character, *i.e.*, his identity with Brahma. Man's relations in life are unreal ; his pleasures, pains, and passions are all unreal ; his very consciousness belies him. Liberation from this ignorance in which man is born—to be attained by means of the several modes of religious merit, faith, and meditation—is the goal of existence ; and the final reward is annihilation of self and absorption in Brahma.

The affinity of thought between Berkeleyanism and Vedântism cannot fail to be observed ; and "no one who can appreciate the lessons contained in Berkeley's philosophy, will read the Upanishads and the Brahma-Sûtras and their commentaries, without feeling a richer and a wiser man."* In both we find that eternal Spirit or universal Intelligence is the one *reality* of the universe ; that the things we see and touch are only 'superficial shows' which disappear as spirit is revealed ; and that we become intellectually aware of this in philosophy, and practically through assimilation to God.

The deep *religiousness* of this view of the universe was ever insisted upon by Berkeley. Whether supreme Mind is 'abstracted from the external world, and to be considered by itself, as distinct from and presiding over the created system' ; or whether 'the whole universe, *including* mind together with the mundane body, is conceived to be God, and the creatures to be partial manifestations of the divine essence'; there is 'no atheism', he says, 'in either case —whatever misconceptions there may be—so long as Mind or Intellect is understood to preside over, govern, and conduct the whole frame of things.'† And, again :—'Comprehending God and the creatures in one general notion, we may say that all things together make one universe, or τὸ πᾶν. But if we should say that all things make one God ; this would indeed be an erroneous notion of God, but would not amount to atheism, as long as Mind or Intellect was admitted to be τὸ ἡγεμονικὸν, the governing part. It is, nevertheless, more respectful, and consequently the truer notion

* Max Müller's "*India, What can it teach us ?*" p. 253. † "*Siris.*"

of God, to suppose Him neither made up of parts, nor to be Himself a part of any whole whatever. All those who conceived the universe to be an animal, must, in consequence of that notion, suppose all things to be One. But to conceive God to be the sentient soul of an animal is altogether unworthy and absurd.'*

Berkeley, however, was no pantheist, not even in its most refined and spiritual sense. He did not hold, as does the Vedântist, that the objects of sense are *false* ; only that they have no existence *apart from perception*. The objects of perception are not mere appearances ; they are 'the real things themselves.' As he says in his Treatise on Human Knowledge :—'I do not argue against the existence of any one thing that we can apprehend either by sensation or reflection. That the changes I see with my eyes, and touch with my hands do exist, really exist, I make not the least question. The only things whose existence I deny is that which philosophers call matter, or corporeal substance.' In Vedântism, on the other hand, cognition, whether perceived or otherwise, not being identified with Brahma, is false.

Further, with Berkeley, the 'reality' of the external world was rooted in faith in the phenomenal order, which faith he held to be part of the common sense of men. Within the transitory things of sense, there is a 'natural order that is steady' ; and through the medium of this phenomenal order, a moral government with a moral purpose is conducted. Nor is this 'moral order' a mere phrase, an abstraction ; it presupposes a thinking, self-conscious Being ; and an active Intellect and Will, which together constitute Spirit, must be its source and its exponent. The pantheistic idea of God, on the other hand, affords no support to our moral life, since it is unable either to explain a moral order or enforce it ; but rather, by denying the freedom and responsibility of man, and the distinction between good and evil, leads to the destruction of all morality.

The main pillar of Berkeley's system—that which lifts him alike above pantheism and extreme idealism—is this *consciousness of our spiritual personality and agency*, and through this, a faith in the principle of causality. This also he regarded as part of the common sense of men. Unlike the view of Malebranche and Spinoza, which approaches Vedântism in its merging of finite agents in God, Berkeley held firmly to 'the spiritual individuality in man that is involved in our moral and immoral agency.' Though he phenomen-

* "Works," vol. ii., p. 476.

alised finite *things*, he did not phenomenalise finite *persons*. He did not, like the Vedântist, reduce everything to God and phenomena. He did not resolve all the action of the universe into the action of one Supreme Spirit, or Substance; but he recognised other spiritual agents—finite yet responsible—besides God. 'We are not so related to the real phenomenal dream as that we *become* what we perceive, or that what we perceive becomes part of us. Our conviction of our spiritual individuality and identity, and of our personal responsibility, opposes us to the phenomenal things of sense, which appear in consciousness without becoming consciousness. The phenomenal things and the self are both real, but of the one we are conscious as phenomenal, and of the other as a hyper-phenomenal reality.'*

It is this presentation in consciousness of the *personal and persistent self*—a first, free, and unphenomenal cause—by which we saw the conclusion of Hume was to be refuted, that gives us the essential difference between the Berkeleyan and the Vedântic philosophy. Either pantheism is false, or man's consciousness is a delusion. It is only by denying the facts of consciousness that pantheism can be maintained. Affirm these facts, as we needs must do, and the pantheistic dream dissolves. This unphenomenal knowledge of spirit, which creates 'the craving for a cause,' was, as we saw, the bridge by which Berkeley passed from the world of phenomena into the world of free spiritual agency, 'where alone there is rest and satisfaction for the causal tendency.' And over against Materialism, on the one hand, and Vedântism, on the other, we thus postulate MIND as the ultimate reality, the paramount principle of all things; and rise *from ourselves*, and other conscious intelligences like ourselves, to the Infinite Mind and Supreme Ruler of the universe. "If you want to find GOD," said Plato, "look *within*."

* * * * "I have felt
A presence that disturbs me with the joy
Of elevated thoughts: a sense sublime
Of something far more deeply interfused,
Whose dwelling is the light of setting suns,
And the round ocean and the living air,
And the blue sky, and in the mind of man:
A motion and a spirit, that impels
All thinking things, all objects of all thought,
And rolls through all things."

T. E. SLATER.

* Dr. A. Campbell Fraser's "Berkeley," p. 81.

A NEW DEPARTURE IN ISLÁM.

The revival, some years ago, of Muhammadán life and feeling in Turkey was the result of the spread of Wahhábi principles, and of the steady encroaching action of the non-Muslim States. The political and the religious feelings of the people were stirred, and, as in Islám these two are most closely united, a striking revival of earnest religious fervour took place. It coincided with a similar movement in India, the Wahhábi revival, which owed its origin and life to the enthusiasm created in the Rebel Camp at Sittana. These revivals, however, were simply a deepening of the bitter hatred against the unbelievers, an increase of the fanatical and sectarian spirit; they were, in no sense, movements towards a higher moral condition of Muslim society. After many centuries, such a movement has commenced in India; but before proceeding to describe it, it is necessary to refer briefly to two other movements, made in the past, and which, though different in kind, have still some historical connection with the present modes of thought and action amongst the most advanced Musalmáns in India. Passing over the differences which divide the Muslim world into its two great divisions of Shiah and Sunni, and setting aside the niceties of discussions on abstruse questions, by which the almost countless sects of Islám differentiate themselves, it may be noted that there have been in the history of the past two great departures from what is commonly known as orthodox Muhammadánism. There have been in all ages teachers and authors who have propounded certain theories, and have founded schools of thought; but, speaking generally, the two great departures from orthodoxy have been movements towards rationalism and towards mysticism.

The first is connected with the most brilliant period of the Baghdád Khalifate, and is now known as the Mutazala movement. A knowledge of it is of some importance to all who would rightly follow the 'new departure,' presently to be described, for that movement, though doubtless brought about mainly by contact with Western thought and culture, yet looks back to the great leaders of the Mutazala school, as men who dared to oppose the current orthodoxy of the day, and to suffer as martyrs for their opinions. Indeed, one of the leaders in this modern rationalistic school of

Indian Muslims calls himself a Mutazala. The name is in some respects a suitable one, and the term 'Modern Mutazalas' may be used, in a general sense, as a convenient form of describing the men of the 'new departure.' Still it does not exactly state the case. The Mutazalas of the olden time were men who disputed much on theological and metaphysical subjects; but they left the region of practical morality untouched. Their principles survived for a while, and influenced the scholastic divines, but they effected no permanent reform either in the faith or practice of Islám. The modern Mutazalas differ from them in this respect; they deal with the subjects of polygamy, concubinage and slavery, the threefold blot on the Muhammadán system. Thus, though some of them claim to belong to the Mutazala school, it must be remembered that the present movement is a decided advance for the better on that most interesting development of Islám, which occurred in the Khalíf Mámún's reign. To put it briefly, the Mutazalas of Baghdád opposed the orthodox men of their day on the great questions of the nature of God's attributes, of revelation and of free-will. The discussions on the first of these subjects were abstruse, and of little practical value. It was a battle of the schools and lead to no useful end. The question of the nature of revelation gave more scope for useful teaching. It took the form of a vehement denial of the eternity of the Qurán, and of an equally dogmatic assertion that men had power to weigh and consider the revelation made. It was an earnest effort to maintain the principle that intelligence and reason were given to men for the purpose of using them in the search after truth. The actual nature of inspiration they do not seem to have touched upon, for equally with their opponents they held the Qurán to be a verbally inspired record. They wished, however, to subject it to lawful criticism, and in this attempt they were quite prepared to persevere in the face of the most bitter persecution. On the question of free-will they took up a well defined position. They saw the error of the fatalistic element in orthodox Islám, and they struggled hard to put it away; but its deadly influence was too strong to be uprooted by such discussions as they could raise. They passed away, the fatalism of Islám still remains, a very canker worm at its heart, weakening its political and social life in many lands.

The whole movement was a remarkable one, and illustrates to perfection how utterly impossible it is to put away moral evils by mere dialectic contests, and how to ensure success a new spirit must

be given to, and a perfect ideal be placed before men and nations. These men had learning, prestige, court favour on their side, but they lacked spiritual life, and as a class they did absolutely nothing to reform the social code of the Muhammadán religion. The ethical and the spiritual elements were wanting in the movement.

The second great departure from orthodoxy was in quite an opposite direction. Early in the history of Islám there was a strong reaction against a rigid and formal law, and against the claims of a wearisome ritual. In few religions have there been men who have gone deeper into the mysteries of mysticism than the Súfi writers of Islám. All the great poets are more or less imbued with Súfiism. The most elegant Persian poetry is full of it. It has much in common with similar phases of thought in other religious systems. In the case of many men, it may, at first, have had its rise in a real groping after light, in an earnest desire for a realization of the sense of union with the Divine, in an aspiration after things more enduring than the fleeting events of time. It is impossible to give here an exposition of it in detail. Based on a false cosmogony, it has yet embodied many elevating and sublime ideas; but it has become, whatever its earliest professors may have intended it to be, a thoroughly pantheistic system. It had in it, at one time, the elements of a moral movement; but the pantheistic spirit has now practically destroyed that, and good and evil are to the perfect Súfi little more than names, creeds and dogmas but fetters to be cast aside by all who would rise to union with the Divine. The great master of Súfiism taught that it was only so long as the soul remained apart from God, only so long as there was a distinct personality that the law was needed.

> "All the authority of the Law is over this 'I' of yours,
> Since that is bound to your soul and body,
> When 'I' and 'you' remain not in the midst,
> What is mosque, what is synagogue, what is fire-temple?"

Such questions as those concerning the nature of God and of His attributes, which were so fiercely debated between the earlier Mutazalas and their opponents, lie outside the range of Súfi thought. Not to ascertain the nature of Deity, but to destroy the nature of humanity is the Súfi's aim.

> "What use to formulate God's unity;
> What use to bow before the Deity;
> Quit 'I' and 'We' which o'er thy heart exert control,
> 'Tis egotism, estranged from God, that clogs thy heart."

The one great duty of man is to cast off this 'not being', to die to

self, to live in the 'Being.' The search, the groping after Truth is described by Jelál ud-din Rúmi in a passage of great beauty. After a fruitless search in earth and heaven, he says :—

> "My glance I bent inward: within my own breast,
> Lo, the vainly sought elsewhere, the God-head confessed,
> In the whirl of its transport my spirit was tossed,
> Till each atom of separate being I lost."

All this has no practical effect upon morals, for to the mystic the world is a place,

> "Where nothing is, and all things seem,
> And we the shadows of a dream."

The system is an esoteric one, it is of little or no avail for the rough work of everyday life. It leaves all the moral evils of Islám just where it finds them, and, though individual Súfis have, at times boldly rebuked usurping power, they have, on the whole, weakened even what little there is of moral restraint in Muhammadánism. An antinomian license is too often the outcome of what, on the face of it, appears to be deep religious fervour.

The 'new departure' has the rationalistic element of the Mutazala movement, in some degree the freedom of the Súfi school, and, what neither of these possessed, a desire to improve the social condition of the Musalmán people. It deals directly with questions of morality. It takes its rise in India, and owes its origin to the steady advance of western culture and thought, imbued as that culture and thought is with the higher moral life of the Christian religion. Nothing like it can be found in lands where Islám reigns supreme, unaffected by modern and foreign influences. Thus it is not a development of Islám pure and simple, but a departure from it, whilst it retains its name. To give honour where honour is due, it owes much of its success to the work of Syed Ahmad Khán Bahadur, C.S.I., of Aligarh. That enlightened gentleman has written much on questions connected with the Qurán, the Bible, Revelation and points of dispute between Christians and Muslims. I enter upon no controversy now, though I do not for a moment admit that the views of this author are correct expositions of Islám as it is; but he has rendered good service by showing that many of the views held by bigoted Moulvies and Moollas are incorrect. At the same time, Syed Ahmad Khán has thrown himself heartily into a movement for promoting English education amongst Musalmáns, and the Anglo-Oriental College of Aligarh, now working up to the B. A. Examination of the Calcutta University, is a fitting close to a most earnest endeavour to spread

light amongst a backward class. In the last report, these words occur,

> "The Musalmáns of India have to confess that it is to their own indifference to such sound and generous education that they owe their present unsatisfactory position in the social and political scale; that, while other subjects of the same Rule welcomed the benefits placed within their reach, they held aloof; that proud of the glories which their forefathers had won in the field of learning and arts, puffed up by false pride, and held in bondage of religious prejudices, they despised the teaching and the methods of other nations that had passed them in the intellectual race."

It is to remedy this evil state of things that the men of the 'new departure' have set themselves to work. Year by year the influence of this small community is spreading, some of its members are proceeding to Europe, and in British Universities and in Inns of Court are widening their mental horizon, and loosening the bonds which bind them to the past. They consider themselves good and true Muslims, but they wish to reform a system which their culture tells them is an anachronism at this period of the world's history. Looking back to the great movements of the past, they pass by the fierce, narrow and bitter spirit of the Wahhábi revival, by the esoteric teaching and the pantheistic system of the Súfis, and fasten on the brilliant epoch of the Abbáside Khalífs for a name, if not for a reason. Moulvie Syed Amir Ali says, "belonging myself to the little known, though not unimportant philosophical and legal school of the Mutazalas, * * * I cannot but observe the movement which has been going on for sometime among them" (Indian Muslims). "The young generation is tending unconsciously towards the Mutazalite doctrines." I have already shown that the earlier Mutazalas dealt with no practical moral questions. What they did was to vehemently oppose certain religious opinions held by the orthodox men of their day. This the modern Mutazalas also do, and if they did no more, the movement would come to an end as that of earlier ones did; but they aim higher, they openly attack questions of practical morality, such as the great leaders in former movements have simply passed by. Even in matters of dogma, they are more advanced. Apparently they are ready to reject Tradition and to cast to the four winds of heaven much for which the earlier Mutazalas would most stoutly have contended. This is only natural, for the environment of a cultured Musalmán, versed in Western Literature and Law, is a world totally distinct from that of the most brilliant men in the Court of Hárún-ur-Rashíd, or in that of his equally able son, the Khalíf Al-Mámún. A few quotations from a recent author will show how wide a gulf is being made between orthodox Islám and

men of this new school, and how it may be truly called 'a new departure in Islám.' It is the glory of orthodox Islám that the revelation on which it is based is a final one, that its Prophet is the Khátam ul-Anbiya, the Seal of all the Prophets. From this has arisen, as a consequence, the view that the Shariat, or sacred Law, founded on the Qurán, the Traditions, and the general consent of the early Muslim Legists is unchangeable. This accounts for the immobility of Muslim States, and for their decay when brought into contact with more progressive nations. Reforms in a purely Muslim State are never spontaneous, they can only be produced by pressure from without. Legal systems have been formed which cover all departments of life, and precedent rules everywhere with an iron sway. It is difficult to see how any change can be brought about so long as the Qurán holds the position it does, for

> "While the world rolls on from age to age,
> And realms of thought expand,
> The letter stands without expanse or range,
> Stiff as a dead man's hand."

Musalmáns who in recent years have learnt to look beyond their own system, and have seen how constitutions grow and are growing, how in all systems progress must take place, unless such systems are to stagnate and pass away, have to face the difficulty raised by this inherent defect of Islám—its fixed and final nature. Hitherto a skilful use of casuistry has enabled Musalmán rulers to adapt the Law, to some extent, to modern requirements; but this is always a troublesome and unsatisfactory way of getting out of the difficulty, whilst there is always the danger of a fanatical uprising setting aside all such concessions as self-interest, or political weakness have brought about. The modern Mutazalas adopt the bolder course, and declaring the sacred Shariat to be only 'common law' hold that it can be set aside at the will of the Sultan of Turkey, and, I presume, by any other ruler. This is not in accordance with the views held by orthodox Muslims, or by the Ulamá in Turkey, and elsewhere, but it is a simple way of getting rid of a difficulty. Whether any responsible ruler in an independent Muhammadán State, such as Turkey, could venture to propound such a theory, much less to bring it into practice, is most doubtful. However, it is admitted by the reforming party that the Canonical Legists of Islám are against them; but as one writer says, "they are manifestly wrong and we have nothing to do with them." What is said to be required is, "a Mujtahid to elaborate new ideas, altogether independent of the present system of Muhammadán legislation, or religious jurisprudence, a Mujtahid to remodel some of our political and social institutions, change our principles of actions, and breathe a new spirit of energy into our existence." The Commentators on the Qurán are highly respected by Musalmáns generally, but now we are told that "we must not take any serious notice of the Commentators, they have their own ways to interpret the Qurán fantastically, and their system is not a rational one." In fact the whole legal system as it now exists is condemned as bad. This is by far the simplest way of dealing with it, but this is not Islám, it is a departure from it. However, all such opinions about the legal system, about the exegesis of the Qurán, the value of Tradition and the like might be mere speculative views; but it is only right to state that the modern Mutazalas are not content with propounding theories on such questions. They directly aim at dealing with the subject of practical morality. They maintain for example, that polygamy was virtually abolished by Muhammad, and a good deal of clever special pleading is shown in the vain attempt to explain away the teaching of the Qurán on this point. Syed Amír Ali Sahib says "whatever may have been the necessity for polygamy in the earliest stages of society, in modern times it can only be regarded as an unmitigated and unendurable evil." Slavery is said to be taken for granted in the Qurán, only *de facto* not *de jure*, and so, notwithstanding its universal practice in Muhammadan countries, it is condemned. In a similar manner, concubinage is denounced as an evil which has grown up with the system, but which has no proper connection with it. There are other subjects also dealt with, which show that these men desire to make Muslim States conform to the usual practice, as regards the civil rights of their subjects and of aliens, followed in modern civilized countries.

It is clear from what has been thus briefly stated that there is now arising amongst Indian Musalmáns, a new sect, different from any other that has yet appeared in Islám, a sect in every way more advanced, more worthy of respect than any that has arisen before it. It is, especially on its moral side, a new departure. It is only my purpose now to state the fact, not to criticise the special pleading which has to be resorted to in order to make the Qurán support these more advanced views. If only it is clearly understood that the views of these modern Mutazalas are opposed to those of orthodox Muslims, if the movement is viewed, as what it really is, a new departure—no one will be misled. Then we can watch with great interest, a movement which may, I do not venture to say

will, be far-reaching in its effects. Whether we are sceptical as to the possibility of reform, or not, the following words of a distinguished Muslim deserve respectful consideration. He says:

"To me it appears that great changes are imminent in the social institutions, and the personal laws of the Indian Musalmáns, how they will be achieved, whether by a general synod of Moslem doctors, or by the direct action of legislature, it is impossible to say."

To me it appears that there is little hope of such a change till Muslims see their Hádi, their true Guide, in the incarnate Kalám Ulláh, the most perfect Revelation of God to man.

EDW. SELL.

WHAT DO FISH TEACH US?

GOETHE has said, and said well, and therefore the saying has been frequently quoted, "Nature is an open secret"; open to those who will stay to study her patiently, a secret to those who will not. I ask my readers to turn with me some of the pages of this open book, and, if they will accompany me, we will try to con together a little of the chapter on Fishes, and to see what it has to offer of interest, or may be of instruction. If I am not mistaken we shall find in the sequel that it has some pretty deep secrets to reveal. But, though the book be open, these secrets are not for the preoccupied hurrying passer by, but for the quiet listener. None others ever hear secrets, and those who do not give close attention have no one but themselves to thank that the, so to speak, whispered secret, caught by others, has been lost to them. Let such pass; it is not for them I write, and we will take Nature's open book together, and read what we can of the chapter on Fishes.

But there is another book of which it has also been said, and said equally well, that it too is in like manner an open secret; and if we can lay these two books on the table, side by side, open at the same chapter, and compare them, it will surely be a more satisfactory study than if we had only one book to go by.

In consulting these two works we have at present one object, we want to see what fish teach us, and we find that each of the two books has something to say on the subject; and, what is more, we find that one of them appeals, in a manner, to the other for confirmation; not as needing confirmation indeed, but much as a naturalist might give you all that is known up to date of the habits and uses of a certain bird, beast or fish, and yet refer you to the animal itself for a personal study, for your own satisfaction, if you had the leisure and the desire to study, whether or not his conclusions were fairly drawn. And if on such examination you found his conclusions beautifully exact wherever you tested them, you would be disposed to take them on trust in other respects in which you had not the leisure or the capacity to test for yourself. Not that you need jump to conclusions, but you would gradually grow from a slightly favourable impression to a deeper one, as you carried your test examinations further and further and found them always ending in being entirely confirmatory of the author.

In this spirit then, the naturalist's spirit of unprejudiced investigation, and of patient moving step by step, we will take these two books, these two open secrets, and try to test them by each other as far as we can see and understand. When we find one of these books saying "All thy works praise thee, O Lord" (Psalm cxlv. 10) we turn to the other, the works, and say is it so? Let us see. We have them under our eyes and we can test them for ourselves. But before we do so we naturally ask ourselves the further question what description of praise is it that we are to look for in these works, for we do not want to waste time in hunting about without a definite object? Is it the sort of praise due to the maker of a Chinese puzzle, a marvel of patient skill in manipulation, and no more? Marvels of patience, and skill, and power we shall doubtless see, and in such lavish abundance as to be astounding and to dwarf all other intellect immeasurably. But that is all on the surface; any hurrying passer by can see that at a glance; there is no secret in that, and I have led you to hope that we may together come at something of a secret out of a comparison of these two "open secrets." Looking again at the passage quoted we find there is a context which is explanatory as far as it goes. "The Lord is loving unto every man: and his mercy is over all his works. All thy works praise thee, O Lord: and thy saints give thanks unto thee." That is the key note is it then, love to man; and those who have found out the open secret giving thanks for the same? And well they may

indeed if that is it, for it is rather a big secret surely, that there is a God that loves mankind. But it is still a little general. Let us see if from Book No. 1 we can define the position a little more, before we pass to Book No. 2, and ask the fishes what they have to say to it. Wherein is the evidence of love to man to be looked for in fishes? Book No. 1 says you will find that they are good, aye very good, that being good, they are made subject to man, and afraid of man, and delivered over to man. And I think we shall see further on that it is a fair sequence that it was for the sake of man only that they were ever created at all; and I would go further and say that I cannot see that their existence answers any other conceivable object than to bear testimony to the power and wisdom of the Creator, and especially to his loving forethought for man in making them for man. And when we come to turn over the fuller pages of Book No. 2 we cannot fail to be struck with the fulness of the evidence afforded by fishes that the person who created them has evinced a marvellous amount of consideration for man, an amount, when we come to examine it, that is so astounding in its lavishness, in its attention to detail, in its variety, in its continuity, in its completeness, in its forethinking unity of design, that if, in common life, we met with a thousandth part of the same consideration from any fellow creature, we could not pass by, we must stop struck with the idea that such consideration was more than ordinary, was nothing short of love, and very real earnest love too. Well that is what Book No. 1 says it is. But first let us see the exact terms in which it says it, and then ask Book No. 2, ask that chapter of it to which by request and promise I am restricted, the fishes, whether they bear it out. "And God said let the waters bring forth abundantly the moving creature that hath life; * and God created great whales, and every living creature that moveth, which the waters brought forth abundantly after their kind, * and God saw that it was good. And God blessed them, saying, be fruitful and multiply, and fill the waters in the seas * * and God created man, * * * and blessed them and said * * have dominion over the fish of the sea. * * And God saw everything that he had made, and behold it was very good." (Genesis. i. 20, 21, 22, 27, 28.) "And God blessed Noah * and said * * the fear of you and the dread of you shall be * upon all the fishes of the sea; into your hand are they delivered; every moving thing that liveth shall be meat for you." (Genesis ix. 1, 2, 3.) "Thou madest him to have dominion over the works of thy hands; thou hast put all things under his feet:

* * the fish of the sea." (Psalm viii. 8.) The points which may be gathered from the above extract, and on which the fishes have to be examined hereafter to see whether they give corroborative evidence or not, seem to be:—

I. That the maker of them took a great deal of pains to see that they were as good as he desired to make them. On the completion of his task, at the end of the day or period of working at it, he personally reviewed it as a whole, and "saw that it was good"; not only that each individual genus of fish was good, but that the whole interwoven network of the system of fish life was good, and then when he had completed all his works he passed the whole in review again the second time, and saw that "it was very good."

II. That as soon as he had satisfied himself that the fishes were "very good" he presented them to man saying "into your hand are they delivered" that man might "have dominion over them."

III. That as this was the use to which they were straightway put, the fair and natural conclusion is that it was for this purpose that they were made, and examined and re-examined, to make sure that they were "very good," or well adapted to the end in view; for if they had been made and examined and re-examined for any other purpose, and had been suddenly diverted as an after-thought to the use of man, it would have been out of consonance with the painstaking care and the dispositions evinced in their making.

IV. That if it was indeed for man alone that all these prescient pains were taken, the amount of solicitude for the welfare and happiness of man, as well as for the evidences presented to him to assure his mind of that solicitude, can only be measured by the immeasurable amount of pains taken.

V. That the points in their economy on which stress was laid as conducing to the welfare of man were, abundantly reproductive powers, such fertility that they should fill the interminable seas, and presumedly keep them full at all times, and under all circumstances, and keep them full too in a way that would be serviceable to man, or the donation would have been useless to man. And that they were to be in all points even in their very fertility under the dominion of man.

VI. That it was part of man's blessing that the fish should be imbued with a fear of man.

Now let us turn to Book No. 2, the book of Nature, and see if the fish themselves will, in ampler detail, give a conclusively affirmative answer to our questionings on every one of these propositions, and lead

us unavoidably up to the great secret that the God that made them *loves man*. Book No. 1 appealed as we have seen from conclusions, explained conclusions, to facts. Book No 2 inverts the process and by facts suggests inevitable conclusions. We must therefore in like manner invert the thread of argument and commence with points V and VI.

The first proposition then is the fertility of fish. It was required that they should be so fertile as to "fill the seas," and yet not to over-fill them so as to be injurious, but nevertheless to keep on filling the seas no matter how many hundreds of thousands aye millions of tons man might daily take out of them, and no matter whether man took them regularly or irregularly. How was this to be contrived? If man had been set down to the problem it would likely have been too much for him. It will prove simple enough when we see how it has been accomplished, but it will serve to give us a truer estimate of the difficulty of the problem if we put ourselves in the position of a man not knowing how it has been done, and trying to invent for himself a scheme that should meet the requirements of the position. What was wanted was a self-acting scheme that should work equally well whether man was on the scene or not. If man was on the scene even in such congregated numbers that the fruits of the field could not suffice to supply him with food the fish must still be there in continuedly maintained abundance, ready to meet his every call year after year. If on the other hand the place was the neighbourhood of a desert island, desert for thousands of years, the fish were required still to be there in like abundance ready for man to put in his net and take them any day of the week he liked to come, and at the same time not to be injuriously over-crowded, so as to deteriorate in quality or cause any other inconvenience. The simple arrangement for this purpose that we accordingly find amongst fish is that they all multiply in amazing numbers, out of all proportion to the necessity for filling the seas if they were to have immunity from capture by man; so that when man comes to capture and consume them by millions of tons it matters not, their increase is so abundant that the gaps made by man are not perceptible. But when man is not there to capture, the same fertility, though still going on, is kept within bounds by their capturing each other, and doing man's work for him infinitely more perfectly than he has yet learnt to do it for himself. Thus there is a lavishly wide margin of abundant fertility almost beyond conception, and ever ready to spring elastically up to any dimensions

required of it, but, till required, kept down by a self-acting pressure like the weight on a safety valve.

To give an indication of the extraordinary fertility of fish as compared with anything but insects on land, it may be stated roundly that one thousand eggs a year for every pound weight of the mother fish is an ordinary amount for a fish to lay. Now if any cow in the town of Madras brought forth in anything like the same abundance it would be a marvel that would throw the whole country into wonderment. But individual fish do very much more than this. The number of eggs contained in the roe of a single cod fish frequently exceeds eight or nine millions. Think for a passing moment of a cow with nine million calves a year! The roe of a large turbot weighing twenty pounds was found to contain over fourteen million eggs. The average number of eggs produced by a salmon of 20 lbs. weight is 27,000 a year, and that of a herring from 20,000 to 50,000 a year. It is stated in the Report of the Herring Fishery Commissioners, 1878, (page 11,) that 2,400,000,000 herrings are caught annually by man in the seas around Great Britain, and it is estimated that at least 50 times as many herrings are caught by other enemies of the fish. In that case more than 120,000,000,000 must be annually destroyed in the seas adjoining the United kingdom of Great Britain and Ireland. "It is a very moderate statement to say that one herring survives for every herring which is destroyed, and it is a very fair inference that one half of those that survive are female fish, and that 60,000,000,000 female herrings are left to deposit their roes in the sea." A herring carries ordinarily about 30,000 eggs. Place her eggs at only 20,000 and the 60,000,000,000 herrings must produce 1,200,000,000,000,000 eggs. The mind of man is hardly capable of following these huge figures, and they are accordingly reduced to a more intelligible standard, in the Report of the Inspectors of Fisheries on the Sea Fisheries of England and Wales 1879, from which this calculation is taken almost verbatim. "500 adult herrings might possibly be compressed into a solid cube of one foot; assuming then 1,200,000,000,000,000 herrings grew to maturity they might possibly be compressed into 2,400,000,000,000 cubic feet, in other words a solid wall about 200 feet broad and 100 feet high, reaching round the greatest circumference of the earth." It has also been computed in another place that the number of cod fish taken out of the same seas in a year would, if they had been left in the sea, have devoured an amount of herrings equal to the year's capture thereof by man; so that it amounts to this, that the

reproductive powers of fish in the sea are arranged on such a magnificent scale of lavish abundance of fecundity, and on such a system of self-regulation, that all the thousands of tons of fish taken out of the sea in one year by man leave it not one ounce the worse as a storehouse of food for him in the ensuing year. Do not these facts, told us by fish, lead unavoidably to the conclusion that it was for the sake of man that the marvellous arrangement was made? Is there any escape from the conclusion? Is there any other conceivable object for which such an arrangement could possibly have been made?

If further proof is wanted take the additional fact that these fish, and any number more, come crowding to our shores. If it was not for man that they were made, why do they not keep out in security in mid ocean in unfathomable depths, instead of year after year steadily coming back to be caught by man. Surely they might be warned by experience that to go near land was to expose themselves to capture, and that it was safer to keep to mid ocean. The instinct that overmasters their dear bought experience, an experience going on hour after hour, and day after day, and at place after place, for months in the year, the instinct that overmasters this, and impels them nevertheless to continue to seek the neighbourhood of man's habitations, must be a very strong power indeed. Account for it as you will, say they come to lay their eggs in waters favourable to the fry, say they come in pursuit of food, the end of it all is still the same—they come to man to be caught. "Into your hand are they delivered."

Reverting to their fertility and the system by which it is kept in check, we shall see that the system not only works continuously in the absence of man, but admits of being most easily utilized by him, so that we are driven again to the conclusion that it was in his interest that it was conceived. As soon as man comes on the scene, and discovers, by utilizing the fish, that certain sorts are competing with him in the capture of the other sorts, if he wants a monopoly of consumption, he has only to turn his attention to the capture of his competitors, so as to secure the whole field to himself; and as we have seen above that in the case of herrings his competitors ordinarily consume about 50 times as much as he does, the largeness of the field immediately opened out to him is readily intelligible. Which these competitors are is easily ascertained by examining the contents of their stomachs, but the general rule obtains that they are ordinarily the larger sorts with mouths well armed with teeth. However, man soon comes to know them, and in rivers and ponds

where the fish that are preyed on have not the same wide area as in the sea to escape from the predatory fish, man has found it very markedly to his advantage to net out the predatory sorts. Thus pike are commonly netted out of trout streams, and the result is that the trout immediately commence to multiply themselves with extraordinary rapidity, and man finds that he can get fifty fish where he got one before. The predatory fish were only there to do his work for him till he was prepared to take it out of their hands and do it for himself, till he was prepared to exercise "dominion over them."

Now turning from the check system to the fecundity of fish we find that here again they are in their very fertility singularly well placed at the disposal of man. Man might be disposed to say "I can look after the breeding of my cattle, sheep and fowls because I can herd them as I like, but how can I herd the fish in the sea, or in the river? the element in which they live is against me." He soon finds that here again the kindest forethought has introduced special arrangements to place them easily at his disposal. "Into your hands are they delivered" in their very breeding also. It is not necessary to herd them or tend them in any way at all. All he has to do is to watch their habits, see therefrom when they are about to lay their eggs, capture a male and a female, or one male and many females, by a gentle pressure of the side extrude the ova of the one and the milt of the other, and he may hold fertilized eggs enough to breed hundreds of thousands of fish in a single bucket in his hand; and he can let the parents go to take care of themselves. And to enable him to do this he will find another special arrangement again in his favour. Once having ascertained the breeding season of any particular sort of fish, he finds that year after year that sort of fish keeps to that season as regularly as a clock. And different sorts of fish have different months, so that he can be busy with one at one time, and with another at another time.

And when man has learnt to breed them in this way he finds yet another marvellous arrangement most evidently made for his special benefit and for no other conceivable purpose. He takes the eggs from salmon captured in some other river, and turns out the fry raised therefrom into his own river. In a short time they go to sea and grow into large fish, and then come back from the sea into the river. But into what river? Perhaps there are two or three rivers debouching into the sea within a few miles of each other; and one of them may be the river in which their parents live. Never, never by any chance will they come into any river but the one into which

man turned them as fry. Indeed so punctilious are they about coming back to their owners that there is a case in which a river flows through a lake into the sea; one set of salmon ascend the river as far as the lake and stop in the lake, no one of them ever going any further, while another set go through the lake into the river above, no one of them ever delaying in the lake. What can possibly be more perfect than this recognition of man's proprietary rights in them, and what conceivable end can the arrangement answer except the good of man? "Into your hands are they delivered."

Consider these anadromous fish from yet another point of view. These anadromous fish, or fish which, living in the sea, have a disposition to ascend rivers, are obviously made for man in a very marked manner. They ascend rivers at certain fixed seasons just to spawn in them, and that done they return to the sea. Their spawning operations are thus conducted entirely under the eye of man, and are placed entirely at his disposal. He can take the eggs in millions and carry them where he will. He can even send them across the seas to Australia and New Zealand. He has done so. These fish, though sea fish, annually come inland with marvellous punctuality to deliver over their breeding arrangements to the pleasure of man. "Into your hands are they delivered." And that done they do not stop in his river to live on him; but they go to sea, there to fatten, and to come back next year increased in size and in splendid condition. They come up narrow passages across which man can set traps and nets to catch them by the ton at his pleasure. And their young too do not stop in the river. At a very early age while still but a few inches in length they are possessed with an uncontrollable yearning to run in spite of all difficulties down the river however big to that sea which they have never seen. Who has imbued them with this uncontrollable yearning? It comes over them the moment they have their smolt coat on, so that if man has them in confinement he has this sign given him, this change of coat, by which he may know that he ought to let them go. Going to the sea, it is in the sea that they grow with great rapidity, and in the course of a few months as soon as they are fine big fish fit to eat, back they come again from the sea to the haunts of man, and always to their own proprietor's river. Thus a river is enabled to breed and lay at the feet of man many hundredfold more tons of meat than the river itself could maintain if the fish did not seek the sea. For whose benefit is this perfect arrangement if it be not for man's?

Man may decimate them, nay leave not a tenth at the very mouth of his river, still they will come back with unerring faithfulness year after year. "Into your hands are they delivered."

Again if man wishes to exterminate salmon from a river, or from any part of it, and to keep trout, grayling or other more desired fish in it, nothing is easier for him. The whole thing is entirely "under his feet." He has only to run a barrier across the river that no salmon can jump up. All that are above the barrier will in their first season undoubtdely run down, and they can never come up again; and so the river is cleared of them by their own action. Could any arrangement possibly place them more completely at the pleasure and service of man. "Into your hands are they delivered."

The salmon from which these illustrations have been drawn is a European and American fish. But we in India are not forgotten; we have tropical fish in abundance with like anadromous dispositions placed entirely at our disposal. Markedly there is the Hilsa which annually runs up the Ganges, its affluents, and many other rivers, and has been found as far inland as Allahabad. Considering the windings of the Ganges, and the distance the Hilsa goes to sea, this fish probably undertakes an upward journey of from 900 to 1,000 miles a year, and the same back again, for the purpose of practically saying to man, into your hands am I delivered.

But we have yet to ask the fish whether there is any blessing to man in the fear of him and the dread of him being upon fish. This was part of Noah's blessing and the effect of it and the reality of it is more easily recognizable in other creatures than fish. "The fear of thee and the dread of thee shall be on every beast of the earth, and upon every fowl of the air, upon all that moveth upon the earth, and upon all the fishes of the sea; into your hand are they delivered." (Genesis ix. 2.) Now suppose there were no fear of man on tigers and elephants, and we found half a dozen in the verandah to-morrow disposed to stop there, and to walk into the house in broad daylight, and that it was habitual for them to take the initiative against man, and to seek him at his occupations instead of always retreating to the covert of the forest, and even there being always on the alert to flee from him though unarmed. Man could not exist upon this earth with the position thus reversed. If even his ox, his horse, his ass, and his dog, knew their strength and feared him not he could never break them in to serve him. But we are to keep to fish and see if this blessing to man is evidenced

in fishes. If whales, sharks, porpoises, sword and saw fish, gigantic calamaries, deadly sea snakes, crocodiles, alligators, and even the larger predatory fish of the rivers had no fear of man it would not be safe for man to enter sea and river as he does. If even the smaller fish which he consumes had no fear of man, the result would again be calamitous to man. If they had no fear of man, and kept still instead of endeavouring to escape, his greed and short sightedness is such that he would unthinkingly exterminate them to his own injury. But having this fear they endeavour to escape, and a proportion do escape him, a proportion enough to go away and breed for his benefit. Thus though man might think it an advantage to him if fish had been so dispositioned as to stand still and be caught by him whenever he wanted them, it is really a blessing to him that "the fear of him and the dread of him is upon * * all the fishes of the sea."

Something might be said about the unity of purpose in the numerous different species of fish, close on nine thousand altogether, as yet distinguished in the salt and fresh waters of the globe, but space forbids, and we have therefore had to confine our inquiry to the few salient features in fish which show markedly that it was for the good of man and of man only that they were made at all, that he was studiously considered in all the arrangements that govern their abundance and the maintenance of their abundance, and that they were all so ordered as to make fish subservient to man's use and for no other conceivable object, except it be that he was to gather therefrom what an incalculable amount of pains had been taken and forethought exercised on his behalf, an amount which, when considered in all its detail, profusion and permanency of result should leave him satisfied beyond a doubt of the love which alone could have prompted such action, and dumb with amazement at the immeasurable extent of that love. Surely the fish have answered all the propositions with which we started with an unhesitating affirmative from which there is no escape, and with a fulness beyond what was expected or necessary, and have left us in possession of the open secret that there is no explanation for it all but that contained in the Bible, that "the Lord is loving unto every man."

H. S. THOMAS.

THE PHILOSOPHY OF THE UPANISHADS.

IN reviewing the philosophical system expounded in the Upanishads,* the Rev. Professor Cooper thinks (1) that the Hindu Pantheistic school stands self-condemned by the inconsistency involved in holding that life is unreal, and salvation nothing more than a deliverance from the erroneous belief in its reality, while at the same time holding that absolute inertion would also achieve salvation; (2) that the Pantheistic school cannot be theistic, because the Pantheistic Godhead can perform no intelligent action; and (3) that the Pantheistic creed must be wrong, because everything like moral responsibility is discarded.

The Aryan admixture with the indigenous tribes where they settled and a belief in metempsychosis are stated to have influenced the Aryan speculation, which, so influenced, became Pantheistic. The particular ways in which these circumstances happened to produce a Pantheistic turn not having been pointed out, I beg to suggest an argument in favor of supposing that they had no effect. The Hindu Philosophy took many ages to be built up. Thinkers belonging to periods separated by very long intervals made contributions. Each thinker doubtless found several uncouth chips in his days, which he tried so to hew, as to make a complete system. It seems to me that metempsychosis was a synthesis from other beliefs relating to the essence of existence. It must have been a later contribution.

Pantheistic predilections are also ascribed to the Hindu temper having been pessimistic. I think that the Hindu temper was, if anything, pre-eminently optimistic. A pessimist is one who believes that the misery of life exceeds its happiness. On this point the Rishis taught that happiness greatly predominates over misery in any individual or phenomenal existence, for every individual is so constituted by the law of self-conservation which has played an important part in its own existence as well as in that of its ancestors, that the individual would accommodate itself to its environments and luxuriate in living, however painful its existence or its circumstances at any moment may appear to others not similarly conditioned or to itself. It is not pessimism to consider that there are two modes of existence, the conditioned and the unconditioned, the phenomenal and the non-phenomenal; that as between these, while the uncon-

* See the July No. of this Magazine, p. 30.

ditioned is bliss, the conditioned existence is misery decidedly, implying as it does, unnumbered mutations.

The Rishis thought that the Supreme Being, was, next to being *Sat* or the substantial, *Chit* and *Anandha*, Knowledge and Beatitude. Beatitude is quite different in kind from happiness such as we understand by the name. Happiness or unhappiness has reference to the individual nature, as it is found at any time, and to the manner in which circumstances prove either suitable or unsuitable to that nature. These words can have no application to unconditioned existence. The unconditioned existence is yet in a manner surmised to be Beatitude from the fact that sleep, which is a phenomenal state nearer unconditioned existence than waking consciousness, is felt to be refreshing, for in sleep the voluntary parts spare blood to the involuntary. The Hindu belief then is that to be comprehended in the phenomenal, or to have become a conditioned existence, is not desirable, although even in the conditioned existence itself the individual feels happy rather than miserable.

Professor Cooper remarks in a foot note that by the word Supreme Being the Upanishads understand the abstract noun, being, which is an act or state, abstracted from concrete individual objects. The Supreme Being is stated to be *Sat* or the substantial ; what is called unreal, being the phenomenal whose relation to the supreme entity, the noumenon, is that of the shadow to its object. Before proceeding to shew that that gnosis which is described in the Review is not incompatible with the efficacy of absolute inaction in the same direction, I beg to make some preliminary observations.

1. The popular notion regarding what constitutes an individual seems to be incorrect. We imagine every tree growing separately to be an individual tree. What looks like a single tree is really the coalescence of several growing together and exhibiting organized action in combination.

2. Similarly there are complex animals. An individual animal belonging to this class moves bodily from place to place. Its parts perform inter-dependent functions. In strict science, however, the animal is understood to contain several animals inhering together and specializing themselves in organic action.

3. Some maintain that each cell in an organism is an individual by itself. The most striking fact in connection with this view is, not so much the aggregation and specialization of the cells acting in concert as their remaining free regarding what concerns each individual cell, notwithstanding the combined action. The aggregation and specialization are wholly determined by habitat and properties inherited from ancestral existence.

4. The Hindus believe the human body to be a complex organism. Whether this is a fact or not, the testimony of our consciousness, which is certainly single, cannot be urged with effect until it be proved that animals known to be complex organisms have divided consciousness, one consciousness for each simple organism that has coalesced.

5. If an individual organism can be really complex, one is quite entitled to propose as a hypothesis that separated individuals only appear so. Space and time are mental forms investing the external world. If we endeavour to dissociate them from perception, the residue would be a unified substance.

The progress of mankind as a whole seems to depend upon peculiar laws which are altogether independent of human action. This shows that separate individuals comprising mankind are really an unseparated individual organism notwithstanding that our consciousness is opposed to this view.

6. The flower is ordinarily thought to be different from the leaf. Science proves them to be the same thing specialized by function. They are not so far specialized however as not to be able to exchange functions whenever there is need.

7. Any thing done by an individual not only affects the aptitudes of the individual immediately doing it, but also its offspring and their aptitudes. The lower animals swim instinctively. The instinctive ability to swim is an inherited aptitude.

8. The Esquimaux children find flavour and relish in fat, because they are descended from ancestors that lived on fat.

9. An individual organic body depends for configuration not upon any thing in the cells which combine to form it, but upon the configuration that ancestral individuals had, upon vital force polarized in a peculiar manner during ancestral existence.

10. An organic being is distinguished from an inorganic in having to do work which implies expenditure of energy. When energy is expended, a fresh supply is periodically sought for. It is obtained by absorbing organic matter from organic food that is taken and by absorbing materials from minerals. This absorption could not be effective, were the basis of all foods not the same.

11. The distinction of animate from inanimate things is popular, not strictly scientific. The difference between the highest type of the one kingdom and the lowest type of the other is not so vast as

the difference between the highest and lowest types of the same kingdom. We do not attribute consciousness to objects classified among the inanimate. Christians deny the soul to them as also to inferior sentiencies. This unwillingness to give to other objects attributes that would, in a sense, make them equal to man cannot be justified unless we are prepared to prove that our not experiencing their consciousness is a sufficient datum for concluding that they have no consciousness. The Hindus ascribe soul to all objects, but this does not in every case involve consciousness. The phenomenon of consciousness varies in different organisms, the highly organised having greater consciousness than those not so highly organised. In this connexion it is proper to state that we are not authorized to believe that the heavenly bodies such as the sun and the earth are not persons endowed with consciousness like ourselves. The parasite worms in the human intestines can never acquire the notion that man is an organised being moving about and doing things at pleasure.

12. A tree grows, putting forth branches, leaves, flowers and fruits. The tree existed in a potential state in the seed. Every leaf in the highest tree is employed in absorbing water and carbonic acid from the surrounding atmosphere. This act of absorbing must be accompanied by a slight consciousness of which we should have cognizance, had the leaf the power to speak to us. Insectivorous plants watch their enemies, select opportunities and adapt their attack to circumstances. This is doing as much as most civilized men do, certainly much more than many barbarous tribes. The power to know things by smell that ants possess is immensely greater than the similar power in man.

13. Matter is indestructible. Force is not less so. No new matter can be created in the right sense of the word.

14. Notions that now pass for very good righteous feelings might be looked upon as monstrous in another stage.

Since the Absolute is at present in the process of evolution, or in a constructive stage, every sentiment that promotes living is a righteous feeling. When dissolution should set in, as indeed it must in the course of ages, murder would be quite a virtue. This last is a Hindu doctrine.

15. The doctrine of evolution, with the survival of the fittest, can be as well applied to the moral world as to the physical.

16. We find antithetical qualities in Nature. There are big and small things, good and bad persons, gentle and harsh tempers.

Individual objects are contained in other individual objects. Nothing is so small as not to have something smaller within it. Nothing is so big as not to have a still bigger thing in which it is contained. As good persons naturally delight in performing generous actions, so bad men delight in doing evil. Gentleness is a very useful quality, but there are situations when harshness would be at least equally commendable. This antithetical nature of qualities in nature shows by their existence that the Absolute in which all things containing the qualities have their being is exempt from them.

17. The life of an individual, from conception to death, discloses traces which in a manner attest how the species to which the individual belongs has been derived.

When one reflects upon these observations one is constrained to conclude that the variegated phenomenal nature, which we see about us, including objective and subjective phenomena, is a primordial substance, the soul, exhibiting itself in infinite forms which are due to equally infinite conditions. These conditions are mere vicissitudes, each vicissitude being mistaken for an independent existence by the consciousness which always accompanies such vicissitudes. The topmost small leaf on the tree experiences individuality and independent being, little suspecting how the roots, the trunk and the branches support its existence. The bubble on the stream has a glimmering consciousness of separate existence while it resists the wind which threatens to break it. It hardly understands the flood beneath which supports it.

Europe has addressed itself to the question whether mind or matter is the entity. This did not appear important enough to the Hindu sage. There are so many things in which we observe antitheses quite as wonderful and as inexplicable as that of mind and matter. The emergence of articulate sounds from inarticulate ones, the origin of moral feelings which do not seem to govern all sentiencies, how the species differentiated itself from the genus, sexual selection,—these are each a question with which many Darwins can hardly cope. Marvellous as nature and phenomena looked, the Hindu sage still asked himself what supported all phenomena. He was convinced that phenomena were derived. He wished to know from what they were derived. He laid down that nature, in the underived state, before development, evolution or individuation began to operate, was a homogeneous simple substance, and to this the name soul was applied. This substance is so subtle as to be

diffused through and supporting every existence, every phenomenon. This substance seems to be associated with a never ceasing power of individuation which the Upanishads call Maya. The homogeneous primordial substance in the act of individuation is the phenomenal nature. All organisms, every inorganic substance, every objective existence, the heavenly bodies, all are forms or embodiments which occur in the course of individuation. Consciousness, the bodily and mental phenomena which sentiencies possess are glimmerings of the Absolute consciousness, shining through infinitesimal points in the Absolute substance, namely the individual selves. The delusion to which each individual is subject consists in his supposing that he is a free agent, believing that he can act or move about as he pleases, which is untrue, for in every act or thought, he is rigidly controlled by the flood of the Absolute on which he floats. His consciousness and his acts are caused by the Absolute. We, not knowing how the Absolute is concerned in causing them, fancy that we are conscious and that we act for ourselves, which is indeed a mistake.

If what we witness in and about us is believed to be the stupendous organism of the Absolute exercising himself in infinite ways,—if self, in every state of feeling, thought and volition, is strictly considered to be the Absolute exercising himself at an infinitesimal point, namely the individual, whose connection with the Absolute is rigid, not permitting any freedom of thought or action on the part of the individual,—if individuals can so exercise themselves by duly meditating and overcoming selfish feelings as to run counter to the process of Evolution or individuation which has produced them, their powers expanding more and more so as to enable their individual selves to embrace a larger expanse of sentiencies at every step,—in a word, if individuals can thread back the past infinite Evolution, till they attain the underived homogeneous primordial state, that is certainly the gnosis inculcated in the Upanishads, that will surely effect salvation notwithstanding our present sentiments based upon moral responsibility.

Moral responsibility is a huge bug-bear which, on closer examination, would prove insignificant. No man in the world has ever been actuated to do good or avoid evil, because he expected reward or apprehended punishment from the Almighty. Every person that said that he was so actuated was deluded, for the truth is that either his breeding or his ancestry had been such that he would have acted precisely as he did in the circumstances whether he realized his responsibility or not. As the practised artist can

involuntarily make æsthetic figures, so acts once performed have a tendency to repeat themselves. The Hindus go so far as to say that the act or experience precedes, and knowledge or consciousness follows without exception, ancestral acts or experience being reckoned to have an effect.

Suppose you have to secure the attachment of a person. Europe would suggest that you should perform kindly acts to the person. India suggests on the other hand that you should cause the person to perform kindly acts to you.

Does not the necessity to reverse Evolution assume Evolution for a fact? This is the most formidable question put by Professor Cooper. I am unable to state how this question is answered in the Hindu books. I shall try to learn and state it.

T. P. RAMANADHA IYER.

[*We publish Mr. Ramanadha Iyer's article with pleasure, as we believe it to be a fair exposition of a type of philosophy very prevalent amongst thoughtful Hindus. We regret that we are unable to find space this month for Mr. Cooper's rejoinder; we hope however to give it in our next issue.*—ED. C. C. MAG.]

"I admit that it requires patience, discrimination, and a certain amount of self-denial before we can discover the grains of solid gold in the dark mines of Eastern philosophy. It is far easier and, far more amusing for shallow critics to point out what is absurd and ridiculous in the religion and philosophy of the ancient world, than for the earnest student to discover truth and wisdom under strange disguises. Some progress, however, has been made, even during the short span of life that we can remember. The Sacred Books of the East are no longer a mere butt for the * * * * * sarcasms of philosophers. They have at last been recognised as historical documents in the history of the human mind, and as palæontological records of an evolution that begins to elicit wider and deeper sympathies than the nebular formation of the planet on which we dwell for a season, or the organic development of that chrysalis which we call man." ("INDIA, WHAT CAN IT TEACH US?"—MAX MULLER.)

AN ELEGY.

If I had thought thou could'st have died,
I had not wept for thee ;
But I forgot, when by thy side,
That thou could'st mortal be.

It never through my mind had past
The time would e'er be o'er,
And I on thee should look my last,
And thou should'st smile no more.

And still upon that face I look,
And think 'twill smile again,
And still the thought I will not brook
That I must look in vain.

But when I speak thou dost not say
What thou ne'er left'st unsaid,
And now I feel, as well I may,
Sweet Mary thou art dead.

If thou could'st stay e'en as thou art,
All cold and all serene,
I still might press thy silent heart,
And where thy smiles have been.

While e'en thy chill bleak corse I have,
Thou seemest still mine own ;
But there I lay thee in the grave,
And I am now alone !

I do not think, where'er thou art,
Thou hast forgotten me ;
And I, perhaps, may soothe this heart
In thinking too of thee.

But there was round thee such a dawn
Of light ne'er seen before,
As fancy never could have drawn,
And never can restore.

CHARLES WOLFE.

SI MORITURAM TE SCIVISSEM.

Si morituram te scivissem,
Non te mortuam flevissem ;
Sed fugit me, tuum sodalem,
Te non esse immortalem.

Mi venerat *in mentem* nunquam,
Praeteriturum tempus unquam,
Me te supremum aspecturum,
Nec te ridere post visurum.

Et semper vultum hunc aspecto,
Ac dum arrideat expecto,
Nec possum hactenus putare,
Me hoc incassum expectare.

Sed respondebas, me loquente,
At nunc loquor, heu ! te tacente,
Quo tandem fit ut sentiam
Te esse vere mortuam.

Si posses placida rigere,
Et mecum semper sic manere,
Pectus immotum amplexari,
Genasque possem osculari.

Cadaver tantum dum tenere
Licet, mea tu videre ;
At illic jaces tumulata,
Et mi est domus desolata !

Quaqua in parte tu verseris,
Me, credo, *non* obliviscēris,
Et ego, reminiscens tui,
Fors *pace cordis* possim frui.

Sed te viventem tam serena
Lux vestiebat, haud terrena,
Ut nunc eheu ! te mortuam
Non possim fingere vivam.

C. COOPER.

LITERARY NOTICES.

HOURS WITH THE BIBLE; *Or the Scriptures in the light of modern discovery and knowledge. From Manasseh to Zedekiah, with the Contemporary Prophets. By* CUNNINGHAM GEIKIE, D.D. *London: Hodder and Stoughton.*

This book is the fifth volume of an admirable series by the same author, well-known by his learned and scholarly 'Life of Christ.' The idea of the series is more than happy. It is to set forth the history and the literature of the Old Testament side by side, so that the one may illuminate the other, to appropriate the results of modern critical scholarship constructively, to exhibit the history of Israel as a real history, and the people of the Bible as men of flesh and blood. In this way the air of unreality with which it has been customary to invest all expositions of things and persons Biblical is got rid of, and the narratives of the Scripture shine forth in something like their original clearness and instructiveness.

When Ewald's History of Israel began to find its way into the hands of English readers, the historical view of Scripture broke like a revelation upon the minds of those who were not scared by that great writer's peculiarities. For a time, people tried to discredit the new method, by laughing at Ewald's assumptions of omniscience and his profound arrogance, but bye and bye, their scorn gave way to genuine wonder and admiration. Here was a man to whom Moses and David and the prophets were real existences, to whom the Psalms spoke of real joy and sorrows that had once moved genuine human hearts, before whose eyes the little field of Jewish history was filled again with living shapes, and prophet, king and priest met each other in vivid interaction and strife. Ewald had such pure historic insight and a spirit so deeply religious, that even his wildest and most capricious passages are instinct with life. A single sentence sometimes lights up a whole chapter of the history and gives to the contemporary writings a meaning they never before seemed to have.

But Ewald is not English, and the best translation fails to Anglicise him. The great mass of intelligent readers take an interest in Biblical questions, but there are few to whom Ewald will be acceptable, or safe. It needs an intellect trained in academic modes of thought to appreciate the perfectly free and often fanciful outgoings of his powerful mind. The greatest of the Germans need to be filtered through an English mind before they can become living water to the average English reader. Nothing is more necessary than that English Christians should be taught to look upon their Bible as a reality, but they are never likely to learn this lesson from the Germans at first hand. Presented as criticism and its results usually have been, they simply alarm and confound. What is wanted is a writer who shall be German in his learning, English in his sobriety, and Christian throughout, to show that the higher criticism, instead of destroying the Bible, really restores its youth, and causes many a page dimmed by time and prejudice, to shine with all the freshness of its early days.

It would be too much to say that in Dr. Geikie the man required has appeared, but it is not too much to say that he is a very respectable substitute. He has read widely and accurately, he is really open to new light from any quarter, and he possesses much of that historical imagination which is necessary for the reconstruction of past scenes and situations. The volume before us deals with the period from Manasseh to Zedekiah and the contemporary prophets. The little kingdom of Judah, in whose history and literature such a profound interest centres, was but a spot rather smaller than Yorkshire. The Northern kingdom had disappeared, crushed by the might of Assyria, and its population had been carried off to the banks of the Tigris, and other regions of the East. Judah, preserved by a signal interposition of Divine providence, still remained 'the home of the one true religion, which was to educate the world for God.' The grandeur of its destiny overwhelms the sense of its physical littleness, and the saddening decline of its national life. It is this period of decline, with its popular corruption, its fashionable idolatry and the splendid though unavailing activity of its prophets which Dr. Geikie enables us to realize and appreciate in this book. In spite of Hezekiah's reforms, a strong party at court, backed by the unspiritual majority of the populace, longed for a return to heathenism with its sensuous and degrading worship. The reign of Manasseh saw the reaction against Hezekiah's purely Israelite policy carried out. During his long reign of fifty-five years, the country went steadily down, in social and religious life, as in political influence. The prevailing corruption not only affected the priests, but even the prophets, only a few of whom stood faithful to Jehovah. "The majority either held their peace," says Dr. Geikie, "or degraded their office for the basest ends. A terrible picture of their moral lapse is drawn by their brethren who remained true to the old religion. They were 'blind watch dogs that did not bark but lay idly sleeping: insatiably greedy: set on gain: given up to strong drink.' They were 'light and treacherous.' They affected to believe in idols. God had withdrawn his word from them. They had sunk in fact to the level of the heathen diviners, and were mere deceivers of the people." The great names among the faithful prophets of the time were Isaiah and Micah, who "boldly denounced the conduct of Manasseh in re-introducing idolatry, with all its inherent abominations. Evil, they cried, which would make men's ears tingle, was preparing for Jerusalem and Judah, for their sin. Jehovah would destroy the holy city as he had destroyed Samaria, and root out its inhabitants as He had rooted out the House of Ahab." Here, it seems to us, is the most wonderful phenomenon connected with the political life of Israel, the existence, alongside of the despotic oriental king, of a prophetic order, making it their business to criticize freely, to denounce with perfect openness, the doings of the government, in the name of God. No other despotism was ever so tempered; on no other Eastern soil did such a marvel appear and maintain itself.

One more effort at reform was to be made before Judah followed Israel into exile. Under Josiah, the cause of the national religion revived. "Roused by the earnest preaching of Zephaniah and Jeremiah, and, it may be, by secret friends of the ancient faith in the palace, Josiah had openly shown a religious bias, from the eighth year of his reign, when he was sixteen, the age at which Hebrew kings attained their majority." Surrounded by a group of like-

minded ministers, the king gradually carried out, in the face of a depraved public opinion, a number of salutary changes. But it was too late. As soon as royal compulsion was withdrawn, the nobles, priests and people slipped back into those perilous paths that led to national destruction.

Connected with the history of Josiah's reformation, there is an interesting literary problem which has excited much attention in recent years. In the process of restoring the defiled sanctuary to the purposes of Jehovah-worship, Hilkiah came upon a manuscript roll, which proved to be a copy of the Law of Jehovah by the hand of Moses. This book was Josiah's guide in the remaining religious reforms of his reign, and the question has been raised what portion of the Bible was thus brought to light, and what was its age. Many hold that the book was Deuteronomy, and we find in that part of the Pentateuch evidences that it belonged to the age of the later kings. But the theories of the critics seem to be mutually destructive. Evidence which one man cites as conclusive in support of one view is cited with equal confidence by another in support of a view exactly contradictory. As Dr. Geikie justly observes: "A theory started by some vigorous thinker, and supported by him with an imposing array of sound or unsound evidence, is certain to gain the support of the mass of average minds, till some other original brain starts another, and then the first is quietly dropped. It has been thus repeatedly in Biblical criticism, and it is so at present." He himself believes in the great antiquity of Deuteronomy, and cites its archaic forms of speech as conclusive. His statement of the case against the extreme critics is moderate but full. As against those who hold the theory of a forgery or pious fraud, it is absolutely convincing. His concluding words are worth quoting. "To believe that a Book or Books, round which a veneration so touching had gathered centuries before Christ, and the re-discovery of which in Josiah's day, revolutionized the history of Israel for all future ages, were mere forgeries of well nigh a thousand years after the date they claim, seems to require much greater credulity than is shown in frankly accepting them as what they assert themselves to be."

We believe that Dr. Geikie's volumes are likely to be of great use to Indian students of religion. The one need of the present day is a better acquaintance with the Bible, and we know of no books that may be put into the hands of intelligent readers, at least in the present state of Biblical criticism, with more profit than this series of volumes. They will do a great service to practical Christianity if they help to reinstate in our Christian pulpits, the Scriptures of the Old Testament, as an equally important part of revelation with the New Testament itself.

SEVEN YEARS AT ETON; 1857—1864. *Edited by* JAMES BRINDSLEY-RICHARDS. *London: Richard Bentley and Sons*, 1883.

The life of an English public school has always been a subject of interest to those who desire to understand the English people. England is a country of anomalies and inconsistencies, to the rigid theorist a source of bewilderment, bearing evidence that she was not made, but grew. The odd mixture of freedom and privilege of aristocracy and democracy, of the past and the present that confronts us in political institutions is equally apparent in other spheres, and particularly in education. The great public schools, especially the older

foundations, appear to outsiders in some respects to be among the most anomalous English survivals of the past, and yet the upper and middle classes of English society regard them with what is little short of veneration. Even in these sacred haunts of conservatism however, the influence of modern ideas has been felt, and it is not too much to say that the great head-masters of the past would fail to recognize their respective schools, if they were to pay them a spectral visit now.

All the more, on this account, is the book before us welcome, recording as it does, in a cheerful easy way the recollections of seven years at Eton by an old boy. These years are not remote enough to make remembrances of them uninteresting to the present generation, for they cover the period when the men who are now making a figure in English life were at school. Lord Rosebery and Lord Randolph Churchill, the Marquis of Lorne and his successor in the Canadian Viceroyalty the Marquis of Lansdowne, were among the school-fellows of the Editor, and it would be easy to multiply names of equal eminence. Some people may question the taste of bringing out a book of reminiscences of so recent a date, but there can be no question as to its interest. It is now, when these men are doing their work and occupying the public eye, that we desire to know what manner of boys they were, the influences under which they were educated, and the promise of their earlier years. And Mr. Brindsley-Richards has accomplished the delicate task he has set himself well. He is thoroughly good-natured, and never says a caustic thing that has not *something about it to* take away the sting.

The volume before us is a book entirely modern in its interest, but Eton College has a history of its own, reaching back far into the past. What is now the most aristocratic school in aristocratic England was founded as a charitable institution by poor King Henry VI. The boys that enjoy the proceeds of this benefaction, the Collegians as they are called, are the Etonians that the founder contemplated, but the Oppidans, or scholars not on the foundation, constitute an overwhelming majority of the pupils and give tone to the place. The masters generally take boarders, and besides them there were, in Mr. Brindsley-Richards' day, the 'dames,' who also boarded boys with the sanction of the school authorities. In old times the boys of the higher forms exercised a large and somewhat undefined authority over the juniors, each of them being entitled, by popular consent, to the services of one or more small boys as 'fags.' The 'fag' was simply an errand boy and general servant, fetching hot-water for his senior's tea, making his toast, bringing his special dainties from the baker's or pastry-cook's. A senior who wished to have any thing done for him, shouted 'Lower boy!', and every lower boy within hearing was bound, by a law inexorable as that of the Medes and Persians, to run with the offer of his services. Strangely enough, the lower boys did not seem to complain, and abuse of the 'privileges of seniority was very rare. Here is an extract that will be amusing and ought to be instructive to Indian youth.

"When Blazes (the nickname of the senior in question) gave breakfasts, his fags had to work like young niggers. One would be toasting a pile of muffins in the kitchen, and begging other compassionate lower boys, or haply one of the scullery maids, if they chanced to be in a good humour, to assist him: the second fag would be making raids upon all the cupboards in the lower boy rooms to borrow extra cups and saucers, knives and forks, and many a pretty

scene arose when the owners objected to these forced loans, and engaged in scuffles to protect their property; meanwhile the third fag would be off to mother Dell's dairy cart, to buy eggs and cream. When he had returned from that errand, it would be time for one of us to scamper off to the 'Christopher' (inn), for the dish of devilled fowl or salmon cutlets which was to be the *pièce de résistance* at the meal. The dignity of a well-dressed boy does not appear impressively when he is carrying down a populous highway a large covered dish out of which gravy is dribbling on to the pavement; but dignity was a feather which you could only put in your cap when you were in the Fifth Form. I have seen the present Marquis of Waterford cheerfully carrying a dish of eggs and bacon from Webber's for a solicitor's son, and the Earl of Rosebery (then Lord Dalmeny) running swiftly down the High Street with the breeks of a parson's son under his arm. One morning, as I was going 'up town,' a lower boy asked me to lend him fourpence, as he had come out without his purse, and had to buy some bloaters (herrings) for his fag master; it was the heir of the Duke of Marlborough, the present Marquis of Blandford."

The instruction given at Eton in Mr. Brindsley-Richards' time was still strictly and exclusively classical. According to the old doctrine of classicalism then in vogue the only instrument for forming the mind was a study of the old Greek and Roman literature, and the quintessence of the higher culture was the writing of Latin and Greek verses. The survival of verse-making in the classical languages is one of the most remarkable facts in the history of English education. It is two hundred years since Milton protested against "forcing the empty wits of children to compose themes, verses and orations," and not much less since Locke still more scathingly exposed what he considered to be a mere fashionable folly. It still survives however and is likely to survive. At Eton, during the years under review, even this seems to have been done about as badly as possible, and the traditions current among the pupils in Mr. Gladstone's day point to a still more appalling incompetence in former years. The fact is Eton boys were, till quite recently, left pretty much to educate themselves, masters and tutors interfering only to prevent obvious mischief. And the results of this method seem to have been fairly encouraging. Several hundreds of boys and youths, of good families and with high traditions, must, when brought together in a great public school, exercise far more influence upon each other than all the masters put together, even when these are the best possible. The prominent place given to sports and manly exercises, especially cricket and boating, makes the mutual intercourse of generous youth in an English public school as near as anything modern can well be to the education of the Greek *palæstra*.

One ugly feature of Eton school-life, even so short a time as twenty years ago, was the undue severity of flogging. Yet the rod is undoubtedly a favourite and beneficial instrument of education in England, and English mothers of the aristocracy can sometimes display a Spartan spirit in such matters, as the following anecdote shows. The young heir to the Dukedom of Montrose, the Marquis of Graham, while waiting on the railway platform for the arrival of his mother to take him home for the Christmas holidays, was found by a master amusing himself with that most fascinating and abominable of all toys, a catapult. This was an offence forbidden on the severest penalties, and the master, though on a journey to London, postponed it in order to take the culprit back to school for punishment.

"In the midst of the discussion, the Duchess entered the station and her

son had to go and tell her that he was under orders to return to Eton for just so long a time as might be required to flog him. Human nature being what it is, one might have expected that Her Grace would intercede for her boy, and that Mr. Walford would not steel his heart against the supplications of a beautiful Duchess. But it never occurred to Her Grace that she ought to intercede. She said with the utmost composure that she would go and wait at the "White Hart" till the operation was over; whereupon Mr. Walford and Graham departed together in a fly, and on reaching the Lower School, Graham got twelve cuts and a suitable admonition from Mr. Carter, the Lower Master. Having thus expiated his fault, he rode back, tingling but relieved, to join his mother and commence his holidays."

One cannot help wondering if there is a Hindu father equal to the Duchess of Montrose in this respect.

Enough has been said to show that the book before us is not only instructive but amusing. We are sure that Indian readers will peruse it with delight. But it must be remembered that the Eton of a quarter of a century ago is not the Eton of to-day. The Royal Commission on Public Schools, which commenced its sitting in Mr. Brindsley-Richards' day, but the effects of which were not felt till 1868, and the repeal of the Statutes of Henry VI in 1872, have introduced enormous changes both in the discipline and work of the school. Fagging is not now what it once was. 'Dames' are no longer licensed, the increase in the number of masters having made it possible for all the boys to be accommodated in their houses. This has led to a more immediate and personal supervision, and though youths are not now thrown upon their own resources as they once were, the change is no doubt on the whole a beneficial one. The course of studies has at the same time undergone an enormous development. The predominant spirit of classicalism has to a very large extent passed away—for good or evil who shall say? There are many conservative spirits who regret it. Mathematics, science and modern languages, have been advanced to more honourable positions. In the lower departments of the school French is compulsory and German and Italian are encouraged. In the three higher divisions every boy is required to take up two extra studies,—such as Physical Geography, Chemistry, Political Economy or Logic—as well as some classical author not usually included in the school curriculum, as Plautus, Terence, Aristotle or Plato. The education given is thus thoroughly modern as well as thoroughly classical. But modern changes must not be understood as throwing contempt upon the past. Times change and schools change with them. If Eton continues to do for future generations what it has done for past, its new governing body will have cause to congratulate themselves, for not without justifiable pride does an old Etonian say "Our school can boast a glorious past. In the church and in the senate, at the bar and in the army, and in every other branch of national life, her sons have held their own and left their mark. At Eton have been learnt the early lessons of endurance, patience, self-control and sturdy independence which have braced the characters of many of England's greatest men. In that world in miniature the boy has been taught to find his own level, and to respect his fellows and himself—lessons happily remembered longer than much of his school work."

THREE LECTURES ON SUBJECTS CONNECTED WITH THE PRACTICE OF EDUCATION *delivered in the University of Cambridge in the Easter Term 1882, by* H. W. EVE, M.A., *Head Master of University College School;* ARTHUR SIDGWICK, M.A., *Late Assistant Master at Rugby School; and* E. A. ABBOTT, M.A., D.D., *Head Master of the City of London School. Cambridge: The University Press.* 1883.

This little book of 95 pages is full of sound common sense on three most important subjects connected with education—*Marking, Stimulus* and *Latin* verse composition. The last of these is not a subject of great importance in this country, and Dr. Abbott's lecture will therefore probably find few Indian readers; but the questions of marking and stimulus are of equal importance everywhere, and we would strongly recommend all engaged in education to read and lay to heart the wise counsels given by Messrs. Eve and Sidgwick.

It is impossible to do justice to Mr. Eve's thoughtful lecture in the limited space at our disposal. Mr. Eve brings out clearly the many difficulties which beset an examiner who is really anxious to do justice to the papers before him. Every one who has had any experience in the work of examining must have felt all the difficulties which are touched upon, and will be thankful for the suggestions which this lecture contains as to the best way of overcoming them. However careful an examiner may be in the preparation of his paper and the allotment of marks for each answer, he will always find that he has under-calculated the possibilities of partial error, and hence that the scheme he has laid down makes no provision for the vast majority of the answers that he will receive. It is of course always possible to draw up a paper—on whatever subject it may be—in such a way that each answer must either be right or clearly wrong. Such answers however generally consist of one word only, and a paper composed entirely or even in great part of such questions are as a rule utterly worthless. And yet it is a fact that in this country such papers are becoming more and more common, especially on the one subject in which they are least admissible—History. Such questions are no test whatever of a student's knowledge of his subject, and when indulged in to any great extent make an examination a mere lottery and utterly destroy its utility. The only possible end that they serve is to lighten the labour of the examiner, and any man who sets a paper with that end clearly in view, is, we do not hesitate to say, unfit for his work. It is however in the better class of papers, those set with the sole object of testing a boy's knowledge and grasp of the subject, that the greatest difficulties are always met in the marking. Mr. Eve wisely recommends that the standard should be kept elastic until a number of the answer papers have been examined, and that then the examiner should turn back, revise his scheme of valuation, and begin again. This is certainly the only way in which any thing like even marking can be attained, no matter what the system of valuation may be. In several of the public schools of England it is customary in every examination to have two independent examiners, each of whom goes over all the papers, and values each according to his own standard, the mean of their results being taken as the closest possible approximation to the true value. This is no doubt an excellent method, but is not always practicable. Mr. Eve also enters at length into the difficult questions of class marks, and of the composition of class marks and examination results. Into these points however we cannot follow him.

One subject *on which* we should have been glad to have the results of Mr. Eve's experience is the difficult one of general impression. Every practical examiner often finds that when he is valuing papers in detail one which has left an impression of carelessness and thoughtlessness upon him obtains a large percentage of marks, and *vice versa* a paper that has left a good impression stands comparatively low. What is to be done? Is this general impression to be entirely neglected? Few examiners we believe do entirely neglect it, and yet in yielding to it there is often a lingering suspicion of unfairness. Dr. Arnold, than whom a higher model could hardly be chosen, used always to reserve a considerable percentage of marks for this general impression, in some subjects making it as high as fifty per cent., and although this is perhaps the extreme on the one hand we are inclined to believe that it is better than the extreme on the other.

Speaking of public competitive examinations, Mr. Eve adduces the example of the South Kensington examiners which we would strongly recommend to the conductors of the Matriculation, *Middle School*, and other large examinations in this country; and especially since the new regulations adopted this year by the University of Madras will give rise to precisely the difficulty which the South Kensington method is intended to obviate.

"A South Kensington examination generally involves the marking, in a limited time, of 3,000 or 4,000 sets of answers to the same questions. There is a chief examiner who sets the paper and looks over the very best answers, and three or four sub-examiners who do the bulk of the work. It is, of course, of great importance to secure uniformity, and they proceed as follows:—The Examiners meet, talk over the paper, learn what answers the chief expects, and assign their marks. Then each of the Sub-Examiners looks over say fifty or sixty of his thousand, marks them and notes all the difficulties that occur. * * * Thus prepared they meet again and discuss the vagaries they have encountered. Then they return to their duties with a revised scale of marking, and, it is to be hoped, attain something like uniformity of standard."

Mr. Sidgwick's lecture on stimulus is still more valuable. Ever since Frœbel commenced his work the question of how best to interest boys and girls in their school work has occupied the attention of educationists, and it is not now infants only who are *thus* cared for but even youths bordering on their translation to the Universities. In the last half century enormous advances have been made in this respect in England. More attractive and rational school books have been produced, methods have been thoroughly reformed, and the old system of distasteful and tedious tasks with class work enlivened only by the cane is now *almost a thing* of the past. Mr. Sidgwick is himself an enthusiastic *educationist*, and speaks from an experience extending over twenty years at Rugby and Oxford. His suggestions are all good, thoroughly practical and to the point; but we cannot do more than refer our readers to the lecture itself. Two of his cautions however are so universally applicable that we will quote them *in extenso*:—

"I have tried to suggest in this necessarily brief sketch a few of the true methods of stimulating *attention* in a common form lesson. There are two false methods on which I should like to say a word: they are what I will call the satirical and the nagging. I will take the nagging first. By nagging I mean a constant fire of little rebukes to one and another for inattentiveness.

It wears out the patience of the best-regulated boy to receive, or even to hear, such rebukes. It is exasperating to human nature and is utterly futile. Moreover it distracts and worries the teacher and destroys even what chance there was of any real stimulus to attention. My own advice would be this—you may have in many lessons to caution once or twice; but if you find the thing becoming common, look elsewhere for the cause and for the cure. The probability is you are becoming dull. Either quicken up a bit or at any rate vary the proceedings. But don't nag. It may of course be not your fault. The weather may be hot; or there may be some excitement toward, a great match after school, or races in the vicinity, or some new promotions to the eleven, or news has come that the ice bears on the reservoir. Anyhow don't nag. If it is hot, open the door and any remaining window: if it is an excitement try and compete with it, rather than choke it by nagging. I have learnt the futility of this method by having tried it—and failed.

"The other false method is satire. Whatever a man can or cannot learn, he can at least learn to avoid that. It is nearly always a fatal mistake. Perhaps occasionally, if used among older boys high up, and only very rarely, and only under real provocation, and used in a kindly spirit, and by a man known to the boys to be really kind, and finally to the right boy, it may be successful once in a way as a stimulus. I need scarcely say these conditions are rarely all observed. It tends to become a habit and be used indiscriminately: it re-acts on the master's temper: and it is very hard to know the right boy. Many a boy will sit and seem stolid and all the while resent your satire with exasperation. You cannot tell a sensitive boy by the look. He is not the shy dark-eyed creature of the school tales. He may just as likely be a ruddy high-spirited person, or a brawny athlete, or an ugly lumpy log of a boy. And the satire may often be unjust. And just or unjust nineteen boys out of twenty hate it. The worst mistake of all is to use it among small boys. They never understand it and they always think you a brute. And unfortunately it is here that it is commonest. A clever young man comes as an Assistant from the Universities where talk is keen and eager, and satire good or bad is rampant, and he is set down—by the wisdom of head-masters—to teach small boys. When they are ignorant, or inattentive, or stupid, he begins to be sarcastic, *i.e.* to show a far worse ignorance and stupidity than theirs. They don't know what he means: they think he is hard on them: they are aware that he is laughing at them: they set him down as dull and bitter: and all his good qualities go for nothing. Moreover it feels to them like an abuse of his position. He is older and cleverer than they are, and of course can 'score off' them if he tries, and say clever things at their expense: especially as they cannot reply. They think it unfair and they are right. I knew a boy who said to a master in a moment of intimacy, 'Oh, Sir, I'll tell you a story which will amuse you, *as you are fond of bullying.*' It is difficult to imagine a bitterer thing said by an unconscious boy to an earnest teacher as he was, and I know that the man felt it deeply."

ELEMENTARY METEOROLOGY *by* ROBERT H. SCOTT, M.A., F.R.S., *Secretary to the Meteorological Council. London: Kegan Paul, Trench and Co.*, 1883.

The subject of Meteorology is one which, till quite recently at least, could hardly be considered a branch of exact science, and even now it consists very much of a vast accumulation of undigested observations and crude theories. There are however at present a number of able Meteorologists who are studying the subject in a truly scientific manner and trying to bring some order out of the chaos of facts with which they have to deal. With men like Meldrum, Buchan, Chambers and Scott devoting themselves to the subject, we may expect to find Meteorology rapidly advancing to the prominent position which it deserves to occupy. Even though it may be long before we can

foretell the weather with any amount of certainty, every careful investigation of the laws which regulate Meteorological phenomena brings us a step nearer that time. The advance in this direction in recent years has been very marked, and Meteorologists are not now content with accumulating observations, but seek to generalize upon them, and in many cases the attempt has been made with undoubted success.

A work on Meteorology by the head of the Meteorological department at once takes its place as a standard book on the subject, but what Mr. Scott has written has a better title to that position in its intrinsic merits. The plan of the book is, after a general introduction, to give an accurate account of the chief Meteorological instruments, with accurate figures and instructions for their use, followed by a pretty full account of the results of observations regarding the distribution of temperature and pressure and other phenomena which we may include under the titles of weather and climate. Throughout the book care is taken to give full credit to all previous workers on the subject, and the references given to their original papers greatly increase the value of the work.

The subject of wind measurement is one of the most difficult that Meteorologists have to face, and as yet we believe no really satisfactory instrument has been devised for the purpose. When wind pressure is measured directly by its effect on a plate, the pressure being balanced by springs, we find that "neither the results obtained from different instruments with the same size of plate nor from the same instrument with different sizes of pressure plate show such an accordance *inter se* as might be wished." On the other hand if we use a velocity anemometer, such as Robinson's, in which the velocity of the wind is measured by the rotation in a horizontal plane about a vertical axis of four hemispherical cups at the extremities of the arms of a cross, we find it very difficult, if not impossible, to translate the record accurately into wind velocity. A point of importance, which seems to have been overlooked by Mr. Scott, is the height above the ground at which the instrument should be placed. Mr. T. Stevenson has recently shown that this is a very important factor on account of the friction of the wind against the ground. Like our author, the Indian Meteorological Department entirely neglects this, and we find anemometers at all heights from 15 to 55 feet, and of course all comparisons between different stations are thus rendered useless.

In the chapter on electrical phenomena Mr. Scott seems to feel hardly so much at home as in the other portions of his work, and on one point at least he seems to us to commit himself to a statement which is untenable. It is this—"Sheet-lightning and the so-called summer or heat-lightning are nothing else than the reflection of, or the illumination produced by, distant electrical discharges." No one we think who has carefully watched the discharges of sheet-lightning taking place in a cloud by no means close to the horizon, as may often be done in this country, will be inclined to agree with our author on this point. For our own part we consider it to be a fact absolutely beyond dispute that we frequently have sheet-lightning without the existence of any distant thunder storm. Of course we admit freely that the reflections of distant flashes are often seen on clouds close to the horizon; but much of the

sheet-lightning which one observes, in this country at least, cannot be due to any such cause.

In an interesting chapter on 'The prevailing winds' the subject of the Indian monsoons is briefly touched upon, and while Mr. Scott seems to accept Blanford's explanation he falls into a curious error when he says 'In both cases [monsoons] it is the wind blowing from the equator which brings the rain.' This is true of course if we consider the effects of the one monsoon on one side of the equator, and of the other monsoon on the other side, but in no other case.

In the chapter devoted to 'The distribution of rain' one would naturally expect to find some reference, at least, to its cyclical variation, but the subject is not even mentioned, while far less important ones are brought prominently forward. In discussing the relation between the amount of evaporation and the amount of rainfall at any station, Mr. Scott remarks—"These figures show that probably, in nearly all parts of our globe, situated reasonably near the coast, the rainfall is about equal to the evaporation from a *free water surface* and that there can be no great transference of vapour from the torrid to the temperate zones." Yet amongst the figures referred to we find the evaporation at Madras given as 91·25 inches while the rainfall is 48·71, and we imagine that on the Western coast of India this proportion would be pretty nearly inverted. The fact is, very little is known as to the amount of water evaporated from a free surface, and it seems premature to attempt to draw any general conclusions from the small amount of reliable data which is available.

The book as a whole is admirably got up and many of the diagrams will be found most valuable by the student of Meteorology, but there is one curious misprint which occurs at least four times and which consists in the substitution of the decimal point for the comma used in marking off thousands. Thus on p. 57 we have the height of Mont Blanc given as 15·781 feet! In this case of course the error is seen at once, but on p. 14, where it occurs in a calculation, it is not quite so conspicuous.

NOTES AND EXTRACTS.

The Director of Public Instruction has proposed an entire reorganization of the Law class at the Presidency College, with the view of making the course of study more popular and more useful. There can be no doubt that the unpopularity of the class is very great, "attendance," as Dr. Duncan remarks, "being regarded as a disagreeable necessity," and this unpopularity seems mainly due to the inefficiency of the class as an educational agency. The number of students in attendance during the past five years has been as follows:—1878-79, 65; 1879-80, 75; 1880-81, 91; 1881-82, 115; 1882-83, 115. In these five years only one first class in the University Law Degree was obtained, whilst the total number graduating in each of the above years was 20, 4, 7, 11, and 8 respectively.

To remedy this state of affairs, Mr. Grigg recommends the following course:

(I) To reorganize the system of teaching—(*a*) by introducing a natural order of progress in the subjects studied and in the standard of instruction, (*b*) by introducing the tutorial system to supplement that of lectures, (*c*) by adopting a new system of examinations, (*d*) by making knowledge of the practice of the courts part of the course, and (*e*) by increasing the hours of instruction; (II) To strengthen the teaching staff. The first year's course should be closed, as in the University of London, by an examination of a defined standard, and no student who failed to pass should be permitted to enter on the advanced course. A student failing twice at this examination should not be permitted to continue his studies with the class. At the end of the second year's course the student should be compelled to rely solely on his work in the degree examination. If he failed he would, should he desire to pursue his studies, have to return to the class, but he should not be re-admitted after two failures. As regards the other examinations, Mr. Grigg suggests that the professor hold short examinations each month in each subject, somewhat on the system pursued in the Medical College. Marks in these examinations should, however, have no place in the results of the intermediate examination. Besides the subjects that are now taught, Mr. Grigg would add in the second year the practice of the courts. This he would effect by requiring the students to attend a specified number of civil and criminal cases in the High Court during their second year, and to take notes of such cases. One of the professors should be required to lecture on these subjects and to criticise the notes of the students. The next change is the introduction of the tutorial system by means of assistants to the professors. Mr. Grigg is convinced that one of the chief causes of failure in the law class is that the average graduate of the Madras University has not that mastery of the English language which suffices for the thorough comprehension of his law books. He needs the help of an efficient assistant to aid him in the study of his books, to prepare him for the professor's lectures, and elucidate matters which he has not fully comprehended in such lectures. On the other hand, the professor needs such an assistant to help him to conduct class examinations and generally to aid him in his work; and to avoid breaks in cases of unavoidable absence. At present the time devoted by the law professor to his class is ordinarily two hours a week, which enables him to deliver 30 lectures in each session. These lectures are usually in the evening from 6 to 7 o'clock. The practice of delivering the lectures at this hour is inexpedient, for both professor and students have been wearied by their day's work. It is proposed to change the hour to 7—9 o'clock in the morning, and to require instruction to be given each morning, Saturdays excepted. Each member of the staff would have to lecture three and two hours a week alternately. The spring term to be limited to twelve weeks beginning the first week in February, the autumn term to eighteen weeks, beginning the second week in July. To work this system, it will be necessary to employ two professors and one assistant to each. At present the fee (fixed by G. O., dated, 15th February 1875, No 46) is Rs. 30 per session. The increase then made in no way checked the attendance. The following scale has been proposed:—Rs. 50, to be compounded by paying Rs. 90 for one year, or Rs. 170 for the whole course. The attendance at a maximum of 110 students only (although it is reasonable to expect that the improved system will lead to a

great increase of the class), will give a minimum annual income of not less than 11,000 Rs. This sum will suffice to pay the following scale of salaries :—

Senior professor at	...	Rs. 300	Rs. 3,600
Junior do	...	„ 250	„ 3,000
Assistant to senior professor	...	„ 150	„ 1,800
Assistant to junior professor	...	„ 100	„ 1,200
	Total ...		9,600

The excess income may be expended on the development of the Law Library and in the institution of two law studentships to be held for one year of Rs. 30, and 20 to be given to the two first students in the intermediate examinations.

At the last meeting of the Legislative Council the Honorable T. Rama Rao introduced a Bill "to provide for compulsory vaccination in the town of Madras and in certain towns and local areas within the Presidency of Fort St. George." This is not the first time that the subject of *compulsory* vaccination has occupied the attention of the Madras Government, but it is, we believe, the first time that a Bill to give effect to the views of Government has been introduced into the Legislative Council.

At the time of the famine in 1877, when small-pox was very prevalent, the Sanitary Commissioner brought the matter under the consideration of Government and a draft Bill was prepared; but after obtaining a number of opinions upon it, it was allowed to drop. Just at that time however the Bombay Council passed an Act making vaccination compulsory, which appears to have worked well.

In 1880, after long discussion, the principle of compulsory vaccination was approved of by the Government of India and a Vaccination Act passed, on the lines of which the Bill now before the Madras Council has been drafted.

The only question for discussion in bringing in a Vaccination Bill is whether the country is ripe for *compulsory* legislation on this subject. Our legislators are evidently proceeding with caution. The operation of this Bill is confined to such Municipalities and Local Fund Circles as the Government in its discretion may deem fit. Power is also reserved to Government to withdraw the operation of the Bill from any town or Local Fund Circle in which after trial it is found unsuited.

Mr. Rama Rao in the Council gave it as his opinion that the introduction of this measure would not raise any general opposition on the part of the lower orders. He said that they had no religious or sentimental prejudices against vaccination, that they did not regard the introduction of the vaccine lymph into their arms as implying any disrespect towards Amma (the goddess of small-pox), nor did it interfere with the worship of this fearful Amma nor with their time-honoured customs. He said they regarded it as a precaution like the great Jatras, which are usually held during the prevalence of small-pox to induce Amma to be more merciful towards her votaries and to avert the consequences of her dreadful ire. The greatest enemy to the spread of vaccination is no doubt neither popular prejudice nor ignorant superstition but that apathy and want of foresight which is common to all classes of society and to all races of men. It is to counteract this that *compulsory* vaccination is needed.

We are glad to find that at last the Madras Government has the courage of its convictions, for we entirely disapprove of some of the half measures with which it has of late been trying to extend vaccination. We refer especially to the order of the Education Department making the vaccination of pupils a condition of receiving a grant-in-aid. Government professes to be anxious to extend both education and vaccination, but it now says a boy shall not have the one without the other. Again, it is the parents and guardians of pupils who are responsible for the vaccination of their children, but the order of Government to which we refer punishes not them but the school-master or school-manager who receives the grant-in-aid. A (the parent) neglects the duty of vaccinating his child, therefore Government punishes B (the schoolmaster) by withholding from him the grant which by his labour he has earned. Should the present Bill become law it will to some extent remove this anomaly, for then A (the parent) will be punished for his own neglect of duty, though we fear B (the schoolmaster) will still be punished too.

Messrs. A. M. and J. Ferguson have published as a supplement to their "Tropical Agriculturist" Mr. F. D'A. Vincent's Report on the Forest Administration of Ceylon. It forms a quarto volume of 156 pages and is full of interesting information on almost every subject connected with the natural productions of the island. It is divided into two parts, the first of which, devoted to a general description of forest produce and management, will be of most interest to the general reader. It deals with the physical and topographical features of the country; its meteorology; general characteristics of its forest vegetation; its produce in past years and the history of administration. The second part is devoted to suggestions for future management and working. The volume is well printed and its value is increased by a large and well executed map.

The publication of so large a supplement to one of their Magazines *gratis*, is a fresh illustration of the enterprise and liberality with which Messrs. Ferguson & Co. have long sought to meet the wants of planters and agriculturists, and one that will, we doubt not, be fully appreciated. To non-subscribers to the *Tropical Agriculturist* the Report is sold at Rs. 4.

On the evenings of September 25th and three following days, four lectures were delivered in the Evangelistic Hall by the Rev. T. E. Slater. The first lecture was on the 'Creation of the World.' After glancing at the most prominent ancient cosmogonies, and contrasting them with the account given in the book of Genesis, Mr. Slater dwelt on the leading truths implied and taught in the opening verse of the Bible, viz., the beginning of the universe, and the being, personality, and moral character of GOD. Atheism, materialism, nature-worship, polytheism, pantheism and fatalism were all denied by this first passage of Scripture, and the world was the workmanship of one intelligent, active, and good Creator. The several pictures of the creative processes, represented in Genesis as the work of the 'days' or periods, were next sketched; the whole narrative regarded as dealing with appearances, and offering, not a complete and scientific text-book of creation, but a good *religious primer* that could be easily remembered; the language, nevertheless, giving natural expression to modern scientific views. Genesis

and geology agreed as to the ascending order in which life appeared on the globe; and the nebular theory, and the theory of evolution were seen to draw freshness and significance from the Bible record. The question was then pressed how this true conception of a growing world, and this accurate observation of natural phenomena could be accounted for, when ancient literature was apt to wander so far astray, unless it were admitted that rational evidence was thereby afforded of the Divine inspiration of Scripture. The lecturer concluded with a practical appeal based upon the universal orderliness; the slow and gradual development of the Divine plan; and the beautiful indications of design and purpose running through the universe.

The second lecture gave an exposition of the teaching of Genesis regarding 'the origin and nature of man.' After intimating that in all probability a higher antiquity must be given to man than that which had been generally accepted, Mr. Slater unfolded the two-fold character of the human personality, body and mind, meeting in the psychical principle of life, common to man and the lower animals, in accordance with the teaching of the words, 'And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of lives, and man became a living person.' Partaking of both the animal and the angelic nature, the problem of man's life was to grow out of the animal into the spiritual; since in this latter aspect man had been made in the 'image of God;' a statement which was true in respect to capacity and prophecy rather than in actual possession, and so deriving its highest significance when realised in Christ, the Second Adam, and perfect Man, because the perfect Image of God. What was implied by a creation in the Divine image was then explained, the likeness consisting in the attainment of similar moral qualities, and in the sovereignty of man over the lower parts of creation; and the duty of thus reflecting the Divine goodness, and serving our Maker heartily, because we were formed by Him and like Him, was insisted upon. The common parentage and unity of the human race was next brought forward; this doctrine going hand in hand with belief in the unity of God, while polytheism was the great divider of the race; the various families of men being destined to be reunited in Christ, the spiritual Head and Representative of the race. The lecture concluded with an argument for a higher morality derived from the essential nobility of human nature. Man followed nature only when he allowed the higher to rule the lower; and the purpose of his creation, and the only rest for human souls, were to be found in ever approaching the Godlike.

The third lecture was on the 'Garden of Eden.' This picture of primeval man, and his subsequent 'fall,' as represented in Genesis, had been, Mr. Slater contended, not a little perverted and marred by a too rigid literalism. All history ultimately ran up to myth, and there was nothing incongruous in the idea of the Divine Spirit using allegorical forms for the teaching of religious truth, especially in a rude age. While the message of the Bible was Divine, the language was human, and marked everywhere by the influences of the contemporaneous age. The lecturer himself inclined to the view that we had in these earlier chapters of Genesis a mixture of fact and sacred symbolism, a highly idealised, and therefore profoundly instructive, representation of the state and fortunes of primeval man. The highest ideas of home and family life were shown to be involved in the Bible story; and this starting point for human liberty and development was a revelation of God's love, and a fair picture of what He desired our life should be. Paradise might be regarded as 'the cradle of the human mind'; and the ideal state was one of education, indicated by Adam's function of naming, and by implication studying the nature of the lower forms of creation; it was also represented as a social state, as taught by the provision of a companion for the man, the method of woman's creation establishing the equality of the sexes; and, finally, industry, not idleness, was the primitive conception of a happy state. The lecture concluded with a pathetic picture of man's present condition as contrasted with the bright infancy of the race, whose memory lingers in the myths of all ancient religions; and with a presentation of the hopeful character of the Christian revelation, which began with Paradise, and ended with the vision of 'new heavens and a new earth' wherein righteousness should dwell.

The concluding lecture dealt with the 'Origin of Evil.' Mr. Slater opened with a statement of the problem, which, he observed, had weighed so heavily on the human mind, that some in modern times had reverted to the old Persian theory of the dualistic hypothesis of the universe—a thought, however, which the religious mind could never tolerate. Christianity had not invented the idea of evil, though it intensified the sense of sin: it had no absolute explanation to offer of the mystery, but it irradiated it, and defined a way of escape. Having called attention to the distinction between metaphysical evil—that imperfection which is necessarily inherent in all created life—and moral evil, which is peculiar to free, rational beings, the lecture postulated three factors to account for the existence of the latter, viz., desire, will, and the objects of sense. Freedom was essential to the idea of man; without it morality would be impossible; while a freedom which did not admit of a possible fall would be unreal. God must either make man fallible, or surround Himself with mere automata, incapable of reflecting back His glory and offering Him a voluntary affection. The source and root of moral evil was thus not in matter nor in fate, but within ourselves, and was to be explained by the abused liberty of the creature. This philosophy of the moral life we had illustrated in Genesis in the trial that befel the first man. The profoundness and truthfulness of the old symbolic narrative, with its mystical trees of life and of knowledge, were then dwelt on, in accordance with the doctrine of nature, that everywhere in the material world we are confronted with types and symbols of the spiritual. The forbidden tree, *e. g.*, was to be regarded as a baneful tree—a pictured image into which Divine Love contracted the possibilities of evil so as to deprive them of their delusive vastness. The lecture closed with a demonstration of the value of the Christian scheme, not only as a practical way of salvation, but as the only sufficient explanation of the fact of man's creation. The mystery of evil were insoluble and the universe hopelessly dark, but for the hope of an ultimate establishment in righteousness for the race, from which there should be no possibility of falling.

We are expressing the feeling of all who had the privilege of hearing these thoughtful and eloquent lectures, when we say that we hope Mr. Slater will soon give them to the world in a permanent form.

The first instalment of legislation to extend Local Self-Government in this Presidency is now under consideration in the Madras Legislative Council.

The Madras District Municipalities Bill deals with all Municipalities outside the City of Madras, and we presume that ere long it will be followed by a Bill dealing in a similar manner with the Local Boards. The Honorable E. F. Webster, in introducing the Bill, pointed out that this was the fourth Act which had been introduced to regulate Municipal action in this Presidency. The beginning of Municipal life dates as far back as 1850. In that year an Act was passed which enabled the Governor in Council, if the inhabitants of any mofussil town desired to improve the lighting and repairing of their streets, &c., to appoint Commissioners, who, along with the Magistrate of the District were entrusted with the working of the Act in that town. The funds for these purposes were raised by bye-laws drawn up by the Commissioners and approved by Government. This Act being almost entirely optional was very little resorted to and thus practically inoperative. It was accordingly superseded in 1865 by the Towns Improvement Act No. X of 1865. The maintenance of the town police, the construction and upkeep of roads and the carrying out of such improvements as were essential for the preservation of public health were the duties laid upon the Commissioners, and funds for carrying out these purposes were to be raised compulsorily. Very soon after the Act came into operation it was found that its provisions were not wide enough to secure the objects which the Government had in view, and it was also considered inexpedient to leave the raising of funds for such Municipal services as vaccination, sanitary inspection, and hospitals to the option of the Commissioners as experience had shown that they rarely exercised the powers vested in them, or if they did, they provided for such services in a most inadequate manner. The Act made no provision for the important subject of education, and as the necessity for entrusting some parts of elementary education to the Municipalities had been recently recognized by Government, it was resolved that the whole subject of Municipal Government should again be brought before the Legislature. The result was the Towns Improvement Act No. III of 1871, which is still in force. Under this Act there are now, excluding the town of Madras, 47 Municipalities. The Collector is *ex-officio* President of all Municipalities within his district, but the working executive officer is the Vice-President, who must be one of the Commissioners, and is either elected by them or appointed by Government. Shortly after the passing of this Act the Government announced that it was prepared to authorise any Municipality to elect its own Vice-President on receiving an intimation of its wish to do so. As yet however only 24, out of the 47 Municipalities, have availed themselves of this privilege, and it is noteworthy that in 17 of these officials have been chosen for the post. In twelve towns some of the Commissioners are elected by the people, in the others all are appointed by Government. They cannot impose taxes other than those allowed by the Act, and the general heads of expenditure are prescribed, but within those limits they exercise a very considerable amount of administrative independence.

It will be seen that Local Self-Government is no new thing in the Madras Presidency. For the last 30 years it has been gradually growing, and we are glad to find that the Bill now before the Council proceeds upon the lines of what has been done in the past, and whilst it is an undoubted step in advance introduces no violent change. The chief alterations made are—(1) Power is reserved to Government to authorise the Municipal Councillors in any town to elect their own President, and in any Municipality where a President may have been elected the Collector will at once vacate his office as *ex-officio* President. (2) The Councillors may be wholly or partly appointed by Government, but when they are appointed in part, the number so appointed is not to exceed one-fourth of the whole. (3) The Act of 1871 neglected to impose on the Commissioners the duty of providing an adequate water-supply, and gave them little or no power to improve the condition of private wells and tanks containing impure water. The consequence has been that in some towns we could name there are splendid roads, well-equipped dispensaries, good schools and a fairly efficient police, but a water-supply drawn either from private wells into which the household sewage most assuredly percolates, or from some venerable temple tank which to the eye and nose of a stranger is most offensive, and which custom and habit alone can have reconciled the people to use. This is remedied under the proposed Act, and if necessary a water tax of four per cent. on the annual value of all lands and buildings can be levied to meet the cost. (4) The Municipal Councillors are required to make provision in Primary or Middle Schools for all children of school-going age. For this purpose they must set apart not less than 10 and not more than 15 per cent. of their income to be spent either in maintaining schools of their own or in aiding private schools. (5) A very important advance is proposed with reference to vaccination. In all those towns where the Councillors are partly appointed by election it is provided that vaccination shall be made compulsory if at a meeting specially convened for the purpose not less than two-thirds of the Councillors agree to the proposal and that Government approves it. (6) The Bill makes provision for a number of other important matters, some of them not hitherto provided for such as the regulation of offensive trades, the prevention of infectious diseases, the regulation of cart stands, slaughter-house and markets, and the selection of burial and burning grounds.

Some of the details of the Bill are no doubt open to criticism. It does not go as far in the direction of Local-Self-Government as many hoped it would. It is an evident growth, and this in our opinion is its chief merit.

SCIENCE JOTTINGS.

In a very able address on "Some unsolved problems in geology," delivered before the American Association for the advancement of science, Principal Dawson took the opportunity of pointing out how impossible it is for geologists to accept in full the assertions of such extreme evolutionists as Romanes, Haeckel, Lubbock and Grant Allen. After pointing out the difficulties involved in the sudden appearance in the Cambrian rocks of a nearly complete invertebrate fauna, of protozoa, polyps, echinoderms, mollusks and crustacea, not at one spot, but apparently throughout the ocean, he goes on to say—

"All experimental attempts to produce by synthesis the complex albuminous substances or to obtain the living from the non-living, have so far been fruitless; and, indeed, we cannot imagine any process by which such changes could be

effected. That they have been effected we know; but the process employed by their maker is still as mysterious to us as it probably was to him who wrote the words 'And God said, Let the waters swarm with swarmers.' How vast is the gap in our knowledge and our practical power implied in this admission, which must, however, be made by every mind not absolutely blinded by a superstitious belief in those forms of words which too often pass current as philosophy. But if we are content to start with a number of organisms ready-made,—a somewhat humiliating start, however,—we still have to ask, How do these vary so as to give new species? It is a singular illusion in this matter, of men who profess to be believers in natural law, that variation may be boundless, aimless, and fortuitous, and that it is by spontaneous selection from varieties thus produced that development arises. But surely the supposition of mere chance and magic is unworthy of science. Varieties must have causes, and their causes and their effects must be regulated by some law or laws. Now it is easy to see that they cannot be caused by a mere innate tendency in the organism itself. Every organism is so nicely equilibrated, that it has no spontaneous tendency, except within the limits set by its growth and the law of its periodical changes. There may however be equilibrium more or less stable * * *. A rocking stone has no more spontaneous tendency to move than an ordinary boulder, but it may be made to move with a touch. So it probably is with organisms. But, if so, then the causes of variation are external, as in many cases we actually know them to be; and they must depend on instability or change in surroundings, and this so arranged as not to be too extreme in amount and to operate in some determinate direction. * * * * * This cannot be chance. If it exists it must depend on plans deeply laid in the nature of things, else it would be most monstrous magic and causeless miracle."

He then proceeds to criticise some recent utterances of the leaders of the development school, and shows, from geological evidence, that they are inclined to go far beyond what that evidence warrants. He claims that geological evidence warrants him in saying that—

"The struggle for existence, however plausible as a theory, when put before us in connection with the productiveness of animals, and the few survivors of their multitudinous progeny, has not been the determining cause of the introduction of new species. The periods of rapid introduction by new forms of marine life were not periods of struggle, but of expansion—those periods in which the submergence of continents afforded new and large space for their extension and comfortable existence. In like manner it was continental emergence that afforded the opportunity for the introduction of land animals and plants."

The whole address is full of interest, and coming from such an authority it cannot be overlooked, for all will admit that Principal Dawson has gained the right to speak on such a subject by the very valuable researches he has made in Geology and Palæontology.

The British Association met this year at Southport on September 19th. The inaugural address by the President, Arthur Cayley, M.A., D.C.L., LL.D., F.R.S., Sadlerean Professor of pure Mathematics in the University of Cambridge, was devoted to Mathematics. After a refutation of some of John Stuart Mill's theories about Geometry, Prof. Cayley entered into some of the questions concerning ideal or non-Euclidian Geometry and its connection with ideal space of more or less than three dimensions. He then spoke at some length of the obligations of Mathematics to questions of common life and physical science, showing how many of the most important developments in pure Mathematics had their origin in such questions. The difficulty of making such a subject intelligible to an audience so mixed as that which is present at the

opening of the British Association, was evidently felt by the President, who could hardly expect many of his audience even to sympathize fully with him when he said "It is difficult to give an idea of the vast extent of modern Mathematics. This word 'extent' is not the right one: I mean extent crowded with beautiful detail—not an extent of mere uniformity, such as an objectless plain, but of a tract of beautiful country seen at first in the distance, but which will bear to be rambled through and studied in every detail of hill-side and valley, stream, rock, wood and flower. But, as for anything else, so for a Mathematical theory, beauty can be perceived but not explained."

Professor Henrici, President of the Mathematical and Physical Section, gave an address on pure Geometry, in which he pointed out the advantage of the modern over the Euclidian system, an opinion which fortunately for the coming generation is rapidly gaining ground. Prof. Henrici says "The more I have become acquainted with the difficulties of the whole subject the greater has become my admiration for Euclid's book, whilst my conviction of its unfitness as a school book has equally gained in strength." Prof. Sylvester—than whom we could get no abler judge, writes—"I should rejoice to see Mathematics taught with that life and animation which the presence and example of her young and buoyant sister (viz. natural and experimental science) could not fail to impart, short roads preferred to long ones, Euclid honourably shelved, or buried 'deeper than did ever plummet sound' out of the school boys' reach. * * * It is the living interest in the subject which is so wanting in our traditional and mediæval modes of teaching." We in India have had an opportunity of introducing these modern methods which is wanting in England, but unfortunately we have let the opportunity slip past unheeded.

In the Chemical Section Dr. Gladstone presided and took up the subject of the elementary nature of the so-called 'elements.' While not prepared to give a verdict on either side of the question, he showed many good reasons for doubting the elementary nature of such substances as Chlorine, Bromine and Iodine. While, as Lockyer has shown, the spectroscope gives strong evidence to show that in the sun's atmosphere even iron suffers dissociation.

The President of the Geological Section, Professor W. C. Williamson, gave a very important opening address on the Vegetation of the Carboniferous period, a subject in which he can speak from the experience gained by an almost lifelong study.

C. M. S.

To this year's death-roll of eminent electricians, which already contains the names of Walker and Spottiswoode, there now falls to be added that of Cromwell Fleetwood Varley, one of the most hard working and successful of the pioneers of Telegraphy. He was born at Kentish Town on the 6th of April 1828 and was the second son of Cornelius Varley, who, though an Artist by profession, was well known to science by his researches with, and improvements in Microscopes. The mother of Cornelius Varley, *née* Miss Fleetwood, was a direct descendant of General Fleetwood who married Cromwell's daughter Bridget.

Varley's school life showed little promise from a schoolmaster's point of view, but out of school scientific apparatus were his toys, and his favourite playground was his father's laboratory. He was an excellent swimmer and in his early years gained a testimonial from the Royal Humane Society for saving more than one life from drowning.

He entered the service of the Electric Telegraph Company in 1846, the year of its foundation, and during his lengthened service introduced many improvements, several of which remain to this day. Amongst these may be mentioned the method of working by means of reversed currents, that is by causing the sending key to send a current through the line and receiving instrument in the reverse direction to the signalling current during the intervals between the signals. By this arrangement several important advantages are gained.

1st. The effective power of any given battery is doubled.

2nd. The range of the relay is greatly increased in other words the prejudicial effect of variations in the insulation of the line upon the signals is greatly reduced.

3rd. The rapidity of signalling is largely increased.

This system of working is still used by the Post Office in England with the best results, and it is a matter of surprise that its adoption has not been more general. Another early invention of Varley's was that of the loop-test with the differential galvanometer. This is one of the most important means of localising a fault and where two wires are available it is the most perfect system we have.

Varley's most important invention however, and the one by which he is most likely to be remembered in the electrical records of the future, is contained in his patent of 1862, and consists in the method of working by means of the rise and fall of current strength or of the potential at the end of a cable instead of the existence and non-existence of current, or of a current and its reversal as had been the practice up to that time. To this invention coupled with Sir W. Thomson's beautiful receiving instruments we are indebted for submarine telegraphy as it is to-day.

In his harmonic telegraph he first showed that several distinct sets of electrical vibrations could be sent simultaneously along one wire, and that each set of vibrations could be separately rendered evident to the ear at the receiving end by an instrument consisting simply of a sounding board, a stretched iron wire and a magnetizing coil. This invention is the foundation of Gray's harmonic telegraph.

The re-invention of Nicholson's revolving doubler, certainly original as far as Varley is concerned, contains the principle applied by Sir. W. Thomson in his syphon recorder for electrifying the ink and causing it to flow through a capillary tube, and in his electrometer for replenishing the charge. The same principle is employed in the Holtz machine and in fact in all modern machines for the generation of what used to be called frictional electricity.

Varley's principal scientific work consisted in certain measurements of the capacity of platinum plates in an electrolite and the determination of the law of discharge of electricity through rarefied gases. Varley was a fellow of the Royal Society and a member of council of the Society of Telegraph Engineers. He was also a member of the institution of Civil Engineers. He died on the

2nd September last at the comparatively early age of fifty-five years leaving a widow, two sons, and two daughters.

G. K. W.

QUERIES.

11. (O. KUNDASAWMY)—(1) *Of the descendants of the three sons of Noah, the Europeans are the sons of Japheth, the Africans of Ham, and the Israelites of Shem; then whose sons are we, the natives of India?*

The question is not difficult to answer in its present form. If the Europeans are the sons of Japheth, then the Aryans of India are the sons of Japheth too. Indo-European and Japhetic are usually considered to be synonyms.

(2) *What is Christian life? What would be the advice you would give to one who wishes to lead the life, but who wants a guide to direct him in carrying out his object? Besides keeping ourselves aloof from evil-doers and evil-speakers what other precautions are there to prevent evil thoughts creeping into our minds?*

Christian life is Christlike life. The best guide to it is the New Testament. To keep the heart from evil thoughts, we must fully occupy it with good. This implies the entrance into it of a new principle—that of love, such love as was in Christ to God and man. Mere rules or laws of conduct are not sufficient. Both heart and life are too subtle and complex, too full of snares and surprises to be guided by an abstract code. It is a right spirit that is required. This is really gained by a full surrender of the heart to Christ, by personal devotion to a pure and personal Saviour. The presence of a perfect personal life realized in the heart has the deepest influence upon the disposition. Just as the truest teacher of domestic morality is not a treatise upon abstract ethics, or a code of rules, but the tender ties of family love, so the true moral dynamic is not a correct theology, but personal love and surrender to the "Altogether Lovely."

12. (S. RAMAKRISHNA AIYAR, MADRAS.) *A living critic says "Darwinism is incompatible with that theory of the Universe to which we owe Paley's almighty watchmaker." Granting the proof of the doctrine of Evolution is the position as stated above against the argument from Design tenable? If not, wherein does it fail?*

Our correspondent should inform us who is the "living critic" from whom he has quoted this flippant sentence. The establishment of the theory of Evolution would lead to a modification of that conception of God's creative agency which prevailed in the time of Paley. But Evolution is quite compatible with Theism. And the argument from Design, as was shown by Professor Huxley, the most eloquent expounder of Darwinism, may remain as powerful as ever. The religious spirit sees in the world a gradual progress from the lower to the higher and in man a progress towards the freedom of the spirit and to perfect moral life. If science enlarges our knowledge of nature or of the history of life, it only reveals an expanse of marvels that are full of testimony to God. God is none the less infinite in power and wisdom

that for ages his creative power has been in exercise and manifestation. "My Father worketh hitherto." And in all this work there is an onward progress, a purpose and a goal.

The world is full of the activity of reason. We see beauty in nature, instinct in animals, highest of all we have genius in man. The highest as well as the lowest is unconscious. Granted the laws or suppositions of heredity, whence that power? How is it that the stream ascends? How is it that forces acting blindly move towards an end, carry out a plan, exhibit wisdom? This the Atheist can answer only by denying the wisdom, the beauty or the good.

What does the Scientist mean by "natural selection"? Does not the very expression point to wisdom or design? Does it not imply a power that selects? It is a gross and foolish error to suppose that when in some dim way we may understand the methods or the laws of our world, we thereby discover these laws and this world to be destitute of an intelligent mind and of wisdom. Our very language belies us. Recurring to the watch we say the existence of the watch proves a watchmaker; and it is so whether the design was conceived instantaneously or gradually, whether the inventing and perfecting of the instrument was the work of one or of a thousand years. We may call the latest manufacturer the watchmaker. But the true watchmaker is the creative mind which first conceived it. The watch proves the exercise of thought and therefore, we say, it proves a thinker. So this world full of wisdom and beauty and moving onwards to a worthy goal, to increasing moral life and joy, proves design and therefore a Designer. Of course, the analogy is not perfect. All earthly analogies of Divine things are imperfect. In a human invention there may be the work of successive minds or the successive efforts of one mind. There may be corrections, adjustments or failures before there is success. In God there is one eternal mind to whom the end is as the beginning. And His ends or plans we cannot fully know. Philosophy must still begin and end in wonder and reverence. But we know enough for our argument. As in the construction of the watch there is evidence of thought and therefore of a thinker and maker, so in the world there are abundant proofs of thought or wisdom, and therefore of a Personal God possessed of mind as well as power.

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STEPHEN, THE FIRST CHRISTIAN MARTYR.

In six lectures on Heroes a very illustrious writer of this century, embodied an essential portion of his philosophy. The same author, indeed, through the greater part of thirty volumes laboured to impress on his age the work of great men in the creation of history and the deliverance of nations. Of heroes, such as he called upon us to worship, he announced six types. These he gathered from a wide range of time; the hero as Divinity for example belonging to a past period of history when as yet men in rude simplicity exalted the most gifted to the gods; the man of letters being a distinctively modern type; while poet, priest and king belong to all the ages. This enumeration is by no means complete. Brilliant thought or action we can admire. But there is a moral greatness, a spiritual greatness, often nobler, not so easily taken account of. There is the glory of self-denying philanthropy. And there are two words of Christianity that the world has been taught to prize—the names Saint and Martyr. The true glory of the saint and the philanthropist may be invisible to the world at large. The crown of martyrdom may have been bestowed on some that were unworthy. Often the noblest have been unheard of. But while they are mute and inglorious, there are others, known to us as pure witnesses, whose deaths are more eloquent than the orator's voice; and whose names, while the world honours the swift runners that have handed down the torch of truth, will be revered alike for the glory of self-renouncement in the

interest of truth, and for the light and leading still reflected from the flames of their funeral piles.

In saying this I am using the term martyr to denote one who has laid down his life for the cause of truth. This is not the original meaning of the word. Martyr, in Greek, is exactly equivalent to our word witness. Christ commanded his Apostles to be witnesses (martyrs) of his life and resurrection. The national heroes of the past were pointed to by the Apostles as martyrs (witnesses) in faith. They formed an inspiring cloud of martyrs (witnesses). In the course of the first two centuries the meaning of the word became changed. First, it was applied exclusively to those that attached themselves to the truth of Christ, became preachers thereof, and in their lives made good their faith before the world. A little later it was limited to those who through confessing Christ had encountered death. This usage alone has been preserved.

Of martyrdom there are three great phases. The first struggle was with Judaism, the Mother Religion; the second and most monumental was with Paganism throughout the Roman Empire; last and not less sacred have been the struggles within Christianity itself of the pure and the true against the formal and the false.

The great struggle with the Empire for the right to live lasted two centuries and a half. The opposition began in capricious cruelty when Apostles, such as Peter and Paul, were called on to suffer. Soon a regular system arose. Refinements of cruelty were invented and legalised to induce men and women to renounce Christ and to return to the worship of the Emperor and the gods. Death in most dreadful forms was bravely faced by a long succession of leaders, Ignatius and Polycarp, Justin and Irenæus, Cyprian and Origen; and not by such alone, but by humble labourers and innocent maidens. And in the midst of it all Tertullian exclaimed, "The blood of the martyrs is the seed of the Church."

But let us not be drawn by any study, however fascinating, from our proper subject—Stephen of Jerusalem and the conflict of nascent Christianity with Judaism in which he was the first to suffer. Yet the proto-martyr, from the nobility of his testimony, is a fit representative of the whole martyr band. The accounts we have of him are brief; the traits of character few; yet nowhere on a single spot is stronger or purer light concentrated. When he was brought before the Sanhedrim, all that sat "looking steadfastly on him saw his face as it had been the face of an angel." A radiance, as from another world, had already lit up his countenance. The substance

of his speech is preserved. It was perhaps the first publication of the Christian faith. His thoughts are clear, his mind is lucid, his sympathies are broad. Righteous indignation mingles with tender love. While loyal to the history of his race he was the first to see and recognise a fuller revelation; to distinguish the temporary and transient from the permanent and absolute; and setting aside the forms of ritual and the growths of tradition to accept the religion of spirit and of truth. And because of his spirituality and catholicity, because he taught that God the Universal Father was everywhere to be found, and that the true circumcision was of the heart, he was doomed, and he chose to die; and he died a death of rare sublimity and heroism, obtaining a vision of the ascended Lord whose life on earth had been his model, and praying for the forgiveness of his murderers with the same lips that an hour before had rebuked their formalism and hard-heartedness, and had expounded to them the truth of God.

We cannot fully construct the first ten years of the history of Christianity. The essential features we know. The Book of the Acts does not give us a complete record. Only a few events are given in detail; and, with these, the speeches of Peter the most prominent leader. And the events are given in the order of connexion rather than of time. It was a period of faith and energy and of miraculous power. In one day the number of Christians is increased from one hundred and twenty to three thousand. Soon it is five thousand. Then it becomes a great multitude, and the whole city is in sympathy. For the life and the power of the Apostles have impressed all classes.

But at this stage we need not expect to find a fully developed Christianity. The Christians are still Jews. Daily they worship in the Temple. The Mosaic law they adhere to. But they have one new doctrine—that Jesus is the Christ; and one new practice, a thorough-going philanthropy. The speeches of Peter represent to us the first Apostolic teaching. The burden of his thought is—that Jesus is the Christ to whom the Scriptures pointed and whom all Jews waited for; that in the eternal counsel of God and for man's redemption, Jesus died by wicked hands; that he was now exalted to be a Prince and a Saviour, made by God both Lord and Christ; and that again he should come in the times of the restoration of all things. This doctrine of Christ, indeed, was offensive enough to the rulers and chief priests, and the Apostles had to endure dishonour though not death. But the widest questions were as yet not raised.

They had one peculiar practice too. All property was common.

"Neither said any of them that aught of the things which he possessed was his own." "Neither was there any among them that lacked: for as many as were possessors of lands or houses sold them and brought the prices of the things that were sold, and laid them down at the Apostles' feet: and distribution was made unto every man according as he had need." Their new doctrine was centred in a great fact which they ceased not to preach—the Resurrection of Jesus. Their new life was due to another fact, to them at least as real. They had found a new spirit. It was a Divine inspiration—an ecstasy of love and power. It was recognised as the fulfilment of Christ's promise, the first gift of the ascended Lord, the descent of the Holy Ghost.

It is in connection with this communism that the name of Stephen is first mentioned. In the course of time, when the numbers increased, a difficulty arose. All administration was still in the hands of the Twelve; and a murmuring was heard in some quarters that the work was not sufficiently performed. There were at this time two great classes of Jews—the Hebrews proper, who had never left their country and whose language was the Aramaic vernacular; and the Hellenists who had travelled and spent their lives among the cities of Greece and the Empire, where indeed for centuries there had been the nuclei of Jewish communities, and whose language was the Greek, now spoken among all the more learned communities. The complaint was that the widows of the Hellenistic Jews were to some extent neglected in the daily administration of charity. Their husbands in many cases may have died abroad, and living obscurely in a city of a million inhabitants, with their own Christian community ever increasing, they may have remained unknown or little known to the busy Twelve. The Apostles recognised the emergency, and at once proposed that a new order of agents should be appointed for this purpose, while they would confine themselves to prayer and the ever-growing work of preaching. And so the community chose seven deacons, Stephen, a *man full of faith and of the Holy Ghost*, and six others, whom the Apostles set apart to the care of the poor. It is a signal proof of the absence of ill-feeling that the seven have all Greek names so that possibly all of them belonged to the class whose widows had been to some extent neglected, and were elected by a community in which they must have been in a minority.

Hereupon the narrative says, "And the word of God increased; and the number of the disciples multiplied in Jerusalem exceedingly; and a great company of the priests were obedient to the faith." This

single sentence spans the period between the election of Stephen and the close of his life. Whether it was a period of months or of years we are left to conjecture. The narrative hastens on to his early but glorious death.

Stephen rises at once before us, as the foremost leader of the Christians. He seems to cast even the Apostles into the shade. At the second mention of his name he is described as full of faith and power. His boldness and success have produced opposition. First his adversaries meet him in public debate. "There arose certain of the synagogue which is called the synagogue of the Libertines, and Cyrenians and Alexandrians, and of them of Cilicia and of Asia, disputing with Stephen." In Jerusalem there were four or five hundred synagogues. Some of these would belong to Jews of the provinces. The Libertines were Jewish freedmen or the sons of Jewish freedmen, who had had a synagogue at Rome, but, as we know from Tacitus the Roman historian, had been expelled about eighteen years before and had sought refuge in Jerusalem. The capital of Cilicia was Tarsus, and from Tarsus was a young man who was consenting to Stephen's death. That he belonged to the synagogue of Cilicia, and that he entered the lists of controversy with Stephen, though it is unmentioned, we may guess. In this obscure connection, with the Libertines and the Cyrenians first appears the illustrious pupil of Gamaliel and zealous Pharisee known as yet by his Jewish name of Saul. The Greek language would be spoken by them all. Among the combatants would be learned scribes, besides Paul. But with all their learning and tradition they "were not able to resist the wisdom and spirit" by which Stephen spake. Accordingly, we are told, the people, the elders and the scribes were stirred up against him. False witnesses were suborned. He was seized and brought before the High Priest and the Sanhedrim.

Here let us pause to consider the questions in dispute. Hitherto the chief doctrine had been the Resurrection and Exaltation of Jesus their Christ. Not more than six years probably have elapsed since the death of Christ and the founding of his Church. But already the question has widened; the new doctrine is permeating the whole life. All the customs pertaining to the Jewish religion are being sifted. The example and the words of Jesus are being recalled. And zealous partisans of the old already recognise that the growth of Christianity means the death of what is most distinctive in Judaism. "We have heard him say"—so they toss back the words of

Stephen with their distortions—"that this Jesus of Nazareth shall destroy this place (the Temple) and shall change the customs which Moses delivered us." This then is the charge, stated indeed by the adversary, but practically acknowledged to be true. The questions are no other than the sanctity of the Temple and the permanence of the Mosaic law; burning questions that touch the very details of daily life.

The Law and the Temple. This indeed might have seemed almost everything. The Temple may be said to have been included in the Law. Still it was a great fact by itself with great histories—the beginning of which went back a thousand years. For so long had it been the centre of their worship. In the development of their religion it had played a great part. And still, as centuries before, from all the provinces the tribes of God went to Jerusalem and to the sacred Temple. But Christ had whispered new truths. This glory of the past was not to be for ever. "The hour cometh when neither in this mountain (the Samaritan Temple) nor in Jerusalem shall ye worship the Father * * * when the true worshippers shall worship the Father in spirit and in truth, for such doth the Father seek to be his worshippers." This was a mark of the new dispensation. Through the ideas of special sanctity already attained, Christ was to lead his followers onward to a conception of holiness that pertained to every detail of life. No one place was holy; but every place was holy to the faithful heart. The Eternal Spirit was ever near. The Sabbath was not a day for bondage or gloom as it had become; but for man's comfort, for rest and meditation and joy. And no class of men was holy, as the priests were supposed to be. But in the truer sense, all who availed themselves of a free access to God, and lived in his presence were priestly and holy. Such truths slumbering in the minds of the Apostles burned in the thoughts of Stephen, and at last flashed into light. It may be that the circumstances of converts whose connections were with distant countries brought prominently forward the question of the Temple. And they could not have forgotten Christ's prophetic words of sadness on its coming overthrow. Whatever were the circumstances Stephen adopted with enthusiasm the spiritual faith of Jesus.

How far Stephen would have gone in the abrogation of the Law we do not know. The Law in its widest sense meant the great body of laws, rites, and institutions twined around the early history, embodied in the Pentateuch and associated with the name of Moses.

There were three divisions of the Old Testament—the Law, the Prophets, and the Holy Writings; but at this period the first was valued far above the rest. It was an age that was utterly unable to appreciate the high ethical and spiritual teaching of the prophets. Still it was in a sense a religious age; and the traditions and hopes of the nation quivered in the breasts of the people. Sects abounded, *religious or political*. The Essenes, in weariness of life, in disappointment with the world, and in disregard of the social relations, had betaken themselves to an ascetic life in the desert. Some had attached themselves to the Herods or were prepared to follow any military upstart. But the two chief classes—the popular Pharisees, and the more aristocratic and priestly Sadducees, both of whom had taken their rise in a bright period of Maccabean resistance to foreign power a century and a half before—sought, amid the loss of political liberty and national misfortune, a rallying point in their ancient law and religion. As Greece by its literature took captive the conquering Romans, so they by their law hoped to maintain, in proud isolation or with condescending proselytism, an elevation higher than citizenship of Rome. It was the age of Scriptural exposition. Schools had become numerous and were growing in importance. Soon the Rabbis, or teachers, were to be reckoned in sanctity and position higher than kings. "Set a hedge round the Law and make many disciples" was becoming the chief maxim. But alas! they could not preserve the spirit either of Law or Prophecy. We possess many of their expositions and paraphrases in the Targums. Tradition was the guide. Various schools differed in the range to be assigned thereto. We do not blame them that a scientific method was unborn; but we cannot respect the quality of their achievements. It is indeed new religious doctrines that we find. The fundamental idea of God had become changed. The name Jehovah was disused. God was declared to be incomprehensible, unknowable, remote, and the passages in the Pentateuch that speak of manifestations of God were freely changed by unscrupulous exegetes. All conceptions of Love and Brotherhood beyond their own race were entirely lost, and with a contempt, prouder and loftier than Brahmanism has ever reached, they looked down on the rest of the world.

Before men thus trained Stephen was summoned. The charge is not that he is a follower of Christ. Jesus was to them a Jew and might now be acknowledged as a Prophet. Even his followers could be tolerated as another sect if they only remained faithful to

the ancient law. But the thoughts and the action of Stephen cut to the quick their national ideal and their deep desire. He, nurtured on the words of Christ, taught to think of an Eternal Father, of the Divine sonship and universal brotherhood of man, of heart religion and of goodness, breathes only love; and is prepared to merge the national life of his country (now only a dream) in the larger life of humanity. For Stephen once thus arraigned there is no escape. He is called upon to be a faithful witness whom the world cannot forget.

Stephen's defence (Acts vii) I need not dwell upon. He takes the ground of history; traces the development of his people from Abraham their first father to the patriarchs and the Egyptian period; dwells on Moses their law-giver, but points out that he spoke of another great Prophet; passes on to David and the kingdom, to Solomon and the Temple; quotes from prophecy sentiments similar to those for which he is accused and appeals to the highest testimony of all—the Holy Ghost, the voice of God speaking to the soul. So to Stephen too the national past was precious. But with his prophetic insight he seemed to catch the law of historic development, to realise the onward progress and the consummation in Christ—the Righteous One whose coming the prophets showed before. Stephen made no compromise. Probably, certain of his fate, he did not even seek to be conciliatory. He preached the perfect faith of the world's manhood, overwhelming with scorn the idea that the Most High can be localised to a temple, and upbraiding some of those before him that in their grossness of heart they had already stained their hands with the blood of the Holy One of God.

The scene that followed is one of confusion. They gnashed on him with their teeth, rushed upon him, cast him out of the city and stoned him. Such is the welcome Judaism offers in this her hour of visitation to the most spiritual expounder of her law and history. But if one side of the picture is fiendish, the other is angelic. "He being full of the Holy Ghost looked up steadfastly into heaven, and saw the glory of God, and Jesus standing on the right hand of God, and said, Behold I see the heavens opened, and the Son of Man standing on the right hand of God. And they stoned Stephen saying Lord Jesus receive my spirit. And he kneeled down and cried with a loud voice Lord lay not this sin to their charge. And when he had said this he fell asleep." While, in their fanaticism, ignorant and vengeful as all fanaticism is, the High Priest and the Sanhedrim unite with the mob in giving rein to fiercest passions, Stephen, calm

and faithful, looks through the open Temple court of Jerusalem up to that heaven in which the Hebrew Psalmist so often saw the glory of God, and beholds the inner glory, the heavenly Temple, and the Son of Man, his true High Priest, exalted on the heavenly Throne.

The martyrdom of Stephen recalls to us the greatest of all martyrdoms—the good confession that was witnessed to the same Council, and before Pontius Pilate. It is the same spirit that is persecuting, fierce Pharisaic fanaticism supported by cold relentless Sadducean hatred. The accusations are similar. Both had reference to the Temple. Christ's observance of the Mosaic law had been watched as closely as Stephen's. But in the former case all charges culminated in one—his claim to be the Messiah. Stephen dies because he is the foremost of the Christians in giving expression to the principles of his Master.

The words of Stephen—"I see the heavens opened and the Son of Man standing on the right hand of God"—(for Christ had told the Judges that one day this would be seen by all) showed that he had treasured the sayings of his Master and made that life his model. Stephen, full of faith and grace and of the Holy Spirit, had been purified by hope so that this vision was vouchsafed. We dare not compare them too closely. An unbeliever contrasting Socrates and Jesus says the one died as a man, the other as a God. If Jesus in the grandeur of his suffering is alone, it may be said that of those who have reflected his spirit no one has come nearer to him than did the first Martyr. The life of Jesus indeed was one continued martyrdom. The holy calm, the sublime majesty and the eternal love of the dying Jesus were divine. But Stephen also, if his glowing enthusiasm seems to carry him away and if his period of trial was more brief, maintains the same fidelity to truth, the same lofty disregard of secondary considerations; and he prays as did his Master that for this crime his enemies may be forgiven, while in closing words also similar to Christ's he commends his spirit to his Lord.

Stephen's death is the first mark of the real progress of Christianity and its world-conquering power. Hitherto the new faith had been despised. It was thought best to let it perish in contempt. Now it is acknowledged that it must be killed. And now for the first time that faith passing the limits and breaking the fetters of Judaism proclaims peace and goodwill to all mankind. And the figure of Christ, applied to himself, was verified in Stephen also: "If a grain of wheat fall into the earth and die * * it beareth much fruit."

Stephen is the follower of Christ: he is the forerunner of Paul. The truths that the one died for the other accepted, struggled for, and bore aloft to victory. There is an immediate historic connection. While now Paul stands by the murderers, it is but a few months later that on his way to Damascus he is arrested by the unseen Lord whom he persecuted. If there was in Paul a mental preparation for this vision and conversion it undoubtedly dates from his collision with Stephen. The overmastering expounder, the fearless martyr, the dying saint with his angelic countenance were riveted in his mind. The saying of Augustine has been believed by many; "If Stephen had not prayed the Church would not have had Paul."

The transitoriness of the Law (as they understood it) and the Temple—this doctrine was the sum and substance of Stephen's offending. It is the sum and substance of Paul's life-long teaching. Salvation not by the law but by divine grace; righteousness not of the law but of God by faith in Jesus Christ; Christian liberty with its spirit of reason and of love, and not the beggarly elements of days and months, the yoke of circumcision, the distinctions of meats, and the other rites and ceremonies which made Christ of none effect,—these were the doctrines of the Apostle of the Gentiles. To Paul there is no temple sacred but the dwelling of the human soul. "In God we live and move" and he is "not far from every one of us." There is no distinction of Jew and Gentile. In Christ there is neither Jew nor Greek, Scythian nor barbarian, male nor female, bond nor free; all are one. Great was the triumph of Stephen's death; in no one aspect greater than in this, that to the very principles for which he was condemned, one among his adversaries, a youth of rare genius and culture, in breadth and versatility of intellect the most gifted, and in purity and elevation of purpose the most noble of his age, devoted a life of untiring self-denial, of unwearied zeal and of unrivalled success—a life too closed with the martyr's crown; and made Stephen's cause the world's.

To one nurtured in Christian truth this teaching may seem commonplace. He may not realise the ecstasy that thrilled through Stephen and through Paul, and a multitude of disciples. But the truths were then new, it was the discovery of a new world. New intuitions, new conceptions crowded into the mind. Hope and gladness filled the soul. Hence the rich and lofty literature of the New Testament, the thousand utterances that expressed a new faith and a new life. Moses at best had been but a servant, Christ was a son with lordly power. And the freedom he imparted was freedom

indeed. It was the "spirit of adoption," "the perfect law of liberty," the "glorious liberty of the children of God."

But do these truths awaken no response in the mind of India? They must; one day they will. Take away from Hinduism its multitude of temples and sacred objects; abolish its ideas of external purity or defilement; break those bonds of custom, those fetters of tradition, the rites and orgies that in the name of religion encircle life from infancy to death; and what remains? Are not all these excrescences? Yet with them what else in the popular mind has been able to live? Teach the young minds of India to look full into the face of God, the Eternal Father, to open their hearts to the throb of his spirit—to behold his beauty in the Christ, to know no glory but in character, no excellence but what is spiritual; and the hour of regeneration will come, the great wave of deliverance will bear the nation aloft.

Let us recur to the Martyrdom of Stephen.

> As rays around the source of light
> Stream upward ere he glow in sight
> And watching by his future flight
> Set the clear heavens on fire.
> So on the King of martyrs wait
> Three chosen bands in royal state,
> And all earth owns of good and great
> Is gathered in that choir.

So sings the poet of three classes of martyrs—the martyrs in will and deed; the martyrs only in spirit; and the martyrs in deed but unconsciously so, as the slaughtered innocents. Highest in the highest class stands Stephen—the first of a long and illustrious roll whose glory cannot die. As "the Cross on Calvary beams on the martyr host a beacon light in open fight," so are they beacons to us. We do not know exactly the character or the history of Stephen. In his brief public life he appears full of faith, full of grace, full of power, full of the Holy Ghost. Such glory is not suddenly attained. It is the crown of a life of onward progress, of effort and victory. And in Stephen we know that it was attained by the love and imitation of Jesus. Let us seek to attain something of his spiritual power and of his breadth of mind, and let us pray in the words of the Collect for S. Stephen's Day that we "may steadfastly look up to heaven and by faith behold the glory that shall be revealed, and being filled with the Holy Ghost may learn to love and bless our persecutors" by his noble example.

The days have passed, in civilised countries at least, when the witnesser of truth has to seal his testimony with his blood. But the

struggle of truth against error, and of spirituality against formalism belongs to every age. A life-long martyrdom of spirit may still be required of any. The martyr I said is a hero. Every age calls for the heroic and the sublime. While then we admire the glory of the martyrs shining on us from the past, let us not forget that in quietness beside us may be lives as noble, lives of suffering and of meekness in the sight of God as pure and as heroic. Let us not deem that

They who to that bliss aspire
Must win their way through blood and fire.
The writhings of a wounded heart
Are fiercer than a foeman's dart.
Oft in life's stillest shade reclining
In Desolation unrepining,
Without a hope on earth to find
A mirror in an answering mind,
Meek souls there are who little deem
Their daily strife an Angel's theme,
Or that the rod they take so calm
Shall prove in heaven a Martyr's palm.

ROBERT SCOTT.

ROMAN COINS IN SOUTH INDIA.

II.

ONE solitary instance would scarcely be deemed sufficient for the establishment of a general rule ; so in the matter of Roman coins found in South India it is well that we are not dependent upon one *find* for material to work upon. I have met with at least *thirteen* references to discoveries of the kind besides the one in Karur mentioned in the October number of this Magazine. The earliest I can find is contained in a letter written by Mr. Alexander Davidson, (Governor of Madras in 1786), and published in the "Asiatic Researches." It runs as follows : "As a peasant near Nelôr, about 100 miles north-west of Madras, was ploughing on the side of a stony craggy hill, his plough was obstructed by some brick-work : he dug, and discovered the remains of a small Hindu temple, under which a little pot was found with Roman coins and medals of the 2nd century. He sold them as old gold ; and many no doubt were melted, but the Nawab Amírul Umarâ recovered upwards of 30 of them. This happened while I was Governor ; and I had the choice of *two* out of the whole. I chose an *Adrian* and a *Faustina*. Some of the *Trajans* were in good preservation. Many of the coins could not have been in circulation ; they were of the purest gold, and many of them as fresh and beautiful as if they had come from the mint but yesterday ; some were much defaced, and perforated, and had probably been worn as ornaments on the arm, and others pending from the neck."* In 1800 Dr. F. Buchanan made a tour through Mysore and Coimbatore, taking notes for the Government. Under date November 24, 1800, we have the following:— "Palachy (Pollachy). In this vicinity was lately dug up a pot containing a great many Roman silver coins, of which Mr. Hurdis was so kind as to give me six. They were of two kinds, but all of the same value, each weighing 56 grains, one of the kinds is of *Augustus* * * * the other belongs to *Tiberius*."† They were the same as those of our latest discovery, but the inscriptions were not clear enough for him to read them aright ; his chief error lay in reading *Cæsarea* for *C. I. Cæsares*.

Sir Walter Elliot, in an article entitled "Numismatic Gleanings" published in Vol. VI, New Series of the *Madras Journal of Literature*, says : "A large hoard (of Saláka or Punch coins) was discovered in September 1807, at the opening of one of the ancient tombs known by the name of *pandu kúlis* near the village of Chavadipalayam in Coimbatore, and about 4 years earlier a pot full of the same pieces was dug up at Pennar, also in the Coimbatore province, among which was found a silver *denarius* of Augustus, which proves that they were current at the commencement of the Christian era." We also hear of Roman gold coins being found in Karur in 1806. They were 5 in number, and belonged to the reigns of Augustus, Tiberius, Antonia and Claudius. Then in a most unlikely place a gold piece turns up. "When Mr. John Sullivan was digging the foundations of a house on the hill to the south of the lake, now called Bishop's-down (Ootacamund) about the year 1827, he discovered a gold Roman coin which is now in the possession of Sir Walter Elliot."‡ We pass now from one elevation to another, and from single coins to cooly loads of them—and gold too. In 1851, as some coolies were searching for gold-dust near Cottayam in Travancore, they came upon this magnificent hoard. It is said there were as many as 5 coolies could carry. Seventy-three of them were secured by the Rajah of Travancore ; many of the rest were melted, but a few are still to be had occasionally in the bazaars on the West Coast. I have seen one in the possession of a gentleman, and heard of another, which were

* Sewell's Lists of Antiquities, Vol. I, p. 144.
† Buchanan's Journal, Vol. II, p. 31 (Higginbotham.)
‡ Sewell's List of Antiquities, Vol. I, p. 226.

so purchased for Rupees 15 and 20 respectively. Those in the possession of the Rajah of Travancore are as follows :—Augustus 8, Antonia Augustus 3, Tiberius 28, Caligula 2, Claudius 16, Nero 16,—73.* In the *Journal of the Asiatic Society, Bengal* (XX. 382), mention is made of another find at Kilalûr, 24 miles from Tellicherry, but no details are given.

In 1842 at Vellalur, near the town of Coimbatore, a large number of *denarii* were unearthed. They were buried in an earthen pot which was smashed to pieces in the struggle to secure its contents. In this pot were 134 of Augustus, 378 Tiberius, 4 Claudius, 1 Caligula and 2 unrecognizable, altogether 522. Three miles to the south of the town of Pulney, near the village of Kaliamputtûr, in 1856 "a pot containing 63 beautiful gold coins of the early Roman Emperors, Augustus and others was found 6 inches below the surface by some tank diggers." Twenty-eight of these are now safely lodged in the Central Museum, Madras. About the same time three washermen of Karur, while searching for fuller's earth, came upon a large *chatty*, containing some hundreds, if not thousands of *denarii*. There were 5 or 6 Madras measures of them. They were sold to Chetties for half their weight in rupees, and the finders have bought themselves land, and built good houses with the proceeds. I cannot hear that a single *denarius* remains unmelted. My informant who saw the hoard believes that most of them were like an Augustus I shewed him. A solitary coin was picked up some time ago near the Seven Pagodas in the Chingleput district. It was thought to be of the reign of Theodosius, but was a good deal the worse for wear. Sir Walter Elliot mentions the finding of a *solidus* of Zeno at Madura, but the most important discovery in that neighbourhood is that of a number of copper Roman coins either in the bed of the river or in the villages near, some of them of the reigns of Arcadius and Honorius. In 1860 another interesting relic of ancient communication between west and east was found near Avanashy in the Coimbatore district, in the shape of a handsome bronze jug, and two other articles of ancient western workmanship, a plate of which may be seen in the "*Indian Antiquary*" Vol. IX, p. 302.

It is to be hoped that further traces of Roman intercourse with India in those far-off times, will yet be found, but we have sufficient already to show that intercourse really existed, that it was not ephemeral, but lasted for at least some generations, and that during the

* Sewell's List of Antiquities, Vol. I, p. 244.

reign of Tiberius it was at its height. In order to trace its rise, we must refer to still earlier times. But before we do so, one remark respecting this ancient intercourse is obviously suggested. There is an idea not uncommon at the present day—a comparatively modern idea—that India owes nothing to the outside world, but that she has been self-formed and self-sustained. Other nations may have borrowed from her, but she has received nothing in return. *A priori* this seems incredible, and the fact that there has been, for 3,000 years at least, communication between India and the west, must prove that both sides of the world were influenced by it.

The history of Phœnicia, perhaps, will give the first clue to the subject in hand. If we glance at the position of Phœnicia on the map, it will at once be seen how very favourably she was situated for her vocation as 'Queen of Commerce.' Resting on the shores of the Mediterranean she had ample scope for her navies towards the west; while on the other hand the 'ships of the desert' brought from the east the riches of China and India, Persia and Assyria. Previous to B.C. 1000 she had colonies established along the shores of the Mediterranean and Atlantic, as far as Britain; and about that time her sailors manned the fleets of Solomon, King of Israel, which came to India. One eminent scholar (Benfy) has identified Souppara, a place to the north of Kallian, with the Ophir of I. Kings ix, 28, which the Greek version of the Bible translated in Alexandria in the third century B. C. renders Sôphīra, a word identical with the Coptic name for India. Amongst the things brought from Ophir by Solomon's ships were *habim, kafim, and tukim*. The first is supposed to be akin to *ibhas* (Sanscrit, elephant), the second is similar to *kapi* an ape, and of the third Dr. Caldwell says "the Hebrew word for pea-fowl which is *thûki* is certainly Dravidian." Dr. Burnell says "the Phœnicians who voyaged for Solomon came to Southern India at least, and exported from thence peacocks which were called in Hebrew by a Tamil name." In a note he adds "that the Hebrew *tuki* is the Tamil *togai* seems to be determined. The identification is finally due to Dr. Caldwell (Comp. Grammar, p. 66)."*

Now while the Phœnicians came to India for merchandise, what may they have left behind them? Dr. Burnell answers, The alphabets in which the most ancient Dravidian words are found inscribed. He says "The art of writing was little if at all known in India before the *third* century before the Christian era, and there is not the least

* Burnell's Elements of Paleography, 2nd Ed., p. 3.

trace of the development in India of an original and independent system, it naturally follows that the art was introduced by foreigners. * * * Numerous indications point to a Semitic original of the Indian alphabets. * * * Three probable sources may be suggested. The first is that the Indian alphabet came direct from Phœnicia, and was introduced by the early Phœnician traders. The second is that the original of these alphabets is to be sought in the modified Phœnician alphabet used by the Himyarites of Arabia, and this has lately been put forward as an ascertained and certain fact. As a third probability I would suggest that the Indian alphabets may be derived from an Aramaic character used in Persia, or rather in Babylonia." Again "All known facts tend to prove that the earliest date of the introduction of the Phœnician alphabet into India, what became the S. Asoka character, cannot have been earlier than B.C. 500, and was probably not earlier than 400 B.C. Writing was certainly little used in India before 250 B.C." This is the date of the Asoka edicts. Dr. Burnell, in a most interesting argument, proceeds to point out the differences between the S. Asoka alphabet and the Vaṭṭĕluttu വട്ടെഴുത്ത, alphabet—the most ancient Tamil, and almost the present Malayalam character. His conclusion is that these two alphabets were derived from one source, and that Semitic, that the Asoka alphabet was moulded for the expression of Sanscrit in the north and the Vaṭṭĕluttu for Dravidian in the south, and that the latter reached S. India by way of the three ports Musiris, Tundis and Nelkunda.

Returning from this digression we find that after the death of Alexander, the eastern trade developed itself in Egypt under the successive Ptolemies who reigned there between 323 and 144 B.C. Traders would start from Alexandria, named after its founder and completed in B.C. 332, and go up the Nile, a voyage of 12 or 14 days, to Koptos, situated on its banks in about 26 N. latitude. From Koptos a good road led through the desert to Myos Hormos (27. 12 N.) a port on the Red Sea built by Ptolemy Philadephus in 274 B.C. From Koptos there was another road leading to Bereniké (23. 55 N.) a newer port, built by the same Ptolemy, further down the Red Sea, and named after his mother. From these ports ships plied to other ports within the Straits, to the coast of Arabia and to further India.

Thus everything was ready when Augustus subdued Egypt, for the Romans to take up the eastern trade. On the one hand were an energy and ambition that knew no bound, coupled with a

refinement which demanded luxuries. Egypt supplied the means, and the distant Ind the far-famed treasures; what wonder then that the trade between east and west was brisk, long before adventurous mariners doubled the Cape of Storms? It is interesting to note how this trade was viewed at Rome. During the stormy months of winter few vessels were seen in the Mediterranean, but as soon as summer approached "the gleaming sea was alive with vessels," and among the fleets of ships whose keels ploughed the waves towards the Imperial city, none were more ardently looked for than those coming from Alexandria. At first these convoys were interesting on account of their cargoes of grain, but by and by a very different sort of cargo tickled the fancy of the crowds who thronged to the shore at Ostia or Puteoli to welcome the Alexandrian fleet. "The vessels which bore the merchandise of Egypt were required to hoist their topsails on sighting the promontory of Surrentum, both to distinguish them from others, and to expedite their arrival. These vessels moreover, according to the institution of Augustus, were of more than ordinary size, and they were attended by an escort of war galleys. The importance attached to this convoy was marked by the phrases *auspicious* and *sacred* applied to it. Hence it glided rapidly by night or day under the guidance of the Surrentine Minerva on the right, and on the left by the lighthouse of Capreæ. A deputation of senators from Rome was directed to await its arrival at the port where it was about to cast anchor. * * As soon as the well-known topsails were seen above the horizon a general holiday was proclaimed, and the population of the country, far and near, streamed with joyous acclamations to the pier, and gazed upon the rich flotilla expanding gaily before them"*

Previous to A.D. 47 the voyage to India from the Straits of Bab-el-Mandeb was very precarious and tedious, but in that year a discovery was made which materially influenced the course of commerce. "A merchant," named Hippalos, "discovered a compendious route whereby India was brought so near that to trade thither became very lucrative.† Another writer says "Hippalos was the pilot who first, by observing the bearings of the ports and the configuration of the sea, discovered the course across the ocean, whence as at the season when our Etesians are blowing, a periodical wind from the ocean likewise blows in the Indian sea, this

* Merivale's History of the Romans under the Empire, Vol. IV., p. 392.
† Pliny, see Ind. Antq., April 1879.

wind, which is the S. W. is, it seems, called in those seas *Hippalos.*"* "To those bound for India it is most convenient to depart from Okelis (now Galla or Cella, a small bay within the Straits of Bab-el-Mandeb). They sail thence with the wind Hippalos in 40 days to the first emporium of India, Muziris. * * * There reigned there when I wrote this, Coelobothras." (Pliny VI. xxvi, 104.) To this Muziris we must return anon, but for the moment other ancient ports of India may be referred to. In the north was first of all Babarikê, the sea-port of Minnagar, the metropolis of Scythia, not far from modern Kurrachee. The *nagaram* at the end of the latter name tells of our approach to India. Then further east was Baraguza or Broach on the Nerbudda. "From Baraguza the coast immediately stretches from the north directly to the south, and the country is therefore called Dachinabadês, because Dakhan in the language of the natives signifies south." So says the Periplus which according to Prof: McCrindle was written by some Arrian probably during the 1st century. "Then follow *Naura* and *Tundis*, the first marts of Limurikê, and after these Mousiris and Nelkunda, the seats of Government." "In the Indian segment of the Roman maps called from their discoverer the *Peutinger Tables*, the portion of India to which this name (Limurikê) is applied is called Damurikê." Dr. Caldwell thinks we may safely infer that this is the Tamil country. The Greek letters equivalent to L and D being so much alike, a transposition of them was very easy, and the fact also that *Modura* (Madura) is placed in *Limurikê* leads along with other considerations in the same direction. In Damir-ike—the Tamil country of the first century we have four ports mentioned, viz., Naoura (the present Honore,) Tundis, Mouziris and Nelkunda. Further, (quoting from the Periplus) "To the kingdom under the sway of Keprobotras Tundis is subject, a village of great note near the sea; Monziris which pertains to the same realm, is a city at the height of prosperity frequented as it is by ships from Ariakê and Greek ships from Egypt. * * * Nelkunda belongs to a different kingdom, that of Pandion."

In the quotation from Pliny given above we read that Caelobothras reigned over Muziris, when he wrote. The *Periplus* has Keprobotras as king of that country. There is another reference extant, viz., an extract from Ptolemy of the second century "*Karoura basileion Kerobothrou.*" Dr. Caldwell thinks that all these expressions refer to the *Chera* or *Kerala* kingdom of which Ptolemy says Karur was the capital—the Karur of our coins, situated in the Coimbatore district. *Kadalundi* (Kadal Tundi), 3½ miles south of Beypore, is in all probability the *Tundis* of the ancient historians; while *Kudangalûr* (Cranganore) 16 miles north of Cochin has been identified through *Muyirikôdu* as the Musiris of the same geographers. According to the Peutinger Tables there was at one time a temple of Augustus in this latter place, and a garrison stationed there consisting of 2 cohorts or about 1,200 men.* It is of some importance to bear in mind the relation between these sea-ports, and the chief city in the kingdom, which on Ptolemy's statement we assume for the present to have been Karur. Landing at Muziris, to the north-east a break in the high range of the western ghâts, and a gradually ascending road, would indicate the only route into the interior,—that by way of the Palghat pass. In front of that pass to the east lies the province of Coimbatore, a very large portion of the ancient Chera kingdom, and to the south-east of that province, right between the two large rivers Cauvery and Amaravathy lay the seat of government of the Chera kings. With only trifling exceptions, the whole of the hoards of Roman coins yet discovered, have been found within the supposed bounds of this country, on one side of the hills or the other, the largest proportion falling on the eastern side of the range. Mr. Sewell surmises that the copper coins found in Madura point to something more than mere trade relations between the Pandyan king and the Romans. There is the clear mark first of all that *Nelkunda* was the port of the Pandyan kingdom. This place was probably near Quilon; *Kallada*, 12 miles N. E. of Quilon, has been pitched upon as near the site, and from this place to Madura is a road through a pass in the mountains. Then we have statements by two independent historians at least, that the Pandyan kings sent more than one embassy to Rome. If we believe on the authority of the Peutinger Tables, that there was a Roman temple and garrison at Muziris, why not a Roman colony at Madura, and thus account for the Roman copper money found there? Merivale refers to a curious incident which happened at Athens when the Pandyan embassy was received there by Augustus. "An Indian sage whose name perhaps was Zarmanochanus, who followed the court of Augustus to Athens, was there initiated into the mysteries of Ceres, and then declaring

* Periplus, see Ind. Antq., May 1879.

* See Sewell's Lists of Antiquities, I, p. 254.

that he had lived so long in perfect content he would not expose himself to the chances of a reverse, burnt himself publicly, according to the approved custom of the wise men of his country." In a note he adds "This philosopher came from Broach on the western coast of India."

During Augustus' and Tiberius' reigns then, a brisk trade was carried on between the Romans and several South Indian nations, the points of contact being chiefly on the west coast, but not altogether so, as Kolkei or Kayal belonging to Pandya was a mart of great importance. This place has recently been discovered by Dr. Caldwell, and is now 3 miles inland, and not far from Tuticorin.

We may now enquire what kind of goods formed the staple of this commerce? What brought the merchantmen to India? What took they away? In the *Periplus* we have a full account of these things from which we gather that bread stuffs were neither imported nor exported; western ships actually brought their own corn, perhaps because the sailors preferred it to the oryza (rice, அரிசி,) of the Dravidians. A few plain cloths and some flowered robes were all that the Cherans wanted from Egypt in the way of clothing, and they sent back fine silks in place thereof. Fine muslins too were also exported,—the Indian weavers of these days being apparently as peerless in the production of this delicate fabric as their successors who centuries after made the muslins of Arni famous throughout the western world. Other exports were ivory, tortoise-shell from the Golden Island, and another sort which was taken on the islands off the coast, pearls in great quantity and of superior quality. There were two articles which on account of their quantity and bulkiness made it necessary for the ships engaged in this trade to be larger than others,—one being pepper, in great quantity, produced in only one of these ports, and called the pepper of Cottanara, which perhaps was the region between Tellicherry and Calicut. The other was *Malabathram*. About this article there has been a good deal of dispute. Some say it was betel, others cinnamon, and others cassia. Probably cinnamon is nearest the mark, and the qualities of the bark and oil answer to the references made to it in Greek and Latin authors. Diamonds and jacinths, (probably garnets) were also sent to the west, and with them *lithia diaphanes pantoiâ*, transparent and precious stones of all sorts. In the *Indian Antiquary* of August 1876 under the heading of "Archæological Notes" there is a very interesting article by M. J. Walhouse, Esq., late M.C.S. on "Aqua Marine Gems, ancient and modern." He

says that in the Kangyam taluq (new Darapuram) of the Coimbatore district, at a village called Podiyur, there is an extensive dyke of crystalline porphyritic granite in the gneiss rock; the dyke abounds with masses of quartz with large crystals of the same, as well as felspar, cleavelandite and garnets; the crystals of cleavelandite are remarkably fine, and it often occurs in large masses, in the cavities of which the aqua marine is found in six-sided prisms. Mr. Walhouse gives an account of the enlargement of a well in 1798 and the discovery of these gems; also of a systematic search made by a Mr. Heath in 1819-20 resulting in the securing of 2,196 stones which weighed 60 seers, and were worth £1,200. He then adds "It is highly probable that most of the best aqua marines of the true sea green colour used in modern times in Europe come from this well, and some considerations will now be offered endeavouring to show the probability at least that its produce reached Europe in classical times and may have been the object of Roman barter. * * Pliny first conjectured what science has proved, that it is but a variety of emerald, and says especially of it (*Nat. Hist.*, Bk. xxxvii, Cap. v) the best beryls are those which have the greenness of pure sea water, and come from India, seldom found elsewhere." He also remarks that they are most lustrous when artificially polished hexagonally, not being aware that they occur in six-sided crystals. Now whence came the aqua marines known to Pliny and on which the Greek and Roman engravers exercised their skill? In modern times the gem, besides occurring in the Indian well, has been found in America north and south, in Siberia, and at a few places scattered over Europe, particularly at Limoges in France. America and Siberia may be excluded from the sources of ancient supply. The localities in Europe are in regions little known to the Romans, and unmentioned by Pliny who had the best means of information. It is unknown in Ceylon. Its ancient origin seems therefore limited, as Pliny says it was, to India, and there it is only known to occur at the locality in Coimbatore described in this note, where moreover the gem is distinguished by the true sea green colour specified by Pliny, elsewhere it is bluish or muddy in tint. It must be added too that most of the finds of Roman coins have been within a radius of 30 miles of this well, and it has been stated to me that between that locality and the west coast there are plenty of Roman coins, both silver and gold, owned by cultivators who now and then dispose of one or two when they go to any distant place to a festival. Not unlikely then these aqua marine gems formed no insignificant item

amongst the *lithia diaphanes* shipped from Muziris for the western capital.

But what did the ships of Egypt bring in the way of luxuries for the Pandyans and Cherans of that day? A little white glass, some copper, tin and lead, the tin it may be coming from far off Britain; some black pigment (surmá) for the women's eyes, coral for ornaments, senthûram for incense, a little arsenic, and a little wine; also great quantites of *specie*, both golden *aurei* and silver *denarii*, amongst which no doubt our coins arrived in India. "The consignments which reached Alexandria from the east were directed to every port in the Mediterranean; but there was no corresponding demand for the produce of the west in India, and these precious freights were for the most part exchanged for gold and silver, of which the drain from Europe to Asia was uninterrupted. The amount of the precious metals thus abstracted from the currency or bullion of the Empire was estimated at 100,000,000 sesterces, or about £800,000 yearly."* "Pliny," says Dr. Oppert "complains most bitterly about the state of affairs, and is highly indignant that 50 millions of sesterces, or two millions sterling, were year by year swallowed by India to pay for eastern goods, by the selling of which the western merchants gaind 100 per cent."† There is a good deal of difference in the amounts mentioned above, and I do not understand how Dr. Oppert makes his calculation, (perhaps 250 should be read insead of 50,) but after making all necessary allowances it is obvious that a very large traffic was carried on between the ports of India, and those of the Red Sea. The wonder is *not* that any mementoes of this traffic survive in India, but that so few have been discovered. It is greatly to be feared that year by year for ages past, important discoveries have been made, but the 'fining pot' has done its work too well to leave an archæological trace behind.

HENRY LITTLE.

* Merivale's History of the Romans under the Empire, Vol. IV., p. 393.
† Madras Journal of Literature, 1878.

STUDENT LIFE AT OXFORD.

III.

IT is equally philosophical and charitable to judge an institution by its best, rather than by its ordinary, products. On this principle we must look at the "Final Honour Examinations" of Oxford, rather than at its Pass Examinations, if we would rightly estimate the excellence of its training of the intellect. Every undergraduate who aims at University distinction looks forward to the final honour examinations—"Greats," as they are significantly called,—as the goal of his ambition. There is nothing beyond them. At the London University there are M.A., D. Lit., D. Sc., &c. examinations, which surpass in distinction the B.A. honour examinations; but for the Oxford man Greats is the winning post of the race: success in Greats cannot be afterwards eclipsed, failure cannot be retrieved. The class that he gets in Greats will be the most important fact in his university career, and the longest remembered; and even if he should gain a thousand honours in later years, and attain the ranks of those illustrious whose death is, to the newspapers, an excuse for a record of their life, the "Obituary Notice" will not fail prominently to record the class he took in Greats. The world outside the university, the world of sisters and cousins and aunts, that does not understand the common jargon of university successes, nevertheless attaches a vague glory to "a First in Greats": it will serve the lucky winner of it for reputation, till he has had the chance of solidly distinguishing himself: and, for more material advantages, it will be a passport to a good Mastership, or smoothe the way to a College Fellowship.

Hence it is natural that the chief interest both of students and tutors should be centred in these final examinations, and that the curricula of them and the spirit in which they are conducted should do more than, perhaps, anything else to determine both the substance and the method of Oxford teaching.

The undergraduate who means to try for honours will keep Greats in view from the outset of his course, so arranging the work of his earlier terms as to leave the amplest possible time for it. He cannot, as the pass-man can, spend as long as he pleases in preparation and attempt the examination as often as he pleases. He must present himself for honours within four years of the time of his matriculation, or not at all. 'Mods' will come at the end of his first year, or, if he take honours in Mods, in the middle or at the end of his second year: so that for the Greats work he may have as little as two years left, and at the most cannot have more than three. At first the examination seems distant and the work easily manageable; but, somehow, 'the flying terms' get swifter and swifter wings, and growing knowledge gives an enlarged view of what the curriculum demands. As the very term approaches when

he is 'in for Greats,' matters become serious; the pleasant hours of chat among the dancing shadows of the firelight after dinner, or round the table at the late-prolonged breakfast, are given up, and mornings and evenings rigidly devoted to work: the college boat or cricket-team is forsaken, and even the necessary afternoon 'constitutional' walk or row is cut as short as possible. The idle visitor wishing to while away an hour as in by-gone days will find the 'oak sported'*: midnight oil is burned and midnight coffee drunk, as aids to study. Perhaps even the vacation is spent in the vacant and dreary college as a quieter place for reading than home would afford: as in the case of Tennyson's seven who

"stayed at Christmas up to read":—

perhaps a private tutor is engaged to supplement the help of the college tutor by more particular attention:—

"And there we took one tutor as to read."

When the examination is only a few days distant the candidate will often, on his tutor's advice, shut up his books and go to amuse himself in the country, banishing, if he can, all thought of the imminent ordeal; and will return with a refreshed and even mind for his week's encounter with the papers.

Of course it is not all men who throw themselves into the work for Greats in the way I have described. Some do not find it engrossing enough to distract them from their cricket or boating: some are content with a third or fourth class, lazily won; but for many, perhaps for most, it is a time of intense excitement, and stories are not wanting of men who have gone mad through the strain of it, of men who have put an end to their lives through disappointment in it. One element of excitement, however, which has often proved baneful at Cambridge, is happily absent at Oxford. The Oxford system gives no scope for personal rivalry. Those who pass in the honour examinations are divided into four classes according to merit, but there is no arrangement of individuals according to merit in the several classes. Hence the aim of the candidate can only be to reach a certain standard, not to beat certain competitors. There may be little harm in arranging successful candidates according to merit when the candidates are for the most part personally unknown to each other and the number of them is large; but

* Each set of rooms has an outer door of thick oak, which can only be opened from the inside and which, when it is closed, cuts off the rooms entirely from the world without. Usually this door stands open, and an undergraduate who closes it, in order to be undisturbed in his work, is said to "sport his oak."

when only a few scores are entering for an examination, as is the case in the honour examinations at Oxford and Cambridge, and when all are taught in one place, so that the merits of each are known to the others, there is generated a personal rivalry that cannot fail to be pernicious. The candidate of one college or tutor is pitted against the candidate of another: the relative progress of one and the other is eagerly noted: a keenness of excitement is introduced, and a stress of competitive labour, that must be injurious, morally as well as physically, to the rivals: the examination becomes an athletic contest, with its rival champions and trainers and backers. After a long experience of the evils of this system, Cambridge is now beginning to follow the example of Oxford and to announce in its lists only what standard men have attained to, and not what rivals they have beaten: a system under which no man can feel that his success is won at the expense of another, or that his failure is due to the superiority of another.

Seeing that these examinations fill so large a space in the view of the Oxford student, the reader may naturally ask what are their curricula and what kind of teaching they tend to encourage. For wherever an examination system is connected with a teaching system, the character of the examinations is sure to determine the character of the teaching: and if the question 'What are the requirements and what is the general spirit of the Greats examinations?' be answered, the answer will largely settle the question 'What is the value of the education given by Oxford?'

It would be tedious to set out in detail the curricula of all the Greats examinations. There are six of them—six 'schools,' as they are called:—Literæ Humaniores, Mathematics, Natural Science, Theology, Law and Modern History. Of these six any student may take one or more than one, and if he take two, he may defer the second till the end of his fifth year; but it is only the most brilliant who succeed in distinguishing themselves in two. The school of Literæ Humaniores is the most famous, and exhibits at its very best the spirit of Oxford education; its curriculum comprises (roughly speaking) equal parts of scholarship (Latin and Greek), Ancient History and Ancient Philosophy: the history and philosophy being read in the original Latin and Greek authors and being criticised by the light of modern discoveries and speculations.

But leaving aside a detailed account of these examinations there are two general remarks that may be made about them, which will

vindicate them from grave objections that are often successfully made against examinations.

They do not encourage 'cram.' There is an inherent tendency in every teaching system that is connected with examinations to degenerate into a system of cram; but Oxford, whether through its traditions of sound learning or through some special wisdom or strength of moral fibre (for cram is essentially immoral) in its legislators and teachers, has been saved, or almost entirely saved, from such degeneration. He who should be so foolish as to cram for Greats would find himself much at a loss when he got the examination papers before him. The examination which suits the crammer is one which could be most perfectly answered by verbatim quotations from books. It measures the capacity of the 'crop,' not the strength of the muscle or the vitality of the blood. It requires, as the preparation for it, feeding indeed, but not digestion or exercise. The method of the crammer is to read books,—understandingly if it may be, but if not, still to read them—and read them again and again until a clear and orderly knowledge of their contents is in his memory. Or better still than to read books is to read epitomes and analyses of books, concentrated essence of books, that will take up little space in the memory and that may be diluted *ad lib.* for the examination paper.

Preparation of this kind would be of little use for the papers in an Oxford examination. To answer them, the candidate must have the mastery of his subject as well as the memory of it: must be able to arrange his knowledge in new combinations, to cast it in new moulds: to gather together facts scattered in different chambers of his memory: to compare things that have never before been even suggested to him for comparison: to derive general rules from instances lying here and there in his mind: to search out instances that shall illustrate or contradict given general rules. He must be so much at home with his subject that he can take the standpoint of a critic in regard to it, and look at it from all possible sides. Every question will call for original thought or original arrangement and expression. For such an examination any mechanical preparation by study of hand-books or epitomes or lecture-notes, any knowledge obtained at second-hand, is of little use. In philosophy it serves little to read about the philosophers, the primary matter is to read the philosophers themselves: in history, not the results alone of historical enquiry must be examined, but the materials themselves from which history is made: in science, patient and careful work in

the laboratory must accompany the study of text-books. In all subjects in which it is possible, an important part of the preparation for Greats consists of essay-writing, an essay being taken to the tutor once or twice weekly. This not only increases the student's power of expression, but necessitates that digestion of knowledge and that exercise of the mental faculties which are the essentials of real education.

It is, of course, possible to 'cram' for any examination. If the examiner asks for knowledge, a surfeit of crammed knowledge may be poured out for him from the memory: and if he asks for something higher than knowledge, for skill and discernment and power of mind, a knack may be acquired of imitating these qualities plausibly enough. A man may learn, for instance, to produce passable essays without having any real acquaintance with the subjects of them, may become practised in putting on an air of originality and depth, may get a trick of taking broad views and making generalisations; and such acquirements are merely a higher kind of cram. Indeed enemies of Oxford make it a reproach against her that men of her training can write essays on any subject under the sun, but essays which no one under the sun is the wiser for reading. But this type of cram is at any rate far more subtle and difficult than the other, and involves the attainment of no little mental power to make it possible.

On the whole it may be said that the Oxford examinations do not encourage, scarcely admit of, cram; and the value of this commendation of them it is scarcely possible to overestimate. When it is remembered that the character of the examinations must determine the character of the teaching as demand regulates supply: when it is considered that cramming men is essentially making hypocrites of them,—making of them manufactured articles on a level with our stuccoed and veneered and electro-plated goods: and above all, when it is remembered how few examinations, whether of Universities or of Governments, have in these modern times escaped the tendency to reward and encourage cram,—it will be seen how much is said for Oxford in saying that cram finds no home there. The most ancient and renowned and powerful of English places of learning still maintains a true standard of what is involved in real education.*

* The writer had special occasion some years ago to be struck with the characteristic of Oxford Examinations alluded to above. It befell him to inspect—with that close scrutiny which is involved in answering the papers—two corresponding sets of

Another general characteristic of the Greats examinations is that *they do not tend to make specialists*. Along with the modern practice of giving ordinary youths a smattering of everything by way of education, has gone a natural correlative tendency to confine brilliant youths closely to that subject for which they seem to have special aptitude. By such exclusive devotion to one branch of learning, distinction is often gained, but the student's sympathies are dried up, the mental faculties not required in his one pursuit are distorted or destroyed, he is left a mere scholar or man of science, not a man of the world. It may be doubted whether depth and force of mind are worth winning at the cost of such narrowing of the mental powers and sympathies. It has been said that to learn one thing well is to have learnt how to learn all things; and a wise education, while it will not seek to make the student's mind a store for all sorts of knowledge, will aim to provide store room in it for any knowledge that it may be afterwards necessary to acquire. The well-educated man will feel, in reference to strange sciences or branches of learning, that though the facts of them may be unknown, yet their principles and methods are familiar: that they belong to the same world that he lives in, and that if he chose to make the voyage he could reach them.

The Oxford student is led, it is true, in the Greats Examinations to confine himself to one subject or class of subjects; and so far it might seem as if they would tend to produce specialists. But, partly by a certain breadth of view in the arrangement of the curricula, partly by the nature of the teaching and the examinations, partly by other influences at work in the University and unconnected with its examinations, the danger of narrowed sympathies and cramped energies is commonly avoided. It is often remarked that while Cambridge has produced more exact scholars, more abstruse mathematicians, more eminent scientific discoverers, Oxford has a nobler roll of men who have been eminent in the practical business of life, of barristers, bishops, statesmen, journalists and men of letters. It would be easier to name among the alumni of Oxford than among

papers, the one being the papers for the school of Literæ Humaniores at Oxford, the other the papers for the B. A. Honour Examinations in Classics and Philosophy at the London University. The ground covered by the papers was in great part the same; but anything more different than the styles of the papers and the kind of attainments required for answering them it would be hard to imagine. Two of the papers especially, both on the same subject, might be taken as models, the Oxford one of what an examination paper ought to be, the London one of all that it ought not to be.

those of Cambridge, a man equally eminent for Latin scholarship and for mathematics, a man who is at once an astronomer and a theologian, a votary of science who is also a votary of art, a politician who is a poet as well. And of men of lesser rank, there are numbers in all the professions who if they cannot produce much for the enjoyment or benefit of the world, have yet learnt at Oxford to enjoy widely themselves, and have taken for theirs the motto of the well-educated Roman:—"Nothing that interests men fails to interest me."

At the risk of repeating myself, let me note that a general review of the system of examinations and study at Oxford will suggest one instructive difference between Oxford and the modern Universities,—that they attach far more importance to degrees and examinations than she does. To those whose ideal of a university is derived from Madras, it may seem peculiar, and even objectionable, that a degree should give scarcely any clue to the mental attainments of the graduate who holds it. Yet such is the case with an Oxford degree. It may have been won without the knowledge of a single proposition of Euclid, or it may have cost three years of strenuous study of mathematics: the graduate may have passed no examination that a Hindu sixth class boy could not prepare for in two years, if he could exchange his knowledge of English for an equivalent knowledge of Latin and Greek, or he may have dealt brilliantly with papers that test as severely as any set in any University, a man's capacity to handle the most abstruse and intricate subjects. According as the student is ambitious and clever or not, he may compete for his degree in very difficult or in easy examinations: and, whichever course he takes, the degree, when won, will be the same. The B.A. degree of the Madras University indicates at the least that the holder of it has got one-third marks on papers set in one or other of certain specified subjects, and at the most that he has got full marks on the same papers; the B.A. degree of Oxford may accompany attainments a good deal lower than the lowest accepted at Madras or attainments far higher than the Madras University examinations could test.

Add to this that the M.A. degree of Oxford is conferred without examination on any graduate of two years' standing who claims it, and that it therefore indicates no more knowledge or capacity than is shown by the B.A. degree, and it will be seen that Oxford degrees cannot be taken as badges certifying mental attainment.

This will only appear unsatisfactory to those who mistake the real use of examinations. It was not until times that may be called recent

that there was any regular system of examinations at all at Oxford. When they were instituted, it was not to enable the University to put a Hall-mark upon its members, and indicate to intending purchasers what proportion of Latin and Greek or of baser metal there was in them; but to guide and restrain within suitable limits the studies of undergraduates, and to ensure that they should engage in some study. This is the proper object and use of examinations,—to give the student interest in his work, to spur him on by competition, to set before him a definite path to follow, to save him from desultory and intermittent study. When it is sought, as it is often sought now, not only by Universities but by Governments, to employ examinations for a different end, to make them tests of ability and knowledge,—when they are relied on in the choice of schoolmasters, civil servants, &c.,—they prove to be unsafe guides. For they cannot test a man's knowledge with certainty, still less his capacity, while of his moral qualities—the most important of his qualities, to whatever position he may be appointed—they give scarcely any information at all. It is a perversion of examinations from their legitimate and serviceable use as incentives and guides to study, when they are used in a deceptive effort to discover, what time and action alone can bring to light, the faculties and qualifications that men possess. Oxford does not pretend to the gift of finding out what is in men by means of examination papers, and the reward which she gives for success in examinations is not the privilege of appending certain letters to the name indicative of such and such attainments: it is rather, the honour of being admitted into a new relation to the "Alma Mater," of passing from probation and being enrolled among her tried sons. Oxford does not, properly speaking, 'confer degrees'; she receives her students into closer and more honourable connection with herself according to their merits: and of these merits, the possession of knowledge or intellectual ability counts only as one.

W. H. FINDLAY.

THE PHILOSOPHY OF THE UPANISHADS.

I HAVE perused with much interest the remarks of Mr. Ramanadha Iyer, B.A., in the last number of this Magazine, on my paper on *The Philosophy of the Upanishads*, which appeared in the first number. I do not complain that the writer of these remarks has assumed the character of my assailant; on the contrary I am glad that an educated Hindu, who has evidently bestowed a good deal of study on the philosophies of both India and Europe, has been induced to come forward and give us the benefit of his thoughts on the interesting questions under discussion. I cheerfully acknowledge the good temper and courtesy with which he has delivered his assault, and I trust that in this rejoinder I shall reciprocate the same qualities.

Mr. Ramanadha Iyer thinks I am mistaken in attributing a pessimistic temper to the sages of the Upanishads, and that they were, if anything, pre-eminently optimistic. "On this point," he says, "the Rishis taught that happiness greatly predominates over misery in any individual or phenomenal existence." I have not found anything like this in the Upanishads, and the assertion seems scarcely borne out by my opponent's admission that to them our present existence was "misery decidedly." This looks uncommonly like pessimism—like thinking that "life is not worth living." And small blame to them if they did think so. For, in defect of the knowledge or belief of a higher life beyond, for which this life, with all its mutations and sorrows and temptations, is a divinely appointed discipline, none who have deep thought or high aspiration could well be other than pessimistic. Now the sages of the Upanishads had not attained to this knowledge. It was natural, therefore, aye and it was noble, in them to imagine a "way of release," whereby at death, and even before death, they might "sink back into the unconditioned," and thus by a virtual annihilation escape from a life which none but groveling spirits could think worth living, in the absence of any prospect of a higher existence beyond, where the "obstinate questionings" of the human spirit would be answered and its highest cravings satisfied.

I think the Rishis taught a profound truth when they taught that the Supreme is, in addition to Being, Knowledge and Beatitude. In this, however, they came short of the Christian Scriptures, which teach that God is Righteousness and Love. But what I pointed out was that the notion of the Supreme Being given in the Upanishads seems to make Him unreal, and therefore incapable of either knowledge or bliss. In so far as I can make out, their conception of the Supreme Being is not that of the Absolute as opposed to the Relative, in the proper sense of that distinction. By the Absolute Being, I understand a being who transcends all the limitations that we, by reason of our finiteness of thought, necessarily impose upon

Him in the very act of conceiving Him. But the conception of the Supreme Being in the Upanishads seems to me to be identical with the "pure being" of the German metaphysicians. We reach this conception by abstraction. We think away from concrete things all their attributes, and leave nothing but bare existence. Such a conception is a mere blank—a predicateless subject, trembling on the verge of non-existence. Such a conception of the Supreme Being is void of reality, and cannot explain phenomenal existence. That this is the conception of the Upanishads, seems forced upon us by their language, as, for example, by their description of the state of the Supreme Being as that of "dreamless sleep." Dreamless sleep is incompatible with either knowledge or beatitude. No doubt there is the negative bliss of the absence of pain, but such a bliss might be attributed to nonentity itself.

Before proceeding to show in opposition to my remarks that the gnosis described by me is not incompatible with the efficacy of absolute inertion in the same direction, Mr. Ramanadha Iyer brings forward a long series of alleged facts, some of which, in my humble opinion, are new, whether to science or philosophy. On what authority is it stated that "what looks like a single tree is really a coalescence of several growing together and exhibiting organic action"? Again, there are doubtless "complex," or rather compound animals; but a compound animal is simply a collection of individual animals, vitally, or partly vitally, partly mechanically, connected together, as, for example, the animals that build coral reefs. The "Siamese twins" were vitally united by a fleshy band. Impressions on this band were common to both, but the consciousness of these impressions was peculiar to each; so that they were *twain*, not *one*, after all.

The Hindus are not alone in believing that the human body is a complex organism, that is, that it is composed of a number of organs, each of which has its own function, the sum of the functions forming the individual life. But I do not see any legitimate inference from this to the conclusion that "separate individuals only appear separate, and are not really so."

That space and time are mental forms, is the doctrine of Kant; but, so far from holding that, "if we could dissociate them from perception the residue would be a unified substance," he explicitly taught that, apart from the mental forms of space and time, there would be no perception at all.

In observations 10, 11 and 12, Mr. Ramanadha Iyer tries to break

down the distinction between the organic and the inorganic, the living and the dead, the conscious and the unconscious. It is well known to science that the inorganic becomes food for the organic, *i.e.* that the inorganic by the action of the organic upon it is changed into its substance. But that is surely no proof that they were essentially the same before. A recently published work of great merit (*Natural Law in the Spiritual World*) states the following as the approved conclusion of science: "The passage from the mineral world to the plant or animal world is hermetically sealed on the mineral side. This inorganic world is staked off from the living world by barriers which have never yet been crossed from within. No change of substance, no modification of environment, no chemistry, no electricity, no form of energy, nor any evolution, can endow a single atom of the mineral world with the attribute of life. Only by the bending down into this dead world of some living form can these dead atoms be gifted with the properties of vitality; without this preliminary contact with life they remain fixed in the inorganic sphere for ever."

In like manner we must hold that there is a "great gulf" between the unconscious and the conscious—that the appearance of consciousness in the animal world is an absolute beginning, although when it first appears it may very feebly show itself. I fail to reconcile the following statements: "We do not attribute consciousness to objects classified among the inanimate. Christians deny the soul to them as well as to inferior sentiencies. This unwillingness to give to other objects attributes that would in a sense make them equal to man, cannot be justified unless we are prepared to prove that our not experiencing their consciousness is a sufficient datum for concluding that they have no consciousness." If the ascription of soul to objects does not in every case imply consciousness, then how would the unwillingness to attribute a soul to an object be justified by our being able to prove that it has no consciousness?

I fail to see the force of the argument that we may be mistaken in denying that the heavenly b odies, such as the sun and earth, are persons endowed with consciousness, just as the parasitic worm in the human intestine can never acquire the notion that man is an organised being, moving about and doing things at pleasure. Is the analogy a legitimate one? Man, at all events, has constructed the science of Astronomy, which fact may be supposed to give him some title to judge as to the consciousness and personality of the heavenly bodies. And when *Vermis Intestina* shall have given us

reason to believe that it too has constructed a theory, say of the human digestion, we may then allow some force to the argument from its ignorance of human consciousness and personality.

Scientific men may, in a poetical mood, speak of the insectivorous plant as " watching its prey, selecting opportunities and adapting its attack to circumstances," but no scientific man would, when talking in this way, wish to be understood in a literal sense. It would be as correct to speak of a mouse-trap watching its occasion to go off, or the hammer of a clock as watching the right moment to strike the hour, as to understand the above expressions literally. The action of the Venus Fly-trap in closing its double-lobed spike-bordered leaf, when an insect alights upon it, shows conscious intelligence indeed, but the intelligence is not in the plant, but in Him who made it and endowed it with its wonderful powers.

According to Mr. Ramanadha Iyer, there is no essential difference between right and wrong. " Notions that now pass for very good righteous feelings might be looked upon as monstrous in another stage." Also " the doctrine of evolution, with the survival of the fittest, can be as well applied to the moral world as to the physical." There is no question but that there is progress in the moral sphere, so that the moral ideas of one age are higher than those of a preceding age. There may also be moral retrogression. But neither the progress nor the retrogression is in morality itself, but only in men's ability to discern it and readiness to practise it. And although the time may conceivably come when murder will not be deemed wrong, yet I cannot admit that the time will ever come (as Mr. Ramanadha Iyer thinks it must) when "murder will be quite a virtue"; for this simple reason that if men shall ever become insensible to the criminality of murder, they will then have altogether ceased to be moral beings and to make moral distinctions of any kind.

From these observations and others that I have not commented on, Mr. Ramanadha Iyer draws the following conclusion : There is one primordial substance or entity. We call it " Soul," but whether it is mind or matter is an inquiry which, while Europe has idly busied itself with it, India has wisely laid on the shelf. For this Being has no qualities and is neither one thing nor another. At the same time, however, it is subject to an unceasing law of vicissitude or evolution, called *Maya*. This law gives rise to endless forms of phenomenal existence. The emergence of each such phenomenal product, whether it be human being, or tree, or leaf, or water-bubble, is accompanied by consciousness, which inevitably assumes the

form of a delusive belief in its own individual existence and free action.

The practical question then is : How is the *gnosis*, which is to dispel this illusion and which is to conduct the human soul, tossed about on the troubled sea of phenomenal existence, into the haven of eternal rest in the bosom of the Absolute, to find a place ? Mr. Ramanadha Iyer's answer seems to me very like a *reductio ad absurdum* of the whole theory. He says : " If self, in every state of feeling, thought or volition, is strictly considered to be the Absolute exercising himself at an infinitesimal point, namely the individual, whose connection with the Absolute is rigid and not permitting any freedom of thought or action on the part of the individual,—if individuals can so exercise themselves by duly meditating and overcoming selfish feelings, so as to run counter to the process of evolution or individuation which has produced them, their powers expanding more and more so as to enable their individual selves to embrace a larger expanse of sentiencies at every step,—in a word, if individuals can thread back the past infinite evolution, till they attain the underived homogeneous primordial state, that is certainly the gnosis inculcated in the Upanishads, that will surely offer salvation." That is to say : If we are simply the Absolute thinking Himself into individuality, and if his thought is ours, so that we necessarily think ourselves to be individual and free beings, and if, while necessarily so thinking, we can also think ourselves back into the Absolute ; in other words : if two contradictory suppositions can be made at the same time about the same matter, and both may be true, then the thing is done. But unfortunately the law of non-contradiction sternly bars such a procedure. This 'if' is a sorely tried word. It has had many a hard task set it in its time. But never has a harder task been set it than that imposed on it by the exigencies of Mr. Ramanadha Iyer's argument.

As for " moral responsibility," Mr. Ramanadha Iyer thinks it a "huge bugbear." It is but the ass in the lion's skin ; listen to its bray and straightway the cheat will be detected. Of course Mr. Ramanadha Iyer, holding the views he does, is logically bound to deny the fact of moral responsibility. Moral responsibility, involving as it does the ideas of good and evil-desert, necessarily implies free-will. I suppose, farther, that, holding the fatalism of Hindu philosophy, he is logically bound to deny even the efficacy, as motive, of the fear of punishment or the hope of reward. Modern Determinism, while equally denying the freedom of the will, and thus equally cutting

away all ground of moral responsibility, yet fully recognises the motive power of accountability. And I can hardly understand how any one can question the fact that, on all hands, men are deterred from crime by the dread of legal punishment. This result, indeed, is, if not the sole, at least the chief reason why laws exist. And what shadow of reason is there to doubt that men are deterred from vice and stimulated to virtue by dread of the displeasure and hope of the favour of the Almighty? No doubt these are very imperfect motives compared with love to God and disinterested desire to please Him; but they exist and they do their work, and the best of it is that, where they exist, they are apt to be transmuted into something higher and better.

Mr. Ramanadha Iyer concludes by stating that the most formidable question put by me in my paper was: "Does not the necessity to reverse evolution assume evolution as a fact?" This hardly expresses my difficulty. The question I put was: Are not the two modes of "release" prescribed in the Upanishads based upon inconsistent assumptions? The two modes are Knowledge and Inertion. On the one hand knowledge teaches that individual existence is an illusion; and whoever receives this higher knowledge is awaked from the troubled dream of phenomenal life and henceforth enjoys the bliss of absolute existence. Henceforth he is superior to pain and death and metempsychosis. They are to him shadows without substance. But freedom from metempsychosis may be gained in a different way, *viz.* by cessation from action. According to the Upanishads good actions must be rewarded and evil actions expiated. If, therefore, a person continues to act up to the end of his life, he must enter into a new embodiment to receive his recompense. But if he can cease from action, then all that he has done, whether good or evil, may be recompensed in the present life and the necessity of re-embodiment be thus obviated.

Now it appeared to me that these two modes of release were based on radically different conceptions of the nature of things. The former of the two modes is based on the assumption that individual life is a delusion. The latter seems to imply that life and action are real and earnest. It seems to me, therefore, that although included in one system now, these modes of release must have originally sprung from fundamentally different conceptions.

C. COOPER.

THE REPORT OF THE EDUCATION COMMISSION.

The Education Commission's Report is at last given to the world, and those who have watched the progress of its investigations with interest, have now the opportunity of studying the general results to which these investigations have led, in a stout folio volume of 695 pp. Blue Books are proverbially uninteresting, but proverbs are not always true, and to those who have at heart the educational interests of India, we believe this formidable volume will be attractive in no common degree. We have received it too late for any lengthy notice this month; all we can attempt is a general review of the work done, reserving a more particular consideration of especial points for some future issue.

It is now little more than a year and nine months since the Commission was appointed.* Its object was to "inquire into the man-

* The Commission was composed of the following gentlemen:—

President:

The Hon'ble W. W. HUNTER, B.A., LL.D., C.I.E.

Members:

The Hon'ble SYUD AHMED KHAN BAHADUR, C.S.I. (who afterwards withdrew and was succeeded by his son, MR. SAYYID MAHMUD).

The Hon'ble D. M. BARBOUR, C.S., Secretary to the Government of India in the Financial Department.

The Revd. W. R. BLAKETT, M.A., Principal of the Church Mission Divinity College, Calcutta.

Mr. ANANDA MOHUN BOSE, B.A., Barrister-at-Law.

Mr. A. W. CROFT, M.A., Director of Public Instruction, Bengal.

Mr. K. DEIGHTON, B.A., Principal of the Agra College, North-Western Provinces.

Mr. J. T. FOWLER, Inspector of Schools, Madras.

Mr. A. P. HOWELL, M.A., C.S., Commissioner of Berar.

Mr. H. P. JACOB, Educational Inspector, Bombay.

Mr. W. LEE-WARNER, M.A., C.S., First Assistant-Collector, Satara, Bombay.

The Revd. W. MILLER, M.A., Principal of the Madras Christian College.

Mr. P. RANGANADA MUDALIAR, M.A., Professor of Mathematics, Presidency College, Madras.

The Hon'ble BABU BHUDEB MOOKERJEA, C.I.E., Inspector of Schools, Bengal.

Mr. C. PEARSON, M.A., Inspector of Schools, Punjab.

The Hon'ble Maharaja Sir JOTENDRO MOHAN TAGORE, K.C.S.I., Member of the Viceroy's Legislative Council.

Mr. KASHINATH TRIMBUK TELANG, M.A., LL.B., Barrister-at-Law, Bombay.

Mr. G. E. WARD, C.S., Collector of Jaunpur, North-Western Provinces.

The Revd. A. JEAN, D.D. (S.J.), Rector St. Joseph's College, Negapatam (now at Trichinopoly).

Mr. C. A. R. BROWNING, M.A., Inspector General of Education, Central Provinces.

Mr. HAJI GHULAM HASAN, Punjab.

Secretary:

Mr. B. L. RICE, Director of Public Instruction, Mysore and Coorg.

ner in which effect had been given to the Despatch of 1854, and to suggest such methods as it might think desirable, with a view to more completely carrying out the policy therein laid down." "The Government of India," says the Resolution appointing the Commission, "is firmly convinced of the soundness of that policy and has no wish to depart from the principles upon which it is based." Special stress was laid in the instructions given to the Commission on the necessity of a full inquiry into primary education and the best methods of extending it, so that sound and useful instruction might be imparted to the greatest possible number. Seeing, however, that provincial and local funds were, and were likely ever to remain, wholly inadequate to supply such education, the Commission was directed to inquire carefully into the subject of grants-in-aid of private effort. This system, elaborated originally in the Despatch of 1854, and applied with more or less success in every province, was clearly seen by the Government to be the only one upon which the educational needs of the country could ever be adequately supplied. The great hope of education was therefore in its fuller development and more impartial application. At the same time, as a subsidiary method of setting money free for more extended, because less expensive, effort, the question of the transfer of Government schools to Native management was also to be considered. A few branches of education were exempted from the Commission's inquiries. These were the general working of the Universities; technical education whether legal, medical or engineering; and the education of Europeans and Eurasians. The Province of Burmah was also excluded from the sphere of deliberation. With these exceptions the whole of Indian education, male and female, has been passed patiently under review, and when we call to mind the vastness of the field—including Bengal, Madras, Bombay, the North-West Provinces, the Central Provinces, Oudh, Assam and the Panjab,—and the bewildering multiplicity and endless variety of detail presented by each Province, it is matter of surprise that the work has been done so quickly and apparently so well.

The Commission assembled in Calcutta on the 18th of February 1882 and sat regularly till the 31st of March. Before it rose from this its first collective session, the provincial members were formed into Committees for their respective Provinces. The main work of these Committees was to draw up a series of Provincial reports, setting forth the history and present condition of education, and to collect evidence and general material to guide the Commission in

its deliberations when it should re-assemble. During the eight following months the President made a tour of the Provinces, and in each a session of the Provincial Committee was held, at which witnesses representing all branches of education were examined. To facilitate the collection of opinion a number of questions had been drawn up by the Commission. These questions were printed and a copy of them supplied to every witness, some months before the meeting of the Provincial Committee by which he was to be examined. His answers—communicated previously in writing—formed the basis of his examination. There was thus obtained a vast mass of carefully thought out and therefore valuable evidence, representing every shade of educational opinion. The number of witnesses examined was :—

Madras	33
Bombay	38
Bengal	31
North-Western Provinces and Oudh	28
Panjab	45
Central Provinces	18
Total	193

The evidence-in-chief and oral answers in cross-examination of each witness were printed, and this portion alone of the matter before the Commission occupied several thousands of closely printed folio pages. But this was not all. In addition to the direct evidence thus collected there were no fewer than 323 memorials, &c., received, and at least one of these documents was a volume in itself. The number of memorials contributed by each Province was as follows :—

From Madras	22
„ Bombay	40
„ Bengal	13
„ North-Western Provinces and Oudh ...	145
„ Panjab	96
„ Rajputana	1
„ Miscellaneous	6
Total	323

With this enormous amount of matter before it, the Commission re-assembled on the 5th of December 1882, and continued in session till the 16th of March 1883. By that date it had fully digested the

information amassed, and agreed upon its recommendations. The Commission as a whole was then dissolved, but a Committee continued in session consisting of the President, Mr. Croft, Mr. Miller, Mr. Howell, Mr. Lee-Warner and Mr. Deighton. To this Committee was entrusted the drawing up of the elaborate Report which we have now before us. Mr. Jacob was specially deputed in addition to take charge of statistical details.

After a short introduction the Report deals with the subjects discussed by the Commission in the following order :—

Cap. II. Historical review of education in India.
„ III. Indigenous education.
„ IV. Primary education.
„ V. Secondary education.
„ VI. Collegiate education.
„ VII. Internal administration of the Department : control, inspection, examinations, text-books.
„ VIII. External relations of the Department to individuals and public bodies : grants-in-aid ; private efforts.
„ IX. Education of classes requiring special treatment ; chiefs and nobles, the Muhammadans, the aborigines, low castes and the poor.
„ X. Female education.
„ XI. Educational legislation.
„ XII. Financial summary.
„ XIII. Recommendations of the Commission.

The whole constitutes an enormous storehouse of facts as well as a declaration of policy, and is one of the most exhaustive records of its educational activity that any country has ever produced. When the mass of provincial reports, together with the evidence and memorials, is published the entire Report will probably be unique in its comprehensiveness. The statistical tables alone, appended to this first volume, occupy 77 pp., and in these the general results of the investigation—as far as they can be expressed in numbers—are brought out with a clearness and simplicity that reflects great credit on the representative Committee, and especially on Mr. Jacob.

So far as we are able to speak from the brief glance we have as yet given it, both the conclusions arrived at and the recommendations made seem firmly based upon facts. It is at any rate evident that it has been the determination of the Commission throughout that they should be so based. No doubt however they will all

be submitted to careful criticism and testing from many quarters. Not the least benefit that will result from the publication of the Report will be the free discussion of problems that have hitherto been regarded as beyond the sphere of practical politics. There is unquestionably much in the Report upon which the press of both India and England will have something to say, but fortunately it is a subject which may be discussed with energy and yet without animus. To us, one of the most remarkable things is the unanimity of the Commission. Of the twenty-one members, *all* have signed the Report and (in addition to an explanatory note by the President on a point of subordinate importance) there are only three dissents and two minutes recorded. These are :—

(1.) A general dissent by the Hon. B. Moorkerjea from all points bearing on Bengal, in which the Commission's Report differs from that of the Bengal Provincial Committee. The points from which he thus dissents are, however, not specified in detail.

(2.) A dissent by the Rev. Dr. Jean from a section containing 29 out of the 683 paragraphs of the Report on the ground that it goes too far in the direction of recommending the withdrawal of State Colleges.

(3.) A dissent by A. Howell, Esq. from a few of the recommendations, the most marked feature being that he dissents from the same section as Dr. Jean on the ground that it does not go nearly far enough.

(4.) A minute recorded by the Hon'ble D. M. Barbour on certain of the conclusions arrived at. Mr. Barbour, however, very honestly says that he was not present when these subjects were discussed. Had he been present it may be that this minute would not have been put on record.

(5.) A long minute by K. T. Telang, Esq., which is not so much a dissent as a re-statement and enlargement of particular portions of the Report, with arguments against a few of its conclusions.

Thus the dissents are comparatively trifling, and we may say that for all practical purposes the conclusions of the Commission are unanimous. This is remarkable considering the large number of vexed questions with which the Commission has had to deal. It says much for the patience and thoroughness with which every subject must have been discussed, as well as for the unprejudiced desire to arrive at right and fair decisions which every member must have brought to the task. And it is all the more remarkable considering the composition of the Commission. Eight of the mem-

bers (besides the Secretary) were members of the Educational Department, and only four were representatives of private effort. To these were added five non-departmental Government officials, (more than one of whom however, we believe, have served in the Department of Education,) and four independent Native gentlemen. Practical unanimity from so varied a body must have great moral weight, though the suspicion almost unavoidably remains that in most things the department must have had its own way. How far that suspicion is correct it is impossible for us to say without a more minute examination of the Report than we can at present pretend to make.

In Cap. XIII we have a summary of the recommendations of the Commission, classified according to subjects, in the order in which these are treated in the body of the Report. These recommendations alone occupy eighteen pages. They are 222 in number and appear to touch almost every important educational question. With a few of these which to us seem the most important and the best adapted to show the general tendency of the Report we must close this brief notice.

(1). *On Indigenous Education.*

13. That Municipal and Local boards be required to give elementary indigenous schools free play and development, and to establish fresh schools of their own only where the preferable alternative of aiding suitable indigenous schools cannot be adopted.

(2). *On Primary Education.*

3. That while every branch of education can justly claim the fostering care of the State, it is desirable, in the present circumstances of the country, to declare the elementary education of the masses, its provision, extension, and improvement, to be that part of the educational system to which the strenuous efforts of the State should now be directed in a still larger measure than heretofore.

4. That an attempt be made to secure the fullest possible provision for, and extension of, primary education by legislation suited to the circumstances of each Province.

36. That Municipal and Local boards administering funds in aid of primary schools adopt the rules prescribed by the Department for aiding such schools, and introduce no change therein without the sanction of the Department.

(3). *On Secondary Education.*

1. That in the upper classes of high schools there be two divisions,—one leading to the Entrance examination of the Universities,

the other of a more practical character, intended to fit youths for commercial or other non-literary pursuits.

8. That the claims of efficient and successful teachers in aided schools be considered in making appointments to posts in the service of Government, and that in cases duly certified by the Education Department the 25 years' rule be relaxed.

9. That the Director of Public Instruction, in consultation with the managers of schools receiving aid from Government, determine the scale of fees to be charged and the proportion of pupils to be exempted from payment therein.

22. That promotions from class to class be left entirely to the discretion of the school authorities.

23. That it be distinctly laid down that the relation of the State to secondary is different from its relation to primary education, in that the means of primary education may be provided without regard to the existence of local co-operation, while it is ordinarily expedient to provide the means of secondary education only where adequate local co-operation is forthcoming; and that therefore, in all ordinary cases, secondary schools for instruction in English be hereafter established by the State preferably on the footing of the system of grants-in-aid.

(4). *On Collegiate Education.*

5. That Indian graduates, especially those who have also graduated in European Universities, be more largely employed than they have hitherto been in the colleges maintained by Government.

9. That the Principal or one of the Professors in each Government and aided college deliver to each of the college classes in every session a series of lectures on the duties of a man and a citizen.

10. That while it is desirable to affirm the principle that fees at the highest rate consistent with the undiminished spread of education should be levied in every college aided by the State, no aided college should be required to levy fees at the same rate as that charged in a neighbouring Government college.

18. That in place of the system existing in Madras, according to which the first twenty students at the University Entrance and F.A. examinations are allowed to read free in any Government college, liberal provision be made for a system of scholarships open to general competition and tenable in any college.

(5). *On the Internal Administration of the Educational Department.*

4. That managers of schools in competition be invited by the De-

partment to agree to rules providing, as far as the circumstances of the locality allow, (1) that, except at specified times, a pupil of one school be not admitted to another without a certificate from his previous school; (2) that any fees due to that school have been paid; and (3) that he do not obtain promotion into a higher class by changing his school.

7. That all schools managed by the Department, or by Committees exercising statutory powers, and all other schools that are regularly aided or inspected, or that regularly send pupils to the examinations of the University or of the Department (other than examinations which are conducted by the Department for admission to the public service), be classed as public schools, and sub-divided into departmental, aided, and unaided; (2) that all other schools furnishing returns to the Department be classed as private schools; and (3) that all other details of classification be referred to the Statistical Committee appointed by the Government of India.

21. That Normal schools, Government or aided, for teachers of secondary schools be encouraged.

(6) *On the External Relations of the Department.*

8. That with the object of rendering assistance to schools in the form best suited to the circumstances of each Province and thus to call forth the largest amount of local co-operation, the grant-in-aid rules be revised by the Local Governments in concert with the managers of schools.

10. That whilst existing State institutions of the higher order should be maintained in complete efficiency wherever they are necessary, the improvement and extension of institutions under private management be the principal care of the Department.

18. That care be taken lest public examinations become the means of practically imposing the same text-books or curriculum on all schools.

20. That the further extension of female education be preferentially promoted by affording liberal aid and encouragement to managers who show their personal interest in the work, and only when such agency is not available by the establishment of schools under the management of the Department or of Local or Municipal Boards.

21 That a periodically increasing provision be made in the educational budget of each Province for the expansion of aided institutions.

24. That when Local and Municipal Boards have the charge of aiding schools, (1) their powers and duties be clearly defined; (2) that

it be declared to be an important part of their duty to make provision for the primary education of the children of the poor; (3) that precautions be taken to secure that any assignment to them from public funds for purposes of education be impartially administered; (4) that an appeal against any refusal of aid lie to the Department.

27. That in order to evoke and stimulate local co-operation in the transfer to private management of Government institutions for collegiate or secondary instruction, aid at specially liberal rates be offered for a term of years, wherever necessary, to any local body willing to undertake the management of any such institution under adequate guarantees of permanence and efficiency.

30. That all Directors of Public Instruction aim at the gradual transfer to local native management of Government schools of secondary instruction (including schools attached to first or second grade colleges), in every case in which the transfer can be effected without lowering the standard, or diminishing the supply, of education, and without endangering the permanence of the institution transferred.

32. That in dealing with the question of the withdrawal of Government from the management of existing colleges, these colleges be regarded as divided into three classes, *viz.*:—

(1) Those from which it is premature for Government to consider the propriety of withdrawal; on the ground that they are and will long continue to be, the institutions on which the higher education of the country mainly depends.

(2) Those that might be transferred with advantage, as a measure promising useful political results, to bodies of native gentlemen, provided the new managers give satisfactory guarantees that the college will be maintained (1) permanently, (2) in full efficiency, (3) in such a way as to make it adequate for all the wants of the locality.

(3) Those which have been shown to be unsuccessful, or of which the cost is out of proportion to the utility, and from which Government might advantageously withdraw even with less stringent guarantees for permanent efficiency. Such colleges should be closed if, after due notice, no local body be formed to carry them on with such a grant-in-aid as the rules provide.

33. That the Government of Madras be requested to consider the propriety of dealing with the second grade Government colleges

of that Province on the principles applicable to the second or third class as may be deemed advisable in each case, in the light of the recommendations made by the Madras Provincial Committee.

(8). *On Female Education.*

3. That the conditions of aid to girls' schools be easier than to boys' schools, and the rates higher—more especially in the case of those established for poor or for low caste girls.

(9). *As to Legislation.*

1. That the duties of Municipal and Local boards in controlling or assisting schools under their supervision be regulated by local enactments suited to the circumstances of each Province.

9. That it be incumbent upon every Local Government or Administration to frame a Code of rules for regulating the conduct of education by Municipal and Local boards in the Provinces subject to such Local Government or Administration.

GEO. PATTERSON.

TRUTH AND FANCY.

Suggested by a picture of Spring in the Erzgebirge

Trees decked out in early bloom ;
Lofty hills in winter's gloom ;
Snow upon the mountains high ;
And all above a deep blue sky ;
Below, a stream still foaming white ;
Above, the swallows early flight ;
And, near the firwood's evergreen
The corn's first tender shoot is seen.
Such was the picture sent to me
And thus I seek to find the key.
Massive hills in winter snow,
Frowning down on all below ;
Fir trees' dark and gloomy shade,
Thus address the sprouting blade,
Thus they chide the budding trees,
Whose blossoms scent the gentle breeze ;
" Check this sudden burst of joy
Sport not like a reckless boy,

You have lived for scarce a day,
And think that Life is only play ;
Life is solemn, life is cold,
This we know for we are old ;
But one day more and yon gay flowers
Will be swept down by wind and showers ;
And ere a few short months are o'er
The corn be gathered by the mower ;
Ye should rather wail and sigh,
Born to bloom and then to die !
But we, who lived long ere your birth
Will still live on when hushed your mirth ;
When all is wrapped in winter's snow,
And ice has hushed the streamlet's flow,
Our massive grandeur still will stand,
No aid *we* need, nor helping hand.
We stand untouched by Time's stern tooth,
For you are Fancy ;—We are Truth !"—

Such were the words of warning speech
Your trees and mountains seemed to teach ;
But then methinks a voice I heard,
Perhaps from some stray summer bird,
Or else the blossoms of a day
Thus their reply did strive to say :
" What though our Life be short and fleet,
Life is joyous, Life is sweet !
Sweet the day's unbroken calm !
And air all laden with our balm !
Sweet our own and others' flowers,
Sweet the bath of vernal showers !
Joy to us and all we bring,
And therefore filled with joy we sing :
Live on, ye hills so blue and cold !
Live on, ye fir-trees hoar and old !
Cold, stern, and knowing nought of ruth,
Well fitted ye for type of Truth !
But we in Fancy's colours drest,
'Tis we who give the picture zest ;
Truth stands for ever, stiff and cold,
But Fancy tips the scene with gold !"

J. D. B. GRIBBLE.

LITERARY NOTICES.

THE CITIES OF EGYPT, *by* REGINALD STUART POOLE, *Keeper of Coins in the British Museum, Correspondent of the Institute of France. London : Smith, Elder and Co.*

Of the triumphs of modern scholarship, none is so marvellous as the resuscitation of ancient Egyptian history. Egypt is ancient with an antiquity compared with which old India is a mere youth. When Moses appeared upon the scene, she looked back upon a vast civilization, and a sufficient number of political revolutions to satisfy a South American Republic. Joseph, four hundred years earlier, was the Dewan and *de facto* ruler of a magnificent kingdom whose capital was Zoan. When we meet with Abraham in the dim twilight of a still remoter past, Egypt was an empire, possessed of monuments pointing back to yet earlier times of real national life and civilization. From the inscriptions on these ancient temples and tombs, from the rubbish mounds that mark the sites of cities whose names had been forgotten, from the very potsherds of the past, modern scholarship, under such men as the late M. Mariette and Dr. Brugsch and M. Renouf, has been recovering, not a lost chapter of history merely, but whole volumes of it, quite recently believed to be irrecoverable.

Shapeless mounds that cover over what remains of famous cities now no more, rather than the monuments that are still, thanks to the matchless Egyptian climate, more or less completely preserved, are the documents which the scholar has to decipher. The ruthless hand of the tourist has been for the last fifty years destroying what the greed and fanaticism of conquerors had left, of sculptured stone and painted wall, and priceless hieroglyphic inscription. But the treasures buried beneath those mounds are harder to reach, and yet await the scholar almost undisturbed. Time, patience and money are all that is wanting to put the world in possession. The book before us is, as it were, an inventory of what we have. Taking the great historic sites of Egypt in turn, Mr. Poole writes on each a charming essay, embodying in popular form all that is most interesting which is already known, and pointing out what we need further enlightenment about.

To students of the Bible, every foot of Egyptian soil is full of interest. The discoveries that have already been made are marvellously instructive, and bring out with wonderful clearness how perfectly historical the Bible references to Egypt are. But the interest centres in Zoan, the capital of Joseph's Pharaoh, the centre of the great oppression, and the scene of those 'wonders in the field of Zoan' that yet thrill the hearts of devout Israelites. Close to it was the land of Goshen, in which the pastoral Hebrews found so congenial a resting-place, and where also they were made to serve with rigour under a king of a different policy. In these regions, if anywhere, we may expect to find the vanished links in the chain of history. "There a little below the earth that we are too indifferent to turn, lie countless fragments of history, probably documents of the rule of Joseph and of the age of the Oppression."

In another place Mr. Poole says "Our failure in this duty is a disgrace to our love of knowledge, a scandal to our love of the Bible. We have an evil reputation for our neglect of research in Egypt. It may be difficult to raise funds for work in Greece or Turkey, but there is no excuse for the polite indifference of the educated class to a subject which deeply interests the half-educated population, even to the children of the village schools * * * The French have worked here and elsewhere in Egypt with well-rewarded vigour; why should not we give them our aid, and brighten the last years of our boasted nineteenth century with the glory of great discoveries, so that when we have ended our labours, our children may say, 'We can remember the excavations in the field of Zoan and in the land of Goshen'?"

A most interesting enquiry is that into the probable route of the Exodus. Such vast geological changes have taken place in Lower Egypt during the last 3000 years as to obliterate almost completely the ancient landmarks of the country. The three eastern mouths of the Nile have been blotted out and absorbed in the Lake Menzeleh, and a series of fertile districts has been converted into a marsh. The Red Sea has retired to the south by many miles, leaving it uncertain whether the lakes that are found along the Suez Canal belong to the Mediterranean or the Red Sea system. In these circumstances, conjecture was wild, and the sites of places mentioned as on the route of the Exodus were uncertain. In 1874 Dr. Brugsch dazzled the Oriental Congress held in London by a new theory of the Exodus, which taught that the Israelites did not cross the Red Sea at all, but passed along the narrow and treacherous way between Lake Serbonis and the Mediterranean, while the Egyptians perished by an overflow of the ocean. It is obvious that such a theory in no way got rid of the miraculous, for the uncommon character of the alleged phenomenon and the opportuneness of it to the circumstances of the Israelites are as remarkable as before. On other grounds however Mr. Poole differs from Brugsch, and from his later works it seems that that scholar has no very clear view of the details of his scheme. Mr. Poole concludes with these words, "When we reflect on the vast period of time which has passed since the Exodus, three thousand years, or ninety generations of men, we may well wonder that any of the places mentioned in the ancient narrative can yet be traced. When we recollect what changes time and war have wrought, it is still more marvellous. There has been no other history but that of the Bible, and this we have to place side by side with documents which say nothing of the event. Tradition does not help, but misleads us. Yet enough remain, even without turning the sand for the historical treasures it conceals, to enable us to restore the main outlines of the map of the Exodus. Future research may tell us more, but we can scarcely doubt that to the end of time the actual place of the passage of the Red Sea will be a mystery."

The chapters on Heliopolis or On, the priestly university city of the most ancient Egypt, and on Alexandria, the university city of what we moderns call the ancient world, are deeply interesting. Space will permit only a brief reference to the former. Its origin is lost in remote antiquity. Both city and university were in all probability founded before Memphis, and Memphis was founded by the first king of Egypt. On was the sacred city of the Sun-gods, Ra the sun generally, and Tum the sun of the night, and it contained

an accumulation of sacred objects, such as the black bull, the sacred crane representing the mystic phœnix, and the persea tree on whose fruits the gods wrote the name of the king. The oldest record of the town is that on the obelisk still standing, whose date is before the time of Abraham. In Genesis we next meet the name, in connection with Joseph's father-in-law Potipherah (belonging to Ra), who is called the priest of On. It is the Beth-Shemesh or house of the Sun, of which Jeremiah prophesies destruction by Nebuchadnezzar. Disappearing from sacred history, it begins to be of interest in the early history of Greek Philosophy. The adventurous Greeks were early known as mercenaries in the Egyptian armies and had a trading station (Naucratis) in the Delta. Their enquiring minds began to seek for wisdom in other lands, and to Egypt, the nearest of the lands of primitive civilization, the Greek philosphers turned. Science had flourished for ages in the Egyptian schools; here they would find what they wanted, knowledge of the origins of things. At first they were received with suspicion, for the priests did not care to tell their secrets to men who could speak to them only through interpreters, and who dared to ask flippant questions on subjects that they regarded with awe. But in course of time confidence was begotten, and the priestly homes were opened to the strangers. Hither came Plato the philosopher and Eudoxus the mathematician. The latter, we are told, having studied under Plato, received from his friends letters of recommendation to the reigning Pharaoh, and was by him handed over to the priests. "He shaved his head," says Mr. Poole, "and conformed to their rule of life, and after long study at Heliopolis, came away with advanced knowledge of astronomy. In his case we cannot doubt that Egyptian science was of value: rude as it was, it surpassed what the Greeks had hitherto possessed. How far Plato benefited by his stay in Egypt, we do not know. As however we learn more and more of the ideas of the Egyptians, we find the connection with Plato's notions of divine things more and more marked. Nor are there wanting in his dialogues touches which show a personal knowledge of Egyptian character."

It would be interesting to know in detail what the 'wisdom of the Egyptians,' in which Moses was trained, really included. There is no direct information, bnt we can infer a good deal from what we find learned men of that time knew. There must have been in the first place, a knowledge of the Egyptian language, and its various forms of writing. In ancient Egypt, a knowledge of the art of writing meant no small training in art, for the picture letters and symbols are beautifully drawn and painted. Unlike the Greeks, the Egyptians were not above making themselves acquainted with other languages than their own, and a second language, Hebrew or some kindred Semitic tongue, was undoubtedly learned, at least in the time of Moses, for Semitic words are freely introduced and correctly transliterated in inscriptions of that date. Every priestly scholar needed to know the sacred books and rituals as well as astronomy. Arithmetic to meet the wants of common life, geometry, absolutely essential in a country whose land marks are annually obliterated by the rise of the Nile, and mechanics, an art that must have been cultivated with much success by the builders of Thebes and Memphis, were also studied. From the earliest ages Egypt was the home of Medicine, and the very name of Chemistry points to an Egyptian origin. The official scribes must have

learnt the principles and practice of law. Philosophy does not seem to have been a regular branch of study, for the colleges were under priestly control, and the moralists were their natural opponents. "To us," says Mr. Poole, "who are accustomed to the vast range of studies at our universities, this seems a narrow scheme of education; but we must not forget that it contained the germ of all later instruction: and that the old Egyptian universities may be favourably compared with the other ancient seats of learning, and with those of the Middle ages."

The university at On, purely Egyptian and little influenced by foreign ideas, gave place to the Museum of Alexandria, where the ancient system was modified to suit the Greek population. "As the obelisks, the ornaments of the old city, were carried away to beautify the new capital, so the seat of learning was transferred from Heliopolis to Alexandria. * * * Thus when the streets of Heliopolis became silent and the homes of the teachers were empty, another university had grown up in the midst of the busy centre of trade, the wealthy Alexandria, now the second heart of Greek wisdom, the new Athens, destined to a longer intellectual supremacy than the ancient 'Eye of Greece'."

The chapter on Alexandria is perhaps the most interesting in the book, but we cannot enter upon it here.

WALKS IN THE REGIONS OF SCIENCE AND FAITH. *A Series of Essays. By* HARVEY GOODWIN, D.D., *Lord Bishop of Carlisle. London: John Murray, Albemarle Street.* 1883.

Dr. Goodwin is perhaps best known to students by his text-books of mathematical science, and in this volume of somewhat miscellaneous essays we are reminded of his earlier studies as well as of his later career. The opening essay, on the connection between Mechanics and Geometry, is a partial reprint of a paper in the Transactions of the Cambridge Philosophical Society. It is here maintained that the connection between these two Sciences is close, that in the straight line are expressed the two ideas of direction and magnitude which are also the fundamental ideas of Mechanics, and that in the recognition of this we are gradually led to a clearer intuitive perception of the truths of Mechanics as really axiomatic.

The second Essay, on the Unity of Nature is perhaps the most important in the series. In it the suggestion is made that all the varieties in the manifestation of life that we meet, may be due to some one law which as yet we have not been able to discover. An equation of the second degree, as the advanced student knows, represents a conic section. But conic sections, though fundamentally one, are very different in appearance. An ellipse which is nearly circular, and a hyperbola passing away in different branches into infinite space have to the untrained eye no resemblance, and but for our knowledge of Mathematics, the heavenly bodies would not present to us such a regular manifestation of law as they do. And so it is suggested that by equations of a higher degree we may yet reduce to a unity more complex facts such as we have in Chemistry. Thus to a sufficiently developed mind the manifold variety of life may appear simple and subject to one law.

In accordance with this opinion Dr. Goodwin ingeniously suggests an explanation of rudimentary organs different from the Darwinian.

"The nipples and lacteal vessels of male animals, the rudimentary feet of certain snakes, the teeth of whales and other useless organs of certain living things may possibly be, like branches of a hyperbola, involved in the definition of the creature, inseparable from its existence, and yet forming no part of its active life. And as the human mind can see the necessity of the existence of the useless branch of the hyperbola, and cannot conceive the elliptic and nearly circular orbit of the earth without recognising at the same time and in the same effort of thought, the possible existence of useless hyperbolic branches of planetary orbits, so it might be that a mind higher than human might see in the definition of man the possible existence of useless organs both in man and in other creatures."

Or again,

"Let any one walk through the zoological galleries of a museum and observe the strange reptiles and sea monsters that are collected there. The survival of the fittest scarcely seems to account for the existence of some of them; but I can easily believe that their existence was a necessity and that they are involved (so to speak) in the general solution of the great life problem."

Of the other Essays on such subjects as God and Nature, Man's place in Nature, Natural Theology, Law, physical and moral, Pessimism, Crayfishes, we have not room to speak. Some of them are more popular than scientific. All are in a pleasant style and excellent spirit. Perhaps the most interesting is the paper on Evolution *and* Evolution, in which the Author expresses his own attitude towards this modern theory. To him the acknowledged facts of 'natural selection' seem but "modifying circumstances in the great drama of evolution, to which geology bears witness; there is (so far as we can judge) nothing in the hypothesis of natural selection which can be recorded as taking the place of a creative cause working according to a fixed purpose or a distinct preconceived plan." The volume fittingly concludes with a funeral sermon on Charles Darwin.

HAND-BOOK OF LOGIC *prepared for the use of First in Arts students. By* H. H. ANDERSON, B.A., (LONDON), *Head Master, Hindu College, Vizagapatam. Madras : Higginbotham & Co.* 1883.

We are sorry we cannot welcome this little book. The compiler hopes "that Native students will find it of great assistance in mastering the contents of the prescribed First in Arts Text-book, JEVONS' *Elementary Lessons in Logic*." Unfortunately for the compiler, however, there is no prescribed text-book in Logic for the F. A. Examination; and we are sure that Principals of Colleges who wish Logic to be intelligently studied rather than 'crammed' in their classes, will shun Jevons' book for the very reason that the booklet before us is in the market. This may seem strong condemnation, but we can modify it with no meed of praise. We can easily imagine that a companion volume to Jevons' might be produced that would be of real use to students. One, say, that dealt a little more fully with such questions as the nature of the concept, the import of the proposition, the possibility or otherwise of argument from particulars; one that would give the arguments *against*, as well as *for*, such so-called 'improvements' in Logic as the quantification of the predicate, &c. But Mr. Anderson attempts none of these things.

He only claims to have produced a "careful epitome." He has in fact simply picked out of Jevons a number of sentences, chiefly definitions, which he has reproduced for the most part *verbatim* and which we suppose he intends his readers to commit to memory. His only aim is to help students to wriggle through examinations. This he ingenuously confesses in his treatment of Cap. XIII—"Pascal and Descartes on method," which he abruptly dismisses with the remark—"The rules are very clear but unimportant for examination." Such books we hold are calculated to do nothing but mischief.

We have said that the compiler for the most part follows Jevons *verbatim*. But alas he does not always do even this, and when he deviates from Jevons' language he almost invariably falls into error. Take one example. In explaining the four fundamental propositions, A, E, I and O, he thus defines the two last—

> "I affirms that part of the subject is included in the predicate."
> "O denies that part of the subject is included in the predicate."

To have such a definition of O foisted upon him is enough to make Jevons revisit the *glimpses* of the moon' to vindicate his character as a logician. How in the world, we would ask, are I and O ever to be true together if O simply denies what I affirms? To illustrate these propositions Mr. Anderson uses Euler's diagrams, and of course perpetuates one of the few defects of Jevons' book. One figure only is used for each proposition and therefore I and O are represented by the same diagram. Neither of these propositions can however be adequately illustrated unless three diagrams are used for each. If this had been done, the difference between the two would have been seen, and let us hope, the defective definition of O would have been remedied. Both definition and illustration show an utter misunderstanding of that crucial little word *some*. Jevons devotes a paragraph to its explanation in which he brings out its logical force clearly and succinctly. This however Mr. Anderson evidently regards as 'of no importance for examination' as he omits it altogether. We could easily multiply errors of a minor kind. For example Mr. Anderson tells us on p. 22 that "Hypothetical propositions [we presume he means syllogisms as it is of this he is speaking] can *generally* be turned into the categorical form, and it will be found that the fallacy of denying the antecedent = illicit process of the major," &c. Jevons tells us that they can *always* be thus changed, and the use of the word *generally* is sufficient to cloud the substantial identity of the two forms of argument. On the next page we are told that "the Dilemma consists of assuming two alternatives (the horns) and proves something in *each* case." Jevons' word is *either* which limits the 'something' to the *same thing*, and by the substitution of *each* the whole truth of the definition is destroyed. But enough.

This little book is apparently—but only apparently—issued under the *imprimatur* of the University. The University does occasionally publish books, and when it does so the title page is headed "UNIVERSITY OF MADRAS." The same is done here and we cannot regard it as altogether honest. We do not however lay the whole blame of this at Mr. Anderson's doors. Messrs. Higginbotham and Co., who are publishers to the University, ought to see to

it that nothing is issued from their press in which the name of the University is taken in vain.

LITERARY STUDIES ON 'SHAKESPEARE' AND 'COWPER' *by* WALTER BAGEHOT, *and* 'THE PHILOSOPHY OF STYLE' *by* HERBERT SPENCER. *Edited, with notes by* CECIL M. BARROW, B.A., *Principal, Doveton Protestant College. Madras : Higginbotham and Co.* 1883.

This is a handy little volume of 185 pages, 145 of which are text and the rest notes. It is well printed and neatly got up, and in this respect is all that a text book ought to be. The notes are quite up to the usual average, but not, we think, up to Mr. Barrow's average. What for example is the use of such a note as this—"*Style.* As this is not a Greek word it ought to be written stile." The Latin word is no doubt more frequently *stilus* than *stylus*, but the word came to us through the French *style* in which the *i* becomes *y* to bring it into conformity to the Greek *στῦλος*. Mr. Barrow, we take it, does not mean that we should violate custom and actually write *stile*, for he does not follow his own rule (see note on line 57, p. 149). On page 184 Mr. Barrow falls into an awkward blunder in attributing to Seigneur de Balzac (1594-1655) 'the father of modern French,' a letter written by Honoré de Balzac (1799-1850), 'the Anatomist of French Manners.' This is remarkable, as both style and subject point to the versatile novelist, who is moreover the only Balzac referred to in these days by his *surnom* alone. The stately and solemn *Seigneur* would not thank Mr. Barrow for imputing to him a *drôlerie* such as the letter in question. Nor is Mr. Barrow invariably happy in his French translations, as for example when he makes "Le bonheur tient au savoir-vivre" mean "Happiness consists in *knowing how to live.*" The bulk of the notes however are good, and both students and teachers owe Mr. Barrow and Messrs. Higginbotham and Co. a debt of gratitude for reproducing what they could hardly otherwise have obtained.

HINTS TO TRAVELLERS, SCIENTIFIC AND GENERAL, *Edited for the Council of the Royal Geographical Society, by* LIEUT-COL. H. H. GODWIN-AUSTEN, F.R.S., JOHN KNOX LAUGHTON, M.A., *and* DOUGLAS W. FRESHFIELD, M.A. *Fifth edition. London :* 1883.

This is a volume which should be in the hands of all travellers who wish to make such observations as will be of permanent value. It contains in a condensed form a vast amount of useful information drawn up in a thoroughly practical manner by men who know from experience exactly what is wanted.

Chapter I—the larger part of the volume—deals with 'Surveying and Astronomical observations.' It contains all necessary information as to the kind of instruments required and instructions for their adjustment and use. A very useful part of this chapter is a set of tables which, though occupying only 46 pages, will be found, when taken along with a table of logarithms, sufficient for almost all the calculations that the traveller will have to make. The second chapter, a very brief one, is on Meteorological observations. We certainly think it might with advantage have been made considerably fuller. Chapter III is on Geology, but this of course is a subject in which the traveller

can do but little unless he has made a careful study of the subject previously. Chapter IV on Natural History gives some very good hints as to the collection and preservation of specimens, which will be found useful by many who are not 'scientific travellers.' The remaining chapters on 'Anthropology,' 'Photography,' 'Medical hints' and 'General hints on outfit' are all of the same standard of excellence.

The book as a whole seems admirably adapted to its purpose and deserves, as it is sure to have, a wide circulation.

NOTES AND EXTRACTS.

In the September number of the *Journal of the National Indian Association*, there is a most interesting article by Colonel Macdonald, our late Director of Public Instruction, on the life of one who will not soon be forgotten in Madras—John Bruce Norton. Although it is now fifteen years since Mr. Norton retired from India, his name is still in many circles a household word. His friendly feeling towards the native community, his sound common sense, the blunt and straightforward way in which he was accustomed to speak out his mind—which, while at first it often wounded, left at last only an impression of thorough honesty and sincerity,—and above all his restless activity and readiness for all public work, have left in the minds of those of his contemporaries who still remain pleasant memories which they will be glad to have refreshed.

John Bruce Norton was the son of Sir. J. D. Norton. He was born in 1815 and educated at Harrow and Oxford where he imbibed a love for classical literature which was his solace all through life. He tells an amusing anecdote of his examination for his bachelor's degree in 1838 :—

"When I went up for my degree at Oxford I took up Herodotus. He was always a favourite of mine ; I had read him a good deal at school and more at Oxford. I was well up in the subject, and thought I could answer any question, that is to say, any rational question that might be asked. Well, I was put on in a chapter about some ants, and the only question asked me was 'Why did the ants travel from East to West?' Was it not monstrous? Of what use was all my knowledge of the history, the geography, the antiquities of my author? I believe I was very nearly plucked for the answer I gave, though I still think it was sufficient for so childish a question. I believe the Examiner thought I was quizzing him, and possibly he was right, when I replied that I supposed it was because they didn't like the sun in their eyes."

He was called to the Bar in 1841 and soon after came to Madras, where for a quarter of a century he was well known and universally respected, in spite of the many controversies on matters of administration into which his fiery disposition and strong convictions led him. Soon after his entrance upon Indian life he was appointed one of the Governors of the "Madras High School and University." Later on he became "Patron" of Pacheappah's Charities—an office which is now a thing of the past. For a short time also he was Professor of Law in the Presidency College, and his volume on the Law of Evidence contains the substance of lectures delivered to his students. His energies found a wider field in the office of Advocate General which he held for many years ; and also in the Legislative Council of which he was a member ; but the period of his greatest activity was from 1854 to '56 when he edited the *Madras Athe-*

næum. These were the palmy days of that journal, when it was reckoned the ablest paper in India. It was during these years that Mr. Norton's best work was done. He had *mastered every Indian problem, and threw* himself into journalism with an energy of which only men of strong feeling are capable. While he was associated with it, the *Athenæum* (says Col. Macdonald) "was remarkable for its scathing exposure of the abuses of the revenue and judicial systems, of the neglect of public works, and of the dangerous tendency of the annexation policy which was then in the ascendant." Journalistic reputation is however very transient. As much good work done in any other department would have earned Mr. Norton more fame, though it might not have given him so much influence, or brought to him so much satisfaction. To the end of his life he looked back upon this two years of editing in India with peculiar pleasure, for he was conscious, however little others might be so, that his pen had exposed many an abuse and initiated many a reform.

But it was not in prose alone that Mr. Norton's active mind found vent. He delighted to express himself in numbers, and though he had too true a standard of criticism to imagine himself a poet either of the first or second order, yet his published poems if collected would fill a couple of fair volumes. He "loved," says Col. Macdonald, "to dwell in his poetry on such themes as the ultimate triumph of democracy, the extinction of poverty, the cessation of war, the spread of education, and the progress of mankind. In his more dreamy moments his imagination carried him to other inhabitated worlds, or revealed to him visions of this planet peopled by a higher and better race." One of these passages occurs in the fourth Canto of '*Nemesis*':—

"And yet shall come a double change, wherein
Andes and Caucasus shall cease to be;
Man and the records of his pride and sin
Have perished from this old globe utterly,
And Earth, like Venus, from the Southern Sea,
Spring, queen of perfect beauty, with a zone
Of loveliness undream'd of, fancy free
To woo new forms, with flush of flowers unknown,
In coral wreath'd, and crown'd with minerals all her own.

Fitted and destined too, perchance, to hold
Beings as much above the race of Man,
As he excels the uncouth monsters old
Which swarmed through seas, or crept, or crawl'd or ran,
Myriads of years in God's successive plan,
Ere Adam was: who, where we dare to guess,
Shall know: where we but darkly grope, shall scan
Light in its fullness: where we hope, possess:
Learn, Vanity, learn, Pride, your transient nothingness."

After his return to England Mr. Norton was appointed Lecturer on Law to Indian students at the Temple, but the failure of his sight—which had indeed commenced before he left India—occasioned his early retirement, and the last few years of his life were darkened by that severest of all afflictions, blindness. He died in London on the 13th of July last.

A discussion of some importance took place at a meeting of the Senate of the University on the 25th of October. The Hon. Mr. Ramiengar had offered to found a scholarship, to be administered by the University for the benefit of Pachayappah's College. The scholarship was to be conferred on the student

of that College who takes the highest place at the First Examination in Arts and promises to prosecute his studies at the Presidency College, taking Physical Science as his optional subject. Objections were made to the University's administering a scholarship founded on such conditions, but in the end the offer was accepted. Of course the foundation of scholarships, with such conditions attached to them as the donor pleases, must in present circumstances be welcomed by all friends of education. If the endowment in question had been offered to Pachayappah's College, no doubt respecting it could have risen. It is not so clear, however, that a foundation of the kind should appear among University scholarships. Two questions are really involved. The first is whether the University should administer a trust that is meant for the exclusive benefit of one of its affiliated Colleges; the second, whether the University should put itself in the position of offering rewards to students for attending one College when if left to themselves they might prefer another. Something may certainly be said in favour of the University becoming general trustee for its various Colleges—or for some of them. Such a course is indeed unprecedented, but it must be admitted that it is difficult to secure efficient and trustworthy managers for permanent endowments. In this point of view it may be convenient, and, may help to elicit endowments, that the University should come to the help of Colleges which have not a managing body that can be relied on: though Pachayappah's College ought hardly, we think, to have been placed in this category. In view of the second question the decision of the Senate is unfortunate. In the particular case under consideration, the evil may perhaps be only temporary. It is part of the conditions of the endowment that in the event of Pachayappah's College having B. A. Classes of its own the holder of the scholarship must prosecute his studies in his own College. Still, in the meantime, the Senate will be regarded as having consented to treat endowments as their own which are meant to induce students to enter one affiliated institution rather than another. Such an impression is unfortunate; for it is too obvious for proof that a position of strict impartiality is the only one that the governing body of the University can either rightly or safely occupy. It would be but a short step further, or indeed scarcely a farther step at all, for the University now to accept the administration of a scholarship to be given to the best student of one College on condition that he should transfer himself to another. For example a scholarship might be offered to the Senate for the student passing the First Examination in Arts highest in the class going up from the Presidency College, on condition that he prosecuted his studies for the degree in the Christian College. In such a case however the Senate would probably refuse to draw the logical conclusion from the premises they have laid down. We trust they would take the course that would be manifestly right, regardless of their own consistency. If so, no great practical harm need follow from the decision that has been come to, though in point of theory it is plainly a mistake.

The University has received another benefaction, to be known as the 'Miller Gold Medal.' It has been founded in memory of his father by the Principal of the Christian College, and is open equally to all students whatever College

they may have attended. So long as all successful candidates for the degree are ranked together, the new reward is to be conferred on the student who stands highest in the list. When,—as will be the case in 1887 and onward,—graduates are divided according to the branches of study they take up, it is to be attached to the branch of Mental and Moral Science. In the meantime at all events, the Miller Gold Medal will be the highest honour in the Arts Faculty of the University.

An amusing and instructive lecture has reached us from America. It is entitled "The Inspiration of the Bible," by H. L. Hastings, and professes to be the first of a series called 'The Anti-Infidel Library.' Its chief merit is its thoroughly popular style, and the trenchant way in which it deals with the follies of secularism. It is in no way a discussion of the subject of Inspiration, and the person who looks into it for a theory of Inspiration, will be disappointed. But it sets forth strikingly the unique position of the Bible among the books of the world, and with great good-humour cuts the ground from beneath some of the most popular infidel fallacies. Many of our readers are doubtless familiar with the current Theosophist account of the Canon of the New Testament, to which, we believe, no less imposing a person than Madame Blavatsky has set her seal. It is that the putting together of the Canon was the work of the Council of Nice (A.D. 325). That body, despairing of its ability to distinguish between genuine and spurious gospels and epistles, put them all on the floor, and prayed that the good ones might get up on the altar and the bad ones stay on the floor, and thus the present New Testament was compiled. The whole story is quite absurd, but we may as well give Mr. Hastings' neat reply to it.

"This writer (the infidel) said that this account rested on the authority of Papias, an early Christian bishop. I replied in a lecture, that there was one difficulty about that story,—that Papias was dead and buried a hundred and fifty years before the Council of Nice was held; but as they might have got the news from the spirits, that might be no great objection. The man rose to explain, and said that this was not the right Papias, but that it was another Papias, an obscure Christian bishop of the fourth century. I told him I thought he was obscure, so obscure that no one ever heard of him before or since. On investigation, it was learned that a German dominie, named John Pappus, preacher in Strasburg and a professor at Münster, who died in 1610, discovered this story in an old Greek MS. entitled 'Synodikon,' which was written by some old romancer down in the dark ages, about the year 900: for it relates things which occurred as late as 869, or five hundred years after the Council of Nice was dead and buried. And this story written nobody knows when, where or by whom, has been swallowed, believed and published by infidels far and near, as an account of the origin of the New Testament."

The author might have added that it will go on being published by people whose only excuse is invincible ignorance. On the same footing may be placed Colonel Olcott's great discovery that Irenæus wrote John's Gospel.

One of the most striking and characteristic passages is that which deals with the objection so often made to the Bible on the score that the persons whose history it gives were not all of them immaculate. After showing that a book which deals with real men and women must be expected to give the

shady side if it is true, he turns the tables neatly on his adversaries as follows:—

"Do you suppose that if the Bible had been revised by a committee of eminent divines, and published by some great religious society, we should ever have heard of Noah's drunkenness, of Jacob's cheating, of Paul and Barnabas quarrelling, or of Peter lying, cursing or dissembling? Not at all. The good men, when they came to such an incident, would have said, "There is no use in saying anything about that. It is all past and gone; it will not help anything, and it will only hurt the cause." If a committee of such eminent divines had prepared the Bible, you would have got a biography of men whose characters were patterns of piety and propriety, instead of poor sinners as they were. Sometimes a man writes his own diary, and happens to leave it for some one to print after he is dead; but he leaves out all the mean tricks he ever did, and puts in all the good acts he can think of; and you read the pages filled with astonishment, and think "What a wonderfully good man he was!" But when the Almighty writes a man's life, he tells the truth about him, and there are not many who would want their lives printed if the Almighty wrote them * * * * * When the Lord undertakes to tell his story of a sinful man, he does not select a poor miserable beggar and show him up; he does not even give the name of the guilty woman who bathes the Saviour's feet with tears; but he takes King David from the throne, and sets him down in sackcloth and ashes, and wrings from his heart the cry "Have mercy upon me O God, according to thy loving-kindness; according to the multitude of thy tender mercies, blot out all my transgressions." And then, when he is pardoned, forgiven, cleansed, and made whiter than snow, the pen of inspiration writes down the dark damning record of his crimes, and the King on his throne has not power or wealth or influence enough to blot the page: and it goes into history for infidels to scoff at for three thousand years."

We feel it our duty in the interests of students to call attention to the enormous price at which alone two of the English prose selections for the B. A. Examination of 1885—Bagehot's literary studies on Shakespeare and Cowper, and Spencer's Philosophy of Style—can be obtained. These together fill 145 small 8vo. pages, and are issued by Messrs. Higginbotham & Co. with notes by Mr. Barrow at Rs. 6 per copy. We do not wish to lay the blame of this on either Mr. Barrow or Messrs. Higginbotham. Had they not reprinted these essays, students would have had to pay about Rs. 35 instead of Rs 6 in order to obtain them, for they are small portions of large works. There are other items also tending to increase the cost. The copyright had to be purchased, and the edition had to be small as the demand could hardly exceed 300. Further, the text must be annotated in order to make it acceptable to Hindu youths, and the publisher must sell at a rate sufficient not only to cover risk of loss, but also to ensure a fair profit. The fault is ultimately not with them, but with the University. The whole of the English texts for the B. A. Examination, 1885, cost about Rs. 18. What, we would ask, would an English student say if his Latin or Greek texts for a similar examination cost him £1-10? As a rule they may be had for six or seven shillings, or if he is content with German editions, for two or three shillings, and yet Rs. 18 to the average Indian student is an incomparably greater sum than £1-10 to the average English student. To many it is equivalent to two months' comfortable subsistence. It may be said that the University has nothing to do with this, but in our opinion it has much to do with it. To prescribe English texts beyond the means of the majority of students is to throw a very

serious obstacle in the way of sound education. There is on some hands a foolish and hurtful desire to have, modern' English prescribed, and this often leads to the selection of pieces, as in this instance, protected by the law of copyright. It may be replied that the English copyright law does not include India, and this is true; but no respectable publisher will lay himself open to the charge of literary piracy. Surely with the whole range of non-copyright English literature before them, the University might select extracts equal to anything produced during the last 42 years—the limit of the copyright law. But indeed they are not confined to this. Every year there are issued in England scores of small books well adapted to the purpose, the English editions of which are cheaper than anything that can be produced in this country. We would strongly recommend the University in its selections of modern English to confine itself to these. But if it must prescribe extracts from larger works, let them either be non-copyrights or let the University itself acquire the Indian copyright, and issue such extracts at a price only sufficient to cover cost. Had this been done in the case before us, the University would have probably found itself able to issue the requisite little volume of 146 pp. at Rs. 1½ without loss or risk of any kind. It must be borne in mind that though the English law of copyright does not reach to India, any rights acquired (as Messrs. Higginbotham & Co. have acquired Bagehot's two Studies) come under the protection of Indian law. If then any wide-awake speculative publisher, without much character to lose, had been before Messrs. Higginbotham & Co. in this case, he might have acquired a monopoly in India and issued what had cost him Rs. 1½ including everything, at, say, Rs. 12 or 15. This is a case that might occur, and we point it out to show to what possibilities of evil the University lends itself in prescribing such extracts at all. It lays its undergraduates—whose interests surely it ought to consider—open to evils from which it should rather protect them,

SCIENCE JOTTINGS.

Experiments on the liquifaction of oxygen and nitrogen carried out by Wroblewski and Olszewski give more definite results than have, as far as we know, been hitherto obtained. Oxygen was liquified at a temperature of—136°C and a pressure of 22½ atmospheres. Nitrogen at the same temperature does not liquify even under a pressure of 150 atmospheres; but if the pressure be slowly diminished from this to about 50 atmospheres, part of the nitrogen becomes liquid. Carbon bisulphide was solidified at a temperature of about [—116°C] and alcohol at—130°·5.

We were rather surprised to find in a recent list in the *Fort St. George Gazette* of the books published in Madras that a work on astrology entitled Kálámrutam was classed under the heading 'natural science': we suppose a book on Spiritualism, would be entered under the same title and certainly if the one—a collection of superstitions—can claim the title, the other,—a collection of tricks and deceptions—may equally well claim it.

The announcement of the death of the eminent physicist Plateau will be received with regret by all who are acquainted with the very valuable work which he has done for optics while labouring under a disadvantage which most men would have considered fatal. While carrying out some experiments on the Physiological action of light he so damaged his eyes that he became stone blind. But this by no means put a stop to his investigations for by making his observations by the help of others he was able to add much to our knowledge of Physiological optics. In addition to his optical researches he did good work in the domain of molecular Physics. Perhaps the two things for which he is best known are his very pretty experiments with a drop of oil in a mixture of spirits and water of exactly the same density as the oil, by which he was able to illustrate the 'nebular hypothesis' and his very satisfactory soap solution for blowing extremely large and thin soap bubbles. He was born in 1802 and was for some time Professor of Physics in the University of Ghent.

Apropos of the amount of nonsense one sees and hears now a days about the marvels performed by spiritualists, it may not be amiss to quote a sentence from a recent address of Sir William Thomson's at the distribution of prizes to the students of the Birmingham and Midland Institute. "He had hinted at a possible seventh sense—a magnetic sense. He wished, however, in passing, to remove the idea that he was in anyway supporting that wretched grovelling superstition of animal magnetism, spiritualism, mesmerism, or clairvoyance, of which they heard so much. There was no seventh sense of the mystic kind. Clairvoyance and so on was the result of bad observation chiefly, somewhat mixed up with the effects of wilful imposture acting on an innocent and trusting mind." We have often wondered how any one who has the least particle of scientific training can be led astray for one moment by the nonsense which passes amongst the spiritualists for the highest wisdom.

The Meteorological Observatory on the top of Ben Nevis to which we referred some time ago was formally opened on the 17th of last month. The buildings are not yet completed but are so far finished as to be habitable. During the winter months the observers may be cut off from all communication with the lower world for several months and so, to provide against all risks, they are to be provisioned for six months. The observations are at first to be entirely eye observations but self registering instruments will be afterwards obtained. Mr. Robert T. Omond who has had a long course of scientific training in Professor Tait's laboratory, has been appointed observer. He will have one assistant and one attendant. Certain of the observations will be transmitted daily by means of a telegraph line which has been laid between the Observatory and Fort William. The height of the Observatory is 4,406 feet. It is intended hereafter to fit up the Observatory with the very best Meteorological instruments which will in part at least, be self recording, but it is necessary to determine the requisite range of the instruments by observations made during the winter before giving orders for their construction. It is noteworthy that this Observatory has been built and in part endowed by private liberality. The only help given by the Meteorological Council was, a promise of £100 a year after the Observatory was built, and

the Government refused even to lay the telegraph line to the top. The amount asked for from the public for the building and endowment was £5,000 and of that sum £4,700 has already been obtained from some 2,000 subscribers.

We learn from the 'Ceylon Observer' that very beautiful sunsets accompanied by a strong red glow in the western sky were observed in Australia about the end of September. Regarding them Mr. Ellery writes from the Melbourne Observatory pointing out the improbability of the common notion that they were in some way caused by dust or vapours from the Javan volcanoes and giving it as his opinion that the cause lay entirely in the presence of a large quantity of aqueous vapour in the higher parts of the atmosphere. Similar fine sunsets have been observed in the Himalayas and other parts of India and were we believe all due to the same cause—aqueous vapour. The great rainfall in Madras last month following on the magnificent displays of sunset colours certainly adds some weight to the very strong spectroscopic evidence which we have previously alluded to.

It may be worth pointing out that from the 10th, to the 16th of last month the amount of vapour in the air as shown by the spectroscope was less than we have ever before known it to be on the plains of South India, while during a great part of the two preceeding months it was greater than usual.

Judging by letters and reports in the "Tropical Agriculturist," it seems probable, that before long, Ceylon will take an important place in the India-rubber trade. Apart from the value to Ceylon planters of this new industry, an increased supply of India-rubber is from all points of view most desirable. The uses to which it is now put are so many and varied, that one feels as if the world could hardly get on at all without it. In imitating the Para process of preparation as has been recommended by some, we hope the imitation will be confined only to what is good, for the Para rubber-gatherer has an unpleasant way of mixing up bark, leaves, and even large stones with his rubber which is calculated, to say the least, to irritate any one who has anything to do with the manufacture of the crude product.

At the meeting of the International Geodetic Conference held in Rome last month* a very important step was taken towards the adoption of a common first meridian. The Conference, after a lively debate accepted the report of the special committee which had been appointed to consider the subject. It was carried by a majority of 22 to 4 that the meridian of Greenwich should be accepted by all nations as the initial meridian and that longitudes should be reckoned from the meridian of Greenwich in the sole direction of from West to East, counting that is from 0° to 360°. Further the Conference recommended the adoption of a universal hour side by side with the local or national hours and "that the point of departure of the universal hour, and of cosmopolitan date be the mean noon of Greenwich, ... the universal hours to be counted from zero to 24." This is a reform very much needed for various scientific purposes as also for steam ship lines, telegraphs and posts. The permanent committee of the International Geodetic Association which first recommended the

[* See ante p. 252.]

adoption of the meridian of Greenwich, pointed out that it was by far the most extensively used at the present time. It is used not only by British sailors, but also by those of the United States, Germany, Austria and Italy so that some 90 per cent. of the navigators through long voyages already calculate their longitudes from that of Greenwich. The Conference has requested His Majesty the King of Italy officially to communicate the resolutions of the Conference to all the Governments. It is to be hoped that the various Governments will accept the resolutions and give practical effect to them.

The Meteorological Society has received permission from Her Majesty to prefix the word 'Royal' to their title so that it will now be known as the "Royal Meteorological Society." This will be thought by most to be a very suitable recognition of the good work that is being done by that society.

Dr. Koch, the chief of the German scientific staff which went to Egypt to investigate the cholera outbreak, believes that he has discovered a definite cholera bacillus (i.e. staff-like microscopic organism.) This bacillus was present in the case of all patients who were actually suffering from the disease and in the bodies of all those who had died of it. It was not found in the case of one patient who had had time to recover from the cholera, but who had died of some secondary complication, and it was not discoverable in the case of patients who, during the cholera epidemic, succumbed to other deseases. Dr. Koch makes his statement with great caution though he considers that at least a *prima facie* case has been made out for holding that this bacillus is directly connected with the cholera. He intends to come to India to carry on his investigations. C. M. S.

The death of Sir William Siemens is announced by telegraph, but we must hold over till next month our notice of this remarkable man.

QUERIES.

13. A STUDENT OF RELIGION, Trevandrum—asks for an explanation of the following extract from an essay by Sir Bartle Frere, in "Faith and Freethought":—"Of the innumerable schools of Brahmanism, none is more popular in India than that of materialists, who teach that we can know nothing certainly, save of matter and its properties: and that belief in what we call life or spirit, save as functions and properties of matter, and by consequence any belief in a spiritual deity—is hopeless error and delusion."

Such a sentence from the pen of one so highly and deservedly respected as Sir Bartle Frere seemed to the editor of this magazine incomprehensible. Accordingly, the question was submitted to a gentleman who may claim to be a higher authority than Sir Bartle Frere, in the hope that he would confirm our own opinion that the extract cited is nonsense. After some delay, for which we must apologize, the following reply came to hand. It covers more ground than the question before us, but we publish the whole.

"It is much to be regretted that one whose name must give a certain degree of weight to whatever he may choose to say, should write on any subject that he has not taken some pains to understand. With what respect can any intelligent Hindu regard the opinions of any writer who can publish such a statement as this? If there is any Hindu sentiment more nearly than another universal, between the Himalaya mountains and Cape Comorin, it is this, that matter is *not a thing*, but a product, an illusion, *Maya*; and that

in some form and fashion, mind, soul, or spirit is the one thing existent in the universe.

The phenomena of the universe is a product, and owes its origin to the mysterious unaccountable *word* of That which is, I AM, I am Brahma." "*Life* and *spirit, functions* and properties of matter"! That is indeed a "hopeless error and delusion, for which our Aryan cousins out here are indebted, not to their own teachers, but to western science, falsely so called. When Brahmans talk of 'knowing nothing certainly save of matter and its properties,' they have already exchanged the more sublime doctrine of heir fathers, for the modern gabble of scients falsely so named.

'Life or spirit merely functions of matter'! Shade of Kapila! ghosts of all who have believed in Him who is the eskamevadvitiya, one-without-a-second-thing! arise and contradict the jargon of these latter day *Nastics*. Functions and properties of MATTER'! What are they? What is matter itself apart from these functions and properties? We observe certain attractions and repulsions, in what we call the matter, the *mother* of the universe; and we watch it or trace it, until it seems lost in the infinitude of ethereal existence. What was it? Has it ceased to be? We look back in bewilderment, and admire the tremendous power, the varied manifestations of force, (so we term it) and ask, whose was it? The modern scient replies, it belongs to the manifestation of itself in the creation of the souls and bodies, the mind and matter that composed the universe; and it may perhaps turn up again, when the rudis indegestaque molis,' has again, accidentally or of its own accord, to assume the kosmic form— and this we are invited to accept instead of the grand Revelation, 'In the beginning God created the heavens and the earth.'

There is something inconceivably grand in the atheistic notion that once upon a time, somewhere in the silent stillness of omnipresent space, a point thereof began to quiver. Why should it? Don't; ask impertinent questions. The doctrine of uncaused effects had not then come up. The quivering atom, senseless speck of empty space, disturbed its neighbours, and they theirs; and so on with constant uncaused acceleration, until the whole became shaken into what we now behold in suns, and stars, and planets, and all that; and also into thoughtful forms capable of seeing and admiring and rejoicing in the order and beauty of the worlds of matter, mind and will. All honor to the senseless atom whose restlessness originated a world so beautiful as this. True, it did not mean it; for on this theory there is not, there cannot be any notion of meaning, but all the same it did it. We praise a beautiful engine that does its work well; but the language is only figurative. While we admire the world of mind and matter, grand conglomerate! we have no evidence whatever of the existence of the one or the other. What we are now invited to believe, is that all the vast forces of the universe are but the acceleration of the kinetic force of some restless atom, or atoms of space. In that originated the universe of matter, of mind, and of will. Believe it who can."

14. (TEACHER,) Madras.—Can you tell me of any substitute for 'lard' in experiments with the air pump.

For this climate it will be found that a substitute for lard, much better than lard itself, can be made by melting bees wax with oil. The amount of oil must be such that the mixture when cool has a suitable consistency. This is easily determined by trial.

(*Other queries and replies are held over till next month.*)

POSTSCRIPT.

Since the note on p. 383 *respecting the selection of copyright extracts for use as texts in the University examinations was in type, we have heard with pleasure that Mr. Barrow has reduced the price of his edition of Bagehot & Spencer to Rs.* 5, *or if* 12 *copies be taken, to Rs.* 4 *per copy. For this generous concession students will be thankful, but it does not affect the point of our note, or detract from the force of our contention that such extracts ought never to be prescribed.*

[ED. C. C. M.]

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GOD IN HISTORY.

HISTORY is the biography of the human race. Humanity in its collective aspect is as much a real existence with a continuous history, as England or France. All the events of history, the appearance and disappearance of races, the growth and decline of civilizations, are but moments in the life of man. The picture of individual life presented in Mirza's bridge is like the life of the race at large. Its beginning and its end are shrouded in mystery. The race emerges from an unknown past, and presses forward to an unknown goal. Nor is the course of events which we partially know very clear, for there are broken arches in the bridge, and clouds sweep over the middle part, as well as hang about the extremities. At first sight history seems but a waste of moving waters, a scene of hopeless confusion. A steadfast order, a principle of progress are hard to find. The past unrolls before us a splendid panorama, but it is stained with the tears and blood of centuries. Progress when minutely examined is found to be nothing but successful cruelty and cunning, sinking always back into retrogression and decay. Mighty empires have risen the one on the ruins of the other, they have flourished and they have been destroyed, but mankind seems only the poorer for all their splendour. Egypt, Assyria, Macedon, Rome, all have played their part and died, leaving only mouldering monuments behind them, to testify not so much to their greatness, as to their essential vanity and

meanness. And when we look at the present we are not reassured, for humanity seems substantially the same in all ages. The nations have not yet learned the secret of life. Before higher civilizations, the backward races of mankind seem destined to extermination, apparently for no other end than that their superiors in cunning and bodily strength may have more room to fight.

Thus at first sight the sphere of history seems to be one of confusion —a congeries of isolated phenomena, destitute of any co-ordinating principle,—a realm without law. Compare it for a moment with the sphere of material phenomena, and it will be found that the two bear a close resemblance to each other. There too the eye of common sense is met by a perplexing multiplicity of details, a host of appearances, each having as good a seeming right as every other to independence. But the confusion gives place to order. The patient labour of generations of thinkers has reduced these multitudinous details, and shown them to be under law, to have an order and a harmony of their own. Science, though still far from a perfect apprehension of the cosmic laws, has at least familiarized us with the conception of law in general, and enabled us to look forward with hopefulness to a time when every phenomenon shall be properly co-ordinated with all the rest. Is it vain to hope for a similar result in the department of history? Is there no law of individual and social life under which the waste of historical phenomena may be reduced to order? Is it not possible to detect the meaning, and expound the significance of human life?

A question of such profound interest was not likely to remain without answer till the present time. On the contrary, it is the question of the ages, one which nearly all truly thoughtful men have asked, and to which there have been most diverse replies. For the question involves a reference to the ultimate explanation of all things, and the answer reveals the thinker's mind on the deepest and most awful topics. Here, if anywhere, the thinker faces the being of God and must settle whether he can best explain the universe with Him or without Him.

As has already been shown, there are many things in the history of mankind which suggest an atheistic explanation, or rather a denial of the possibility of any explanation. The apparent disorder of events, the manifest misery of so great a part of mankind, the wastefulness and cruelty which have been supposed in many natural processes, the very existence of evil—all these seem to militate against every hypothesis which involves the existence of a benevolent Creator

or a benevolent plan in the life of humanity. Interrogating nature as to what man is, we seem to hear but the melancholy answer,

> "The spirit does but mean the breath:
> I bring to life, I bring to death:
> I know no more."

Man is but an animal, and an animal is but a piece of organized matter, and organization with all its weight of woe is but the result of chance. Civilization, with all the tender grace of life, is merely the last result of brutal struggle, destined to sink again into unconcealed brutality. Chance is lord of all.

There is a simplicity about this theory which will always recommend it to crude minds. But the strain upon our credulity is too great. We are asked to accept an explanation of phenomena which runs completely counter to all our ordinary experience. Ignoring that order, which in spite of apparent confusion *does* reign in history,—and that more absolutely than most of us dream,—we are called upon to accept an unthinkable explanation and to believe that things which show all the signs we usually suppose to accompany the forthputting of intelligence have an unintelligent cause. If it had the merit of explaining anything we might be more inclined to accept this theory, but it is in effect a declaration that all explanation is impossible.

God and Chance are really the only alternatives. Deism accepts the former, but only in a half-hearted way. Grasping firmly the truth that the universe is an exhibition of law and order, and impelled by a necessity of thought to seek support for this system of law and order in an intelligent First Cause, the deist apprehends God as the Creator of all things. But he does not regard Him as God in history. The Divine Being is responsible for the existence of man, but He has nothing to do with the world as it now is. Having finished his world and set it agoing, He sits outside of it, seeing it go. Thus Deism fails us just where we need help the most, and satisfies itself with a partial solution of the problem. Yet there can be no doubt that the theory has in the past exercised a vast influence on religious thought, and that the very men who in the eighteenth century were ostensibly fighting the battle of Christianity against Deism, were themselves practical deists. For all dead Christianity makes God an absentee. But the same reasoning which leads to God in creation should lead us also to God in history. There is no evidence for an initial creation which does not make as strongly for a continued governance. As an attempt to save religion from the assaults of rationalism and infidelity, Deism is a failure, for the

religious emotion cannot be called forth towards a God who leaves His creatures to whirl to ruin by themselves.

The Pantheist offers us an explanation of human history of nobler mould. God is the All, the sum of existence; the phenomenal world is the expression of his life: human history is the conscious life of the Divine. The events in the life of humanity are the pulsations of Divine life, heart-beats of God. All that happens in thought and action happens by a Divine necessity. The distinction of good and evil, right and wrong, is therefore a delusion. The individual is but a conscious point in the life of the Absolute Being, dependent for thought and feeling and volition on that vaster life of which his is but an infinitesimal speck. The history of the race with its sorrows and sins, its strivings and achievements has nothing in it of independence, for all these things are bound by an inexorable chain of causation to the life of the Absolute.

If Pantheism is free from the heartlessness of Deism, and attractive to men of nobler mind by reason of the warmth of its conception of the Divine, it labours under peculiar disadvantages of its own. Atheism explains nothing, Deism halts half-way. Pantheism, by giving too much, commits itself to a contradiction of what alone makes a philosophy possible—the veracity of consciousness. It can only be right if human intelligence is delusive. By contradicting the universal consciousness of freedom and individuality, it arrays against itself both the moral and the intellectual interests of mankind. Nor has it any practical advantages to offer in exchange for our surrender of real intelligence and moral freedom. It throws no transfiguring light on the history of the past; it gives no gleam of hope for the future of the race. Instead of a past that is the painful preparation for a hopeful present and a future of glory, Pantheism tells us that sin and misery are the necessary accompaniments of the Divine self-manifestation, over which the Absolute is as powerless as the fever-stricken patient is powerless to control the raving and tossing of his delirium. The future is forlorn of hope, for the Deity—if such we can call the Absolute Being of Pantheism,—is powerless over the lust of creating, which runs like a fever in the blood. There is nothing to hope for but an everlasting series of conscious manifestations, each tortured by the misery of individual existence, and finding refuge, if it may, in a return to unconsciousness only to be succeeded by new forms of misery. A theory that is neither true nor consoling had better perish.

What then is our supreme need, and where shall we find it

supplied? We need a theory of human life which shall cast light upon our mysterious existence without giving the lie to the revelations of consciousness; which shall show us a purpose running through the tangled maze of history, and leading it onward to a great future. Nothing short of this can satisfy both the theoretical and the practical demands of human nature. History must be the self-manifestation of the Divine even as nature is, but the God manifested must be other than the phenomena through which he manifests himself. God must be not only *in* nature but above it; both immanent in creation and transcendant over it. We need not only a God who lives, but one who wills and in righteousness directs, whose manifestations are the result of deliberate and holy choice. The God of history must be not merely a Being but a Person.

Here it is that Christian Theism with its historical revelation meets us and offers us the key that unlocks the mystery. It tells us that God is both the maker and the ruler of the universe, that he has neither abandoned it to itself nor become entangled in its evil. He is the free controller of events and not their slave. It tells us also of man and his unique position in the scale of being, as made in the image of God, free and intelligent, and therefore, as a dweller among sensuous things, capable of falling. Because he is so great, man is capable of a terrible degradation. Had he been a lower creature, his fall would have been less. God-like in his capabilities, he sinks by disobedience sometimes below the brutes.

These then are the factors of the problem; God immanent in creation yet transcending it, and man a creature, but gifted with the perilous and glorious endowment of self-determination. History is thus, to quote a somewhat doubtful phrase, 'a double-faced unity,' the record of divine and human activity as the one modifies and controls the other. The creative agency of God is free and ceaseless, but also intelligent and good, and therefore reasonably adapting itself to the new circumstances introduced by the sin of man. Man's freedom, that gift which makes him truly the 'image' of God, is respected by the Creator, who in the exercise of Almighty power, can use only moral means to bring back his creature to obedience and consequent happiness. Therefore it is that the two streams of human sin and divine grace, of perverse wickedness and patient all-conquering love, flow through the entire length of history, the one gradually attenuating and doomed to extinction; the other broadening and deepening till it fill the entire channel.

But what likelihood is there that the Bible view is correct? We

may recognize its power as an instrument of thought, its fidelity to the difficulties of the situation, and its general acceptableness as affording us glimpses of hope. That God is in the field when he is most invisible is the deepest longing of earnest souls, and it is consoling to find that Hebrew sages and heroes, prophets and kings cherished as a belief what we scarce dare admit as a hope. But is it reasonable to allow the glow of devout optimism to gladden us when, it may be, the pitiless facts of the universe are all against it? This is a case in which no mere dictum, however naturally pleasing, can be accepted on authority, however reverend that authority may be. The history of the past is being rapidly unrolled with increasing clearness before our eyes: the history of the present is even now transacting itself. What do they say of our Christian optimism?

It is just because the Bible bears a historical character that it meets the requirements of a Revelation. We do not want a dogmatic assertion of God's presence in history, but we do want some one to show us God's real activity in the world. By calling our attention to the divine significance of events, by showing us, on the limited area of a particular history, God entering the field and keeping it throughout, the Bible throws a new light upon all the matters with which history deals, and enables us to discern a distinct and orderly grouping where at first we saw only confusion. All the details of sacred and profane history fall into rank at the call of Scripture, which gives us the key of their position. They are all seen to have reference to a gradually unfolding plan, and to lead up to the great turning-points in its evolution. Let us attempt an outline of the sketch.

Not only does Scripture teach us of man's corruption, but it shows us the selection from the mass of a particular family and nation, to be the depositaries of Divine truth, that was rapidly perishing from among men. Nothing in this race could to outward seeming justify a preference of them over the other families of mankind, though the splendid qualities of the Jew after nearly 20 centuries of national degradation may well testify that the election of God is ruled by a divine propriety. But the Jews were distinctly taught that they held this position simply in trust for mankind, in order that in them all nations might be blessed. Hedged round by particular providences, disciplined by national disaster, instructed by the activity of the prophets in the present will of God, the Israelites during slow moving centuries advanced towards their natural goal under the present dispensation, viz., that of providing the teachers of the world in

divine things. Outside the pale of Israelitish history the mighty drama of the empires was being played by heathen nations, who were not forgotten of God. While Israel's strange story transacted itself, the nations struggled with each other, and empires rose and fell, but all in preparation for the divine purpose. For example, the divine activity is as visible in the civilization of ancient Greece as in the history of Israel. That gifted people the Greeks were as distinctly trained by God to liberate human thought, to be the intellectual eye of the world, as Israel was to preserve a pure monotheism. Yet farther west, Rome is seen, strong in the principle of order, being educated to give to the world the very impersonation of law. Behind the Alps, in the primeval rudeness of the German forests, the Teutonic peoples are being trained to be strong of limb and stout of heart, daring in conception and persistent in execution, while they wait God's call to come forth and take their place among the nations. Thus while the interest centres in Israel, within which that is going forward which gives significance to the whole, there is no corner of God's world so obscure as to be forgotten.

Then came the 'fulness of time.' Israel had completely learned the lesson it had to teach and beyond which it could not go; Greece had passed the meridian of her eloquence and thought; Rome was throned in imperial grandeur over East and West, when Christ came. To ordinary observers nothing whatever had happened. A Galilean mechanic had lived in obscurity for thirty years; then, having the gift of speech, had earned some reputation among the humbler classes of his countrymen; fell under the displeasure of the Pharisaic bigots and courtly Sadducees, and died on the cross. This was all that appeared, but how different was the reality! Believer and unbeliever alike must admit that in Christ a new force was introduced into human society, a force which it would have been folly in contemporary wise men to notice, but which nevertheless has altered the face of the globe. Gaining impetus as it advanced, the Spirit of Christianity gradually overran the Empire, created for itself an external form, a body that it might inhabit, and sat down beside Cæsar on his throne. Then comes the end of that ancient world, for the sluices are lifted, and Goth and Vandal, Lombard and Frank pour into the Empire, the God-appointed agents at once of judgment and regeneration. For from that seething mass, of fresh young barbaric life and worn out Roman civilization, seasoned and tempered by the Christian faith, there emerged as from a Me-

dusa's cauldron, the fair and youthful figure of modern Christendom.

Thus a great portion of the history of the past finds its explanation by a reference to the advent of Christ. Human progress throughout the pre-Christian centuries ran along certain well-defined lines, all converging upon Christianity. The majestic train of events, defiling slowly across the stage of history, usher in the Christ. The history of antiquity is a providential preparation for the appearance of Christianity, an arrangement and collocation of the world system so that the new force might act with the maximum of effect. Nothing more conclusively points to the Divine origin of Christianity than the fact that the Almighty Disposer of events appears to have arranged the evolution of human society in its interests. Or rather the advent of Christ and the rise of Christianity appear as part and parcel of a divine plan, stretching between the eternities.

But history is not yet finished. If it were, no other verdict could be announced regarding this God-created world than that it had been a disappointing failure. If Christ's redemptive energy be now exhausted, and if the world has nothing more to expect from that source, then also the gracious purpose of God towards a fallen world must be judged to be in vain. For the vast majority of mankind still lies outside the Divine obedience, and even within that portion of human society which calls itself Christian, Christ's kingdom is yet to come. If there is a divine purpose in history, it is evident that the age-long processes are yet incomplete. If Christianity is to be our guide to the meaning of history, it must look forward as well as backward, enable us to forecast a divinely planned future, as well as to survey a divinely guided past. And it rises to the requirements of the case, for it tells us not merely that Christ has come, but that He is coming again. There will be a Second Advent.

History is not a circle with Christ in its centre, but an ellipse with the First and Second Advents as foci. These two events are the points to which all other events have reference: and in connection with which the orderliness of history becomes evident. Just as all ancient history was a preparation for the Incarnation, so all post-Christian history, all the history that does not find its explanation in the planting of Christianity, will find it in the consummation, when the Lord shall come again. On a grander scale, the divine processes are being repeated in preparation for a grander *finale*. The exactness of the parallel is almost startling.

Instead of the Jews we have a new Israel in the Christian society,

the modern depositary of the sacred seed. Like Israel in its faithlessness and selfishness bringing down upon it the righteous anger of God, it is also like Israel in its strange persistence amid the wreck of empires and civilizations. Chosen for the world's sake, which the God that made it loves, modern Christendom is the fountain from which flow forth the healing waters of life. For with all its shameful weakness and sin, it is still the source of every living impulse that saves the world from corruption. Now as in ancient days, empires founded on selfishness and cruelty rise and fall, while the world groans under the sin and misery that accompany them. But every political change, every social revolution brings about a readjustment of affairs in the interests of the kingdom of heaven, and clears the ground for the more vigorous action of Christian principles. We do not ignore the prevalence of unbelief and anti-Christian movements of thought in the present any more than we ignore their existence in the days when the Christian religion laid hold of Græco-Roman civilization. On the contrary we note their strength, which depends partly on the incorporation of Christian ideas in the programme of infidelity, and partly on the obscuring of vital Christianity by the Christian Church. Thus it was in the ancient world, for then too the enemies of Christianity sought to fight it with its own weapons. And as in former times the zone that girdled the civilized world and made it co-extensive with the Roman empire, was relaxed to admit the nations of the north, so the boundaries of modern Christendom are daily widening, to admit peoples that have yet their part to play in the drama of civilization. Races that were unknown to ancient history, and on which the proud modern spirit looks down as hopelessly behind in the contest, are now emerging from their obscurity, receiving the gospel, and bidding fair to be the Franks and Saxons of a new world.

And just as the great movements of antiquity prepared the way for the Incarnation and its marvellous results, so are the changes of modern times marching onwards to meet a returning Christ. The presence of the Saviour himself will give the final impulse to the restoration of humanity. Revelation closes with the vision of a new heaven and a new earth, wherein dwelleth righteousness. Beginning with a Paradise Lost, it closes with a Paradise Regained. Not destruction but renovation is the goal of God's creation, over which must be written, not failure and impotence, but success and power.

Here then is the grand complement of the modern theory of Evolution. Fixing its eyes upon phenomena alone and ignoring that

Power which contributes to them their reality, atheistic evolution, with the calmness of despair, looks forward to a universal collapse, when the universe, after centuries of loathsome decay, shall have ground itself down to death. But Christian theism, faithful to the revelation of himself which God is ever giving in his works, grasps the reality of the Divine action, and preaches a gospel of hope. The power that made the world is not exhausted, but works on, works ever. Righteousness, however, it may be obscured by man's sin, is yet the law of the universe, and for righteous souls laying hold of divine might, there will be provided a proper sphere in which they can eternally realize the law of their being.

ALEX. ALEXANDER.

ZUL-FIKAR KHAN, THE KING-MAKER.

During the reign of the Emperor Jehangir, there came from Persia, a Turkoman adventurer. He was a man of good family, and had, what at the Court of Delhi was better than a letter of recommendation, a white complexion. He had been engaged in revolt against Shah Abbas, the King of Persia, and had to fly for his life. He found favour with the Emperor and married a near relative of the celebrated Noor Jehan. His son was Ibrahim Assad Khan, and when Jehangir died in 1627, this son was seven years old. During Shah Jehan's reign the boy grew up and came early to the notice of the Emperor, by whom he was employed in military service. He was married to a daughter of the Vizier Asoph Jah, brother of Noor Jehan, and when Aurungzebe came to the throne in 1658, was already one of the most powerful nobles in the Emperor's Court. He was subsequently raised to the highest dignity, namely, to a Munsub of 7,000, and for many years filled the post of Vizier. He lived all through the long reign of Aurungzebe; and for six years afterwards, throughout the civil wars which followed between Aurungzebe's sons, he was one of the most influential men in India. In 1712, when Ferokshere (properly Firukh-Siyar) succeeded, he fell into disgrace, but being then ninety-one years of age, his life was spared and he was allowed to live in a kind of honourable confinement on a scanty pension, until at last he died in 1716 at the mature age of 95. It is said that when he died the Emperor sent to ask his pardon for any wrongs

that had been done him, and consulted him as to how he should treat the two rising nobles, whose daring and insubordination afterwards mainly led to the downfall of the Imperial power. It is of course impossible that at so advanced an age, Asoph-ud-Dowlah, for this was the old man's title, could have for so long maintained his influence, had he stood alone. His long career of prosperity, he owed almost entirely to his brave unscrupulous son Zul-fikar Khan, and it was only after the latter's death that the father fell into oblivion.

Zul-fikar Khan is a striking example of an Indian adventurer. His whole career was one of insubordination. His force of will, however, was such, that he made each rival party anxious to secure his services, and the Prince he had fought against the day before, was only too glad to win him over to his side on the day following. His one aim was the advancement of himself and of his family, and with this end in view he scrupled at nothing. As long as he lived he had a career of extraordinary power and prosperity, but when at the very summit of this power he fell, not from natural causes, but by treachery and assassination. The earliest notice to be found of Zul-fikar Khan, is at the siege of Gingee, somewhere called the modern Troy. This was in 1694, and he must then have been a personage of considerable importance, because he was the Commander-in-Chief under the Aurungzebe's favourite son Khám Buksh. The Prince was young and foolish, and impatient of the control of his generals. He was only allowed a nominal command without any real authority, and at last the friction became so great that he imprudently entered into secret negotiations with the besieged garrison. The Mahratta General Santa was close at hand with a relieving force, and Zul-fikar Khan resolved to act promptly. Accordingly, he surrounded the tents of the Imperial Prince with armed men, took him prisoner, and brought him in golden fetters to Aurungzebe. Aurungzebe pretended to approve of what his generals had done, but it is probable that he never forgave the insult to himself through his favourite son. During the next ten years Zul-fikar Khan appears to have been the leader of every dangerous command, but Aurungzebe's jealousy of all men who made themselves prominently noticed, kept him under a cloud. His abilities, however, were such, that he could not be spared, and as the Emperor was now growing very old, he wisely bided his time. He foresaw the anarchy that must ensue when Aurungzebe should die, and knew that he would then be one of the principal factors in the making of the next Emperor.

Early in the year 1707, Aurungzebe lay dying. He was then ninety years of age, and the last twenty years of his life had been occupied in incessant marching and camp life. He was always moving on, and frittered away the wealth and strength of the Empire in his ceaseless efforts to subdue rebellious vassals and Hindu Rajas. He was generally successful for the moment, but his restless mind never allowed him to remain long enough in a conquered country to thoroughly subdue it. Directly his back was turned, the flames of rebellion broke out again, and the latter end of his life was spent in literally fighting his battles over and over again. He had reigned for fifty years. He had gained the throne by an act of treachery against his own father Shah Jehan, whom he kept for nearly eight years in confinement, and whose death there is strong reason to believe was not quite due to natural causes. From that time the Emperor's temperament had been one of gloomy austerity. Haunted by the memory of his own rebellion, he was in constant dread of a similar act by one of his sons or grandsons. He continually played off one against the other; they were sent to remote commands and Governments, and his generals were kept near his person. The consequence of this policy was that the power and influence of the Imperial family was weakened, and that of the military leaders and adventurers was enormously increased. We have seen how Zul-fikar Khan actually dared to send the Emperor's favorite son back to Delhi in arrest laden with golden chains. The Emperor's end had been long expected, and his sons were all so widely separated, and were all so jealous of each other, that it was certain that when the end occurred, the new Emperor would be the one who could first reach the capital, with the strongest army at his back. Hence each Imperial Prince had his own partizans working for him in secret, and not only the sons, but the grandsons were conspiring against their fathers. There is something vastly touching about Aurungzebe's dying days. During his reign the Imperial house of Delhi had reached its height of splendour. His sway was nominally accepted from Cabul to Cape Comorin, and the Imperial family was equally represented by Princes in the far-away north, and in the half-conquered south. But he, the head of this vast empire, was incessantly travelling about alone. His age was past that of ordinary men, but there were none of his sons near him to soothe his declining years. Years before, he had prohibited the writing of history and had stopped the playing of music, and when he once met a long procession of weeping mourners and asked who was the great

man whose funeral ceremonies were being celebrated, he had been told that it was "our mother Music killed by order of the Emperor." "Bury her deep," said the stern old monarch with a grim smile, "so that she may never rise again." And now he was dying alone, almost friendless, and with an anxious foreboding of what would happen after his death. "Dissensions had arisen among his nobles through rivalry, so every plan and project that he formed came to little good; and every enterprise which he undertook was long in execution and failed of its object" (Khafi Khan). Iradat Khan's description of his last interview with Aurungzebe is almost affecting. Iradat Khan had long been on friendly terms with Aurungzebe, but foreseeing the end, had made up his mind to throw in his lot with Prince Bedar Bukht, Aurungzebe's grandson, and son of his second son Azim Shah. It is by no means unlikely that Iradat Khan had secret instructions from the Emperor, whose policy it was to set his own grandsons against their fathers; and shortly before the Emperor's death he was despatched from the camp. We will quote his own words as translated by Scott:. "On the evening before my departure, the Emperor, opening the window of his sleeping apartment, called me to him, and said, 'Absence now takes place between us and our meeting again is uncertain. Forgive then, whatever willingly or unwillingly, I may have done against thee, and pronounce the words 'I forgive' three times, with sincerity of heart. As thou hast served me long time I also forgive, whatever knowingly or otherwise, thou mayest have done against me!' Upon hearing these words, my sobs became like a knot in my throat, so that I had not power to speak. At last after his Majesty had repeatedly pressed me, I made shift to pronounce the words 'I forgive' three times, interrupted by heavy sobs. He shed many tears, repeated the words, and, after blessing me, ordered me to retire." What a subject for a picture this scene would make! The gorgeous show of an Imperial camp, which was like a moving city; the Emperor's tent in the middle with its durbar hall all glittering with cloth of gold, and surrounded by elephants and horses in state panoply; and from a side window in the tent the form of the aged Emperor asking his kneeling and sobbing friend to forgive! Weariness of life, loneliness, and isolation in the midst of Imperial splendour! A few weeks after this scene Aurungzebe died, but before he died he wrote two letters, one to his second son Azim Shah and the other to his favorite son Khám Buksh. Azim Shah had only recently visited his father, uninvited, and was not far off; Khám Buksh was also near

and towards this son the old man's affections inclined. The eldest son Shah Alum was away in Cabul, and his son Azim-oo-Shah was on the borders of Hindustan. It was supposed that these two were so far removed, that one of the other sons would necessarily be firmly established before either of them could appear at the capital; which this would be the old man himself could not tell, he hoped it might be Khám Buksh, but he feared it might be Azim Shah or his son Bedar Bukht. I give both the letters *in extenso* since they are not only interesting and touching in themselves, but are historically instructive, showing how great are the dangers which attend the death of a Prince whose rule has been carried on by means of his own individuality, and whose dynasty is based on despotism and not on the affections of the people.

"To Shah Azim Shah:

"Health to thee! my heart is near thee, old age is arrived: weakness subdues me, and strength has forsaken all my members. I came a stranger into this world and a stranger I depart. The instant which passed in power has left only sorrow behind. I have not been the guardian and protector of the Empire. My valuable time has been passed vainly. I had a patron in my own dwelling (conscience), but his glorious light was unseen by my dim sight. Life is not lasting, there is no vestige of departed breath, and all hopes from futurity are lost. The fever has left me, but nothing remains of me but skin and bone. My son (Khám Buksh) though gone to Bijapur is still near; and thou my son art yet nearer. The worthy of esteem, Shah Alum is far distant, and my grandson (Shah Alum's son) by the orders of God is arrived near Hindustan. The camp and followers, helpless and alarmed, are like myself full of alarms, restless as quicksilver. Separated from their lord, they know not if they have a master or not. I brought nothing into the world, and except the infirmities of man carry nothing out. I have a dread for my salvation, and with what torments I may be punished. Though I have strong reliance on the mercies and bounties of God, yet regarding my actions, fear will not quit me; but when I am gone reflection will not remain. Come then what may, I have launched my vessel in the waves. Though Providence will protect the camp, yet regarding appearances, the endeavours of my sons are indispensably incumbent. Give my last prayers to my grandson (Bedar Bukht), whom I cannot see, but the desire affects me. The Begum (his daughter) appears afflicted; but God is the only judge of hearts. The foolish thoughts of women produce nothing but disappointment. Farewell! Farewell! Farewell!"

"To the Prince Khám Buksh:

"My son, nearest to my heart! Though in the height of my power, and by God's permission, I gave you advice, and took with you the greatest pains, yet, as it was not the Divine will, you did not attend with the ear of compliance. Now I depart a stranger, and lament my own insignificance, what does it profit me? I carry with me the fruits of my sin and imperfections. Surprising Providence! I came here alone, and alone I depart. The leader of this caravan has deserted me. The fever which troubled me for twelve days has left me. Wherever I look I see nothing but the divinity. My fears for the camp and followers are great; but alas! I know not myself. My back is bent with weakness, and my feet have lost the power of motion. The breath which rose is gone, and has left not even hope behind it. I have committed numerous crimes, and know not with what punishment I may be seized. Though the Protector of mankind will guard the camp, yet care is incumbent also on the faithful and my sons. When I was alive no care was taken; and now I am gone, the consequence may be guessed. The guardianship of the people is the trust by God committed to my care. Azim Shah is near. Be cautious that none of the faithful are slain or that their miseries fall upon my head. I resign you, your mother and son to God, as I myself am going. The agonies of death come upon me fast. Bahadur Shah is still where he was, and his son is arrived near Hindustan. Bedar Bukht is in Gujarat. Hayatu-n-Nissa who has beheld no afflictions of time till now, is full of sorrow. Regard the Begum as without concern. Udipur your mother, was a partner in my illness, and wishes to accompany me in death; but every thing has its appointed time.

"The domestics and courtiers, however deceitful, yet must not be ill-treated. It is necessary to gain your views by gentleness and art. Extend your feet no lower than your skirt. The complaints of the unpaid troops are as before. Dara Shukoh though of much judgment and good understanding, settled large pensions on his people but paid them ill and they were ever discounted. I am going. Whatever good or evil I have done, it was for you. Take it not amiss, nor remember what offences I have done unto yourself, that account may not be demanded of me hereafter. No one has seen the departure of his own soul, but I see that mine is departing."

Well might the dying Emperor feel remorse for his many crimes. The forms of his father, Shah Jehan; of his brothers, Murad Buksh and Prince Dara; of Shuja; of his own son Prince Akbar, besides the numbers of powerful nobles once his friends, but afterwards done to death, may well have stood by his bedside; and of them he was probably thinking when he wrote these letters. No sooner was Aurungzebe dead than the storm broke loose. Azim Shah and Khám Buksh each proclaimed himself Emperor, and had the Khutba read in his name, and both marched on Agra where nearly fourteen krores of rupees, the remains of Shah Jehan's treasure, were lying. Shah Alum, afterwards known as Bahadur Shah, was supposed to be far away, but in reality he was much nearer than was supposed. Azim Shah appears to have been a man of a hasty and passionate temperament, with but little judgment or discretion, and although Zul-fikar Khan attached himself to his cause, he probably foresaw what the end would be and kept a loophole for escape ready. Bahadur Shah had laid his plans with admirable skill. When sent to Cabul on purpose to be out of the way, he had passed through Lahore, where in the Governor, Moonim Khan, he had a man devoted to his interests. To him, he opened out his mind and told him that he had acquiesced in his exile simply to render his future career more safe. He said that he had even caused a report to be spread abroad that he intended to take refuge in Persia and added: "From this report my father is easy, and my brother lulled into self-security; but by the Almighty God, who gave me life (laying his hand on the Koran near him), and on this holy book, I swear, though not one friend should join me, I will meet Azim Shah in single combat, wherever he may be. This secret which I have so long maintained, and even kept from my own children, is now en-

trusted to your care!" In secret, Moonim Khan got everything ready for a forced march. Bridges were built, troops were enlisted, and a heavy train of artillery held in preparation. The soldiers were all paid and large advances made to the new levies. As soon as he received the news of Aurungzebe's death, an express was despatched to Bahadur Shah, and the army sent on towards Delhi. Bahadur Shah lost no time in joining the army, and then with forced marches of from 20 to 30 miles a day, was soon in front of Delhi. Here, he took possession of a large amount of treasure, and at once hurried on to Agra, which he succeeded in reaching shortly before his brother Azim Shah, who had marched leisurely along, encumbered with a huge camp, and an enormous amount of baggage. Azim Shah's army was by no means unanimous; even his own son Bedar Bukht was in secret a traitor, and there can be no doubt from what Iradat Khan tells us that the Prince meditated putting his father out of the way. "Being alone with him one night, he suddenly threw his arms round my neck and holding down his head upon my heart, said: 'If a sovereign and a parent seeks the life of a son, and that son is truly informed of his intention, how should he act in self-defence? Have you a precedent for it?' I replied: such a question is unnecessary. The behaviour of your grandfather (Aurungzebe) to his father, is a sufficient precedent; and sovereigns are forced to expedients which are not justifiable in other men. Conversation of this sort often passed between us; and one evening he asked me how he might gain an opportunity of seizing his father. I replied: 'When he has gained the victory over Shah Alum, you will be the first to congratulate him. The troops will then be separated here and there in search of plunder or looking after the dead and wounded; and as the tents will not be ready, your father will be only under a Shamianah surrounded by a few Khanats. You will be admitted to audience, attended by such of your followers, as may have deserved notice in the action by their gallant conduct, and at such a time they will be allowed their arms. It is probable your father will not have many persons with him between the Khanats. Then is your time!—The Prince eagerly exclaimed: 'You have spoken well! Dare you, at such a time strike the blow?'—I replied that though the act was easy, yet a sacred oath rested upon our family never to shed the blood of a Prince unless by chance in battle." Surely no historian has ever made so frank a confession of having advised a Prince to become a parricide! And the easy way in which such a crime is discussed shows how terribly blunted must have been all moral sense and feelings of humanity. The way the wily old counsellor gets out of belling the cat is amusing.

The two armies met outside Agra. Zul-fikar Khan was with Prince Bedar Bukht in the advance guard. Before the battle took place, Bahadoor Shah sent to offer terms to his brother and proposed a division of the empire, leaving the choice to Azim Shah, or if these terms should be refused offered to decide the quarrel by single combat. These terms were refused with a contemptuous message. "Does not the stupid fellow know that two kings cannot sleep under one blanket?" There can be no doubt that in the action which followed Zul-fikar Khan had resolved to fight as little as possible. At the commencement "he obliqued so far to the left as to be scarcely visible" and appears to have allowed Shah Alum's advance guard to cut him off from Bedar Bukht. Azim Shah hurried up to reinforce his son, but it was too late. Zul-fikar Khan had turned his back and *galloped off to Gwalior*, and Azim Shah and his son Bedar were left fighting, attended by only a few faithful adherents. Bedar Bukht fell first, struck by a musket ball and several arrows; his father Azim Shah also received a *mortal* wound, and the young "prince Wallajah sunk down in the sleep of death. I now made my escape towards Agra, not choosing to go to the enemy's camp, though I had many friends who would have given me protection." (Iradat Khan). Azim Shah, in the meantime, with the bravery of his race had, wounded though he was, descended from his howdah, when "an arrow struck him in the forehead and ended his existence. Rustam Ali Khan mounted the elephant and cut off the head of the Prince with his pitiless sword. He carried it to the army of Shah Alum and the shouts of victory rose high. When Shah Alum saw the gory head of his brother, he looked fiercely at that dog Rustam Ali Khan and burst into tears" (Khafi Khan).

Bahadoor Shah's first act was to give to Zul-fikar Khan the reward of his treachery. He was sent for, and his Munsub was raised to 7,000, the highest dignity he could attain, and he was then despatched to put down Khám Buksh, with whom, as seen before, Zul-fikar Khan had already once been in collision. This Prince may have been foolish, but like all the rest of the Imperial family, he was certainly brave. A fierce engagement ensued near Hyderabad and Khám Buksh was not only defeated, but, with his two sons, was taken desperately wounded to the royal tent. Here the Emperor came to visit his brother and sat down by his bed; he gave him a few spoonfuls of broth and then left with tears in his eyes. That same night

Khám Buksh and one of his sons died. Their bodies were sent to Delhi and buried in the tomb of Humáyun.

After this victory Zul-fikar Khan was made Subahdar of the whole Deccan, where he had almost unlimited power, and where, though supposed to be fighting against the Mahrattas, he in reality took the opportunity of allowing his opposition to be bought off as often as possible. In 1711 the office of Khan Khanam or Commander-in-Chief fell vacant owing to the death of Moonim Khan, and the Emperor wished to appoint Zul-fikar Khan, but he declined as he preferred the independence of his Subahdarship. In 1712 Bahadur Shah died and then fresh disturbances arose from which Zul-fikar Khan succeeded in reaping fresh honours and profits. Bahadur Shah's short reign of five years was one full of promise. He seems to have been an able, generous, and large-hearted man, and a strong one when occasion called for strength. Had he lived a few years longer, it is probable that he would have been able to quell the disturbances which were breaking out all round, and the power and influence which Aurungzebe's grandsons still possessed, would probably have been broken by a reign of some years duration. As it was, the same scenes which occurred at the death of Aurungzebe, occurred at the death of Bahadur Shah. His sons and nephews waged an internecine war, aided by their nobles, and on all sides fresh enemies were arising. The Sikhs had just begun to make themselves dreaded, and the Mahrattas were daily spreading their ravages. The country was gradually being converted into a vast battle field, over which every chief who was not engaged in fighting was wandering in search of plunder. Bahadur Shah's death was so sudden that there is room for suspicion of foul play. The first quarrel occurred at the bed side of the dying Emperor. Jehander Shah the eldest son, and Azimush Shah the second, were seated by their father's bed, when the latter drew out a dagger from under his father's pillow in order, it is said, to admire its workmanship. Jehander Shah, at once supposed or pretended to suppose that his brother was about to make an attempt on his life, "he started up and retired with such precipitation, that he struck the turban from his head against the door of the tent, forgetting his slippers at the entrance, and fell down over the ropes." (Iradat Khan). He at once retired to his own quarters and Zul-fikar Khan, who was now Ameer-ul-Umra, seeing that a breach between the two brothers was imminent wrote to the younger and asked how he could serve him. The answer was a somewhat peremptory order

to do as other Imperial servants had done, and come to Azimush-Shah's presence. Zul-fikar Khan, in high dudgeon at being treated in so summary a fashion, at once went over with his army to the camp of Jehander Shah and placed his services at his disposal. The Emperor had four sons and all four were encamped close together. Azimush Shah had excited the jealousy of all the rest, and the three younger ones therefore combined together to destroy him as soon as the Emperor should die. Zul-fikar Khan offered his services to this confederacy who agreed that they would divide the Empire between each other. But the proverb quoted above, of two Kings not being able to sleep under the same blanket, proved only too true in this case. Azimush Shah had the largest number of men under his command, but instead of acting promptly and at once marching against his brothers, he waited for five days. In the meantime the three brothers had time to strengthen themselves and Zul-fikar Khan sent for the heavy artillery from the neighbouring city of Lahore, on the fifth day Azimush Shah marched out to give battle. A short but sanguinary battle ensued, and Azimush Shah, with the hereditary bravery of his family, was killed in the front ranks, deserted by almost all his followers. Iradat Khan as usual was on the losing side and went through a variety of misfortunes during the day. His tents were burnt, his treasure looted, his women nearly carried off, and he had to bivouac on the open ground, drenched through with water, but in spite of all this, the soldier-philosopher says that "he thanked God for his safety and honour, and after saying 'what is gone is gone' with a calm mind recited one hundred and twenty verses of the Mesnari, (a collection of moral poems) besides an ode applicable to the present state of affairs." In the meantime the three brothers had quarrelled over the plunder. Zul-fikar Khan had made up his mind that if two kings could not sleep under one blanket, still less could three, and as Jehander Shah was a "weak prince, fond of his pleasures and averse from business" he thought that he would be the Emperor under whom he would most likely be able to exercise the most power. Accordingly, he resolved to sacrifice the two other brothers. These, relying upon the partition agreement, had each sent in to Jehander Shah the share of plunder and treasure they had obtained; but instead of dividing it, Zul-fikar Khan, kept putting off a partition, first on one pretext and then on another. In the meantime the troops were clamouring for pay and prize money, and each day's delay increased their insubordination. At last Zul-fikar Khan refused point blank to make

any division, and then the two brothers drew off their camps and commenced hostilities against Jehander Shah. But they were themselves at variance and the younger, Russaush Shah, had resolved if possible to destroy not only his allied brother but Jehander Shah also, accordingly, just as his brother had succeeded in repulsing Zul-fikar Khan's attack, he fell upon him in the rear and the Prince, Jehan Shah, who is represented as a noble-minded man, died fighting in the front ranks. Zul-fikar Khan at once stayed his flying troops and after having cut up the enemy's force, sounded the trumpet of victory. The two rivals now left were Jehander Shah and Russaush Shah. The latter was foolish enough to think that he would be supported by Zul-fikar Khan. Next morning he made an attack on Jehander Shah, but instead of finding Zul-fikar Khan come over to his side, he was himself deserted by his principal general, and like the rest of his family, disdaining to fly, he fell fighting bravely. Iradat Khan says with truth: "Such courage I must with justice remark never appeared among the descendants of Timur, as was shewn by the offspring of Aurungzebe, nor do various histories that I have read, record the like gallant opposition of princes singly against numbers. True valour is proved in the extremity of danger; but it is easy to assume the appearance of courage in the day of safety."

Zul-fikar Khan was now at the height of his power. The new Emperor Jehander Shah was his creature, and as long as he took care to provide his puppet with wine and women, he knew that he need fear no interference. Jehander Shah, however, was a man of such unbridled passions, and of such total want of ability and discretion, that he soon horrified even the lax moralists of those days. Probably his chief cause of offence was the way he insulted the nobles. He took into his harem a public courtezan, and raised to the highest dignities of the Empire all her relatives and friends. Upon his mistress alone he settled an income of two millions sterling for household expenses only. Women of her own class were promoted to high dignity, and when they dared to insult in the public street so high a nobleman as the Nizam-ul-Mulk, they were supported by the Emperor's influence. To such a state of degradation did this Emperor descend, that he used to visit at night, together with his mistress, the brothels of the city, and was generally brought home with her to the Imperial palace in a state of drunkenness. On one occasion "after spending the day in debauchery, and visiting different gardens near the city (Delhi) in company with Zohara, the

herb woman, they retired to the house of one of her acquaintance who sold spirits, with which they all became intoxicated. After rewarding the woman with a large sum, and the grant of a village, they returned in a drunken plight to the palace, and all three fell asleep on the road. On their arrival, the mistress Lall Koor, was taken out by her women; but the Emperor remained sleeping in the chariot, and the driver who had shared in the jollity of his royal master, without examining the machine, carried it to the stables. The officers of the palace, after waiting till near morning for his arrival, on finding that the mistress had entered her apartments without the Emperor, were alarmed for his safety, and sent to her to inquire regarding his situation. She desired them immediately to examine the coach where they found the wretched monarch fast asleep in the arms of Zohara, at the distance of nearly two miles from the palace." (Iradat Khan.)

In the meantime Zul-fikar Khan's own pride and insolence helped to bring about the inevitable catastrophe. Whilst his master was doing his best to bring disgrace upon the Imperial name, he "became absolute, and so proud that Pharoah and Shudad could not have obtained admission to his threshold" (*ibid*). The oldest families were ruined, and rich men were sought for solely to be plundered of their wealth and put to death. On all sides were heard complaints against the Emperor and his chief minister; the end was near, for, as the historian says "often does the sigh of the widow ruin the riches of a hundred years." This state of things continued for nine months, and then one of the royal princes came forward, trusting to the general dissatisfaction to effect a revolution.

Ferokshere was the son of Azimush Shah, the first of the four brothers who was killed after Bahadur Shah's death. He had been appointed to the government of Bengal and Behar, and was in these provinces when his father was killed in his attempt to gain the throne. He now assembled an army and marched on Delhi declaring that he would revenge his father's death. He was supported by two influential noblemen, known as the two Syeds, who were emulating the career of Zul-fikar Khan and his father Asoph-ud-Dowlah, in which endeavour they ultimately succeeded, even to the last closing scene. Zul-fikar Khan appears to have lost a great deal of his old energy; he was probably between sixty and seventy years of age, and had become enervated by court life. He allowed himself to be taken by surprise, and was so signally defeated that both he and the Emperor Jehander had to fly for their lives. They both fled to Delhi and took

refuge in the house of Zul-fikar Khan's old father Asoph-ud-Dowlah, then over ninety years of age. Here they remained until Ferokshere's arrival, the reason probably being that they dared not leave the house for fear of being torn to pieces, for the tyranny and rapacity, which had been the feature of Jehander's reign, had left him and his minister no friends amongst the people. The nobles were disgusted at the way unworthy persons had been promoted to high honour, and were impoverished by the wholesale robberies which had been carried on by Zul-fikar Khan and his partizans; whilst the people were shocked at the way in which the Emperor had himself lowered his Imperial dignity. Ferokshere camped before Delhi and Asoph-ud-Dowlah with his son, Zul-fikar Khan managed to get out of the city and went to meet him in the hope of pacifying his anger and smoothing matters over. The father and son were both received in open Durbar and treated with respect; they were honoured with dresses and other marks of royal favour, and then the father was dismissed but the son was ordered to wait. This Zul-fikar Khan must have felt to be ominous, and when shortly afterwards some food was brought to him from the royal table, his fears increased. The officer with him, however, began to eat and so, his dread of poison being removed he began to pluck up heart. It was then suggested, that it being contrary to etiquette to eat in the Emperor's tent they should adjourn outside. Directly Zul-fikar Khan arrived inside the outer Khanat, the door was closed behind him and he was left alone. The old soldier must have then known that his hour was come and he prepared to die like a man. There was no hope of escape, for, as soon as he had entered, the enclosure was surrounded by two hundred armed men, who, as already arranged, took up their posts of guard. After half an hour of bitterness of death, the chief of the Emperor's domestic servants entered the enclosure and said to the old general: "His Majesty commands you to inform him why you confined Khám Buksh in Dekkan (15 years before at Gingee) and ill-used his friends, contrary to loyalty and respect to the Emperor?" The answer was: "I confined the prince by orders of Arungzebe, his sovereign and mine. Had he commanded me to imprison my father I should have at once complied." The officer then withdrew but soon returned and said: "You were the general and chief minister of Azim Shah; was it acting loyally to desert him in the field and seek your own safety by flight?" He answered: "While he was alive I kept the field (this was not true), but when he was slain I dared not oppose a prince of

the blood without a rival of equal dignity at the head of our army." The officer again withdrew but returning in a short time said "What were the circumstances of your conduct to the martyred prince, his majesty's father, Azimush-Shah?" (This was the first of the brothers who fell in the quarrel after Jehander Shah's death related above and who had sent a discourteous message to the powerful general). The answer was: "He behaved inattentively to me, and I then attached myself to his brother, but in this did no more than other nobles, who each embraced the cause of the prince he best loved, and from whom he received the greatest favours."

Then followed the last question: "Why was his majesty's beloved brother inhumanly murdered in cold blood, many days after the battle, when other princes were allowed to live?" (It is difficult to understand to which prince this question refers, because from Iradat Khan's history, which is evidently that of an eye witness, all the princes were killed in battle. It is possible from the answer which follows that this was merely a manufactured charge in order to bring about the crisis). Zul-fikar Khan seeing that all hope was over exclaimed: "If I am to die, kill me instantly, nor vex me longer with vain interrogations."! "Upon this Sacheen Beg, and other chelas, rushing upon him, threw him on the ground and having strangled him with a bow string, stamped upon his breast, and stabbed him with daggers in several parts of his body. When quite cold, the corpse was drawn out with ropes, and cast without the court of the divan, as a spectacle to the populace. His effects and estates, with those of his father were confiscated to the royal use" (Scott—Ferokshere). Khafi Khan tells the story in the same way, though with less detail, and from what he says it would appear that the old father and Zul-fikar Khan confined Jehander Shah in the fort as soon as he arrived in Delhi from his flight, and hoped in consequence to make their peace with Ferokshere; but when the old man was dismissed and his son kept behind "the father saw that his son was doomed, and with a swelling heart and tearful eyes he repaired to his tent." On the same day men were sent to Delhi with orders to despatch Jehander Shah with the bow string; this was done (15th February 1712) and the heads of both Jehander Shah and Zul-fikar Khan were cut off and carried about the city on spears. Their bodies were both slung on one elephant, (that of Zul-fikar Khan being suspended to the tail), paraded before the people and thrown down at the gate of the fort. Asoph-ud-Dowla was left alive, and allowed to

live out the few remaining years of his long life in honourable confinement with a scanty pension. Their estates, which must have been enormous, were confiscated, and in this way, says Iradat Khan, "the family which had filled for above two hundred years the highest offices of the state, was in an instant levelled with the dust, and like that of the Barmecides, totally ruined."

J. D. B. GRIBBLE.

THE LATEST THEORY OF LANGUAGE.*

IN the history of the Science of Language the quest for a single primitive form of speech seems to have had as great a fascination for its students, as the search for a north-west passage to Cathay had for our early navigators. One writer, Goropius, endeavoured to prove that Dutch was the language of our first parents in Eden; another, Erro, published arguments in support of the opinion that Basque was entitled to that honour and the same claim would seem to have been made on behalf of Gaelic. Hebrew too, as being the language in which the Old Testament was written, did not lack advocates who thought it needful in the interests of orthodoxy to uphold its claim to be the source of all the languages of the world.

Much energy was spent in this unscientific search for a Hebrew origin of human speech. Words were collected from many quarters and each word was provided with a derivation; but as the principles on which the derivations were obtained were not always sound and as there were no means of verifying them, those accumulations of learning did not make for progress and they are of interest now only as matters of curiosity. When *lucus* was derived *a non lucendo* because the sun does *not* shine therein; when *cœlum* 'heaven' could be traced to *cœlatum* 'covered,' because it is open; when a Hebrew word could be identified with another in Greek or Latin in which the letters were reversed, because the language of the Jews happens

*1. The Principles of Comparative Philology, by A. H. Sayce, London: Trübner & Co. 1875.

2. The Jelly-Fish Theory of Language, by A. H. Sayce, Cootemporary Review, April 1876.

3. Introduction to the Science of Language, Two Volumes, by A. H. Sayce, London: C. Kegan Paul & Co., 1880.

to be written from right to left; when, as an Englishman has been heard to maintain, an 'apothecary' is so called for the very good and sufficient reason that a-pot-he-carries, then etymology belies its name and instead of being the science of 'truth' becomes a science of falsehood.

Trial and error, however, seems to be a condition of progress; and the principle of Æsop's fable has oftener than once been verified in the history of science. The sons did not literally find the gold that lay, as the father alleged, in the vineyard; but, having dug well for it, they had, what was better, a splendid crop of grapes. If there had been no persistent pursuit after the philosopher's stone, invested as it was with the hypothetical power of turning whatever it touched into gold, the modern science of Chemistry could not yet have reached the gigantic proportions which it has happily attained. And just as the dream of the alchemists in search of the philosopher's stone resulted in the discovery of the true laws of Chemistry; as the romantic imagination which animated the seekers for a north-west or north-east passage to the mysterious land 'where shone the golden cities of Cathay' was rewarded by the tangible acquisition of geographical knowledge and the establishment of commercial prosperity, so the eager quest for some one primitive speech, Hebrew or other, kept up the zeal of research until it was rewarded with the discovery of a true principle of procedure, a clue to guide it through the devious paths of the wilderness safe into the promised land of ascertained knowledge.

Before speculating about the origin of language, before theorising on the nature of language as a whole, it is necessary, according to the true inductive method, that many languages should be examined and compared and a sound principle of classification fixed on. It was this last factor that was so long wanting for the solution of the problems of language, and it was reserved for India to supply the raw material out of which the missing principle was ultimately evolved. Though the materials of the science of language are literally in every one's mouth, yet the best, if not the only sufficient, materials for developing the principles of a science of language must be subject to the condition that, if the languages be living, they shall be literary, and, if dead, that there shall be books or other monumental forms in which their literature is recorded:—a condition which of itself is sufficient to condemn the crude theorisings about the language of paradise, when it cannot be professed that the world even now possesses extant records at all comparable in age to the

age of man. Now it has happened within the scientific era or on the threshold of it, that some discoveries have been made which have supplied keys to unlock many of the puzzles of language. Two of these only is it desirable to notice here.

The first is a discovery made within the last thirty years of a bilingual record, written in the Accadian* and Assyrian languages. "One of the most curious discoveries," says Mr. Sayce, "that have resulted from the decipherment of the records of Assyria and Babylonia is that the whole of the district included in Assyria, Chaldea Susiana and Media was originally inhabited by a Turanian race with agglutinative languages, who invented the cuneiform system of writing, built the great cities, and founded the *monarchies* of the kingdoms of the Tigris and Euphrates, and were, in fact, the pioneers of civilization in Western Asia. Their traditions pointed to a cradle in the mountainous region south-west of the Caspian, and the mountain of Nizir in the land of Gutium, between the 34th and 36th parallels of latitude (the present peak of Elwand, as it would seem), was the sacred spot on which the ark had rested, and mankind had found its second birth-place." The same author, distinguished both in Accadian and Assyrian scholarship, elsewhere says "The science, the art, and the literature of Babylonia, had been the work of an early people who spoke an agglutinative language, and from them it had all been borrowed and perhaps improved upon by the later Semitic settlers in the country. Their language, which for the want of a better name we will call Accadian, had ceased to be spoken before the seventeenth century B. C., but not before the civilization and culture it enshrined had been adopted by a new race, who had to study and learn the dead tongue in which they were preserved, as the scholars of the middle ages had to study and learn Latin. Hence came the need of dictionaries, grammars and reading-books; and the clay tablets of Nineveh accordingly present us not only with interlinear and parallel Assyrian translations of Accadian texts, arranged upon the Hamiltonian method, but also with syllabaries and lexicons, with phrase-books and grammars of the two languages. It is the first attempt ever made to draw up a grammar, and the comparative form the attempt has assumed shows how impossible was even the suggestion of such a thing without the comparison of more than one form of speech. The vocabularies are compiled sometimes on a classificatory principle, sometimes on an alphabetic

* cf. Genesis X, 10.

one, sometimes on the principle of grouping a number of derivations around their common root; and the latter principle enunciates at once the primary doctrine and object of comparative philology—the analysis of language into its simplest elements. With the discovery of roots, we may date the possibility and the beginning of linguistic science."

The other discovery referred to was the discovery of Sanskrit by western scholars. The first European that thoroughly mastered Sanskrit was Roberto de Nobili, who came as a Jesuit missionary to India in 1606 and entered on the duties of his profession at Madura. He was in his way a remarkable man. Thinking the methods of Xavier unsuitable and not likely to bring success to the missionary cause, he determined to strike out a new line for himself. He did not believe in spending his energies on the lower classes as Xavier had done, but bethought himself of the design of attacking the citadel of Brahmanism. With this view he shut himself up in secret till, having first learnt Tamil and Telugu, he acquired a thorough knowledge of Sanskrit. Thus equipped "he showed himself in public, dressed in the proper garb of the Brahmans, wearing their cord and their frontal mark, observing their diet and submitting even to the complicated rules of caste."* He came, as he said, to preach a new or a fourth Veda; but though the Ezur-Veda—composed, as it is, in Sanskrit verse in the style of the Puranas, and containing a wild mixture of Hindu and Christian doctrine—has been ascribed to him, it was probably written by one of his converts. Certain it is that a French translation of it, sent to Voltaire, was printed and given out by that brilliant sceptic in the belief that it was four centuries older than Alexander and that it was the most precious gift for which the West had ever been indebted to the East. The fact of the discovery of Sanskrit was made known in Rome first by one Philippo Sassetti who had been for five years in India in the end of the sixteenth century and again in written communications by Roberto de Nobili who was a missionary for ten times five years. But Rome took no interest in the great discovery.

The European mind never grasped its significance until men like Sir William Jones, Henry Thomas Colebrooke, William Carey and other illustrious contemporaries of theirs, having worked with success at the subject in India, inspired scholars in Europe with a zeal akin

* Max Muller's Lectures on the Science of Language (Longmans, Green, & Co. 1871) Vol I, pp. 173-5.

to their own. Sanskrit manuscripts were sent by these pioneers of linguistic science to the India House in London whither German scholars were attracted to examine the newly found treasure, and thus a new German school of philology was inaugurated by Bopp and Grimm and others whose illustrious names and herculean labours have been made familiar to the English reader by one whom Germany and England may almost equally claim as their own and of whom each has good reason to be proud. I mean of course Max Muller. But Sir William Jones and his collaborateurs did not lack national successors and a new English school of philology—of which Mr. Sayce is the most accomplished representative—has risen up to take their share side by side with continental scholars in working out the problems of linguistic science. More correct views of language and a better understanding of the right methods of dealing with it have been attained since the days when the Diversions of Purley threw a charm over the repulsive subject of words and roots, albeit the redoubtable author wrote in the interests of "a philosophical theory whose key note is struck in the assertion that *truth* is what a man *troweth;* which regards things as but the reflection of words and words as what men deliberately make them; which treats grammar as no organic growth but only as the mechanical invention of mankind."

Language is neither the mechanical invention of man nor is it the gift of God, at least in the sense of being a ready-made instrument for immediate use. Athene coming direct from the brain of Zeus clad in full armour is not a product of nature and forms no analogue for the genesis of human speech. Language is the gift of God in the sense that man is divinely endowed with the faculty of speech, and becomes able to express his thoughts in articulate words. Language is a combination of sound and sense; like man it consists of a body and a soul; it is the expression and embodiment of thought. The cupola of St. Peter's was not more really the outward expression of the idea which existed in the mind of Michael-Angelo, than the words which we utter are the outward expression of the thoughts that possess the heart. Articulate sounds that have a meaning are what we generally denote by the term language and such articulate sounds are found only where there is a mind to prompt and mould them. There is thus an outward or physical side to language and there is an inward or psychological side. Language grows with the growth of man and develops in accordance with scientific laws. The properties of oxygen may be the same

now as they were at the beginning of all things and the notes of the nightingale may not have changed since first they delighted the ear of Adam and Eve; but the thoughts of men and therefore their speech are progressive and have a history; or, as the poet sings,

> 'Yet I doubt not thro' the ages an increasing purpose runs,
> And the thoughts of men are widen'd with the process of the suns.'

The science of language deals, on the one hand, with the whole apparatus of voice and the phenomena of sound; on the other hand, with the laws of thought as embodied in speech. In the one view it is a physical science, in the other it is, like sociology or comparative law, a historical science. Its laws therefore may be verified by physiology and acoustics and by psychology, but "its results and conclusions have to be brought to the bar of history." Nor must we forget, as Mr. Sayce so well puts it, that "as it is the inward sense and meaning which constitute the essence of language, the primary object of comparative philology ought to be to discover the nature, origin and history of the signification we breathe into our words."

Sound without significance is not yet language: it must express thought. Now the expression of a thought or judgment is called by the grammarian a sentence; and nothing less than a sentence is intelligible. It is the smallest integer of speech: it is the unit of language. Take a sentence to pieces and what can be made of the separate parts? Language is like society whose creature it is. You may break up society into individuals, but beyond that only the anatomist can go and his business is with the dead body. The individual in language is the sentence and the dictionary-maker may break it up into words or roots but these are practically dead in their separate capacity. The old lady expressed a true sentiment who, after poring over Johnson's dictionary for an hour or two, at last gave it up with the remark that it might be very interesting if one could only find the thread of the story. Every one that consults a dictionary must carry the thread with him. In other words, he must not only convert each definition into a sentence, but he must remember that the definitions themselves are obtained by observing the meanings which words have in the sentences of standard authors.

We may say 'thanks' on receipt of a kindness and the whole circumstances known to speaker and hearer give the interpretation. The meaning is not conveyed by this monosyllable but by the monosyllable *plus* the circumstances. The person addressed thus feels that 'thanks' expresses a complete thought and needs nothing but

the form to make it a sentence. It is easy to see how the scanty language of a savage tribe might thus be eked out by means of gestures; and we are in fact told of a people in North America who possess a meagre vocabulary and who can hardly converse in the dark. And what are the grammarian's so-called 'parts of speech' but fragments of a sentence, fractions of the unit? "It is not *what* a word signifies that determines it to be this or that part of speech, but *how it assists other words in making up the sentence.*"

By taking a sentence to pieces we see what is the value of the individual words; and, if we take a word to pieces and reduce it to its radical or elemental form, we shall obtain similar results. Take for example the word 'his-tor-ic-al-ly.' Part after part being thrown off, we come at last to the root *is* or *id* or *vid* which appears in the Greek οἶδα and in the Sanscrit *veda* and which within the Aryan family means to see or to know; but why the root *vid* should have this meaning it is altogether impossible to tell.* Roots are thus the ultimate phonetic elements obtained by an analysis first of groups of allied words and then of the individual words themselves; and they bear the same relation to words or derivatives as letters and syllables do to the latter. It is difficult therefore to conceive a time when men talked by means of roots alone, or that roots ever constituted a language. All observation goes to show that in the matter of speech the specific precedes the general, the concrete, the abstract. "No doubt the roots of the grammarian are the best representatives we can now obtain of that early stage in the development of language which we may continue to call the root-period; but to identify them with the unknown *words* and *sentences* of that primative age would be like saying that oxygen and hydrogen are not only the ultimate elements into which water can be analysed, but actually constitute water itself when existing separately and before combination."

The primordial element with which the linguist must deal then is not the root, nor the word or derivative, but the sentence; and the theory under review is based on these two principles, viz. (1) That language is the expression or embodiment of thought; and (2) That the sentence is the unit of speech. On these two propositions as a foundation rests the canon of a morphological classification of the languages of the world, namely, that "the test of linguistic kinship is agreement in structure, grammar and roots." According to this canon, languages are classified into the following groups. (1) The

* cf. Max Muller's Lectures, Vol. II, pp. 329-30.

isolating (otherwise called monosyllabic) languages such as Chinese and Thibeto-Burman. (2) The *agglutinative* languages, such as the Turanian or Ural-Altaic and the Dravidian. (3) The *incorporating* languages, "the oldest examples of the *agglutinative* class," such as the Accadian and the Basque. (4) The *polysynthetic* or incapsulating languages of America, "in which the words that make up a sentence are stripped of their grammatical terminations, and then fused into a single word of monstrous length and appearance." (5) The *inflectional* languages like Sanskrit and Arabic. (6) The *analytic* languages, which show an attenuated stage of the inflectional and may be represented by modern English and the Romance languages.

It will thus be seen that a morphological classification of languages is largely a geographical classification. This is a fact which might suggest to publishers and promoters of education the idea of providing a series of language-maps for the easier instruction of youth in acquiring a general knowledge of the results of the science of language. But more important still; it is fitted to correct the tendency we all have to assume a unity of origin upon insufficient evidence. For "types of language like types of race, are as strongly marked off from one another as the countries to which they belong. Polysynthesism is as much characteristic of America as the hatchet face and the red skin of the aboriginal; isolation of Eastern Asia, as the yellow skin or oblique eyes of the Chinaman or Burman. Modern discoveries are gradually producing a conviction that the civilizations of China, of Babylonia, and of Egypt were all independent and self-evolved. Such at all events is the case with their modes of writing, the best product of any civilization and no one can study the character of these three civilizations without perceiving that they are radically distinct. Egypt, when the monuments first cast light on her, some 6000 years ago, is in the height of her culture and advancement; but she comes before us as a pharos of light in the midst of utter darkness, self-contained and self-sufficient, but surrounded on all sides by tribes and nations even more barbarous than the untaught negro of to-day. And such as was the civilization, such too was the language; the civilizations of the Nile, of the Euphrates and of the Hoang-ho, were not more isolated and peculiar than the languages which embodied them." Thus the testimony of language to the age of the human race agrees with that of geology and prehistoric archæology in assigning it a higher antiquity than the six thousand years "to which the monuments of Egypt allow us to trace back the history of civilized men."

However far back linguistic researches are carried, on strictly scientific lines, it is impossible to show that an isolating class of languages have ever passed into an agglutinative or an agglutinative into an inflectional or to show that all the languages of the world have proceeded from one, two or three original centres. Such an opinion is what Mr. Sayce, in one of his happy phrases, would describe as one of the *idola* of Glottology.

This conclusion has little or nothing to do with the question of unity of race. It is impossible to decide on the social affinities of a people merely from the language they speak. Race in physiology is one thing, race in philology is quite another. The Brahmans of Southern India may have Aryan blood in their veins while their speech is Dravidian. Language may prove social contact but cannot prove blood-relationship. The Ethiopian may change his tongue, though he cannot change his skin. Ethnology and philology are not convertible terms. On the one hand, we may believe in the unity of the race and still hold a plurality of primitive languages; on the other hand, it would not be difficult to hold a brief in support of the proposition that, if the race had a plural origin, language at first was one.* The Science of Language cannot decide the question of unity of race: it can neither affirm nor deny it.

Such being the morphological classification of languages, the next stage in the logical, though not in the chronological, order of inquiry is to arrange in 'families' those languages which the test of agreement in grammar and roots shows to be of kindred character; for where there is agreement in grammar there will generally be also considerable agreement in roots. The first family that was thus differentiated and that received for a long time almost the exclusive attention of scientific students of language was the Aryan. The great work of Bopp, culminating in his *Comparative Grammar of Sanskrit, Zend, Greek, Latin, Lithuanian, Slavonic, Gothic and German*, really laid the foundation of the science. Once on the right track, research soon produced valuable results. In contradiction to the ancient expectation that Hebrew was the parent of all the languages of the world, it soon appeared that Aryan is not only not derived from Semitic but that by no ascertained principles of philology can such a result be shown to be even possible. The well-marked distinction between the grammar of the Aryan and Semitic families is a universally accepted position in philology; but some

* See Max-Muller's Lectures, Vol. I, p. 373.

scholars still hope (against hope, it would almost seem) to bring the triliteral roots of the Semitic into correspondence with those of the Aryan family by reducing them to monosyllables. All other languages in Europe and Asia, not included in these two families, it used to be the fashion to comprehend under one great miscellaneous class called Turanian or Allophylian, but this is now generally held to be as unscientific as to assign Aryan and Semitic to the same family.

The test of grammar then comprehends in one great class the Sanskritic languages of India, the languages of Persia and the principal languages of Europe; which is thence called the Indo-European or the Aryan family. From the test of agreement in roots, it is now possible, by noting those which are common to all the languages of the family, to reconstruct the system of Aryan civilization before the emigrants left their original home in the neighbourhood of the Hindu Kush; and few chapters in Mr. Sayce's charming volumes are more delightful than those in which the ancient civilization is so beautifully recovered. It is possible even to trace the route which the several groups of Western emigrants followed in their march into Europe, and to show how some of these groups after a period of cohesion separated from each other and struck out new ideas and new forms of speech for themselves.

The state of forwardness in which Aryan philology is found, compared with that of other families, is due to the early discovery of Sanskrit, which was so specially valuable "because its roots and suffixes and generally the principles on which its words are formed, are more easily discernible than in any other language of the family: the other members (the younger sisters) of which showed much more blurred copies of the originally common system.*"

It is much to be wished that the philology of other groups of allied languages were brought up to an equally advanced standard with the Aryan, that each large family should have its Sanskrit, its key to unlock its hidden treasures. The recent discoveries, already alluded to, encourage the hope that in the case of some families the wished for consummation is in the way of being attained. "Assyrian," we are told by Mr. Sayce, "may justly be described as the Sanskrit of the Semitic idioms;" and "as Accadian," says Mr. Peile, "is by far the oldest form of the languages of that family of

* Peile's Primer, p. 55.

which Turkish is the best known type, its importance is of the same kind as that of Sanskrit."

The hopes which these facts justly excite are far as yet from being attained, but considerable progress has been made, all with a tendency however towards multiplicity rather than unity. As within the inflectional group, it has been shown that Aryan and Semitic are separated by a gulf which no linguistic engineering can bridge, so in other groups, there are, according to our genealogical sub-classification, many separate families that cannot be traced to any real or hypothetical common parent. "The number of separate families of speech now existing in the world which cannot be connected with one another is at least seventy-five; and the number will doubtless be increased when we have grammars and dictionaries of the numerous languages and dialects which are still unknown, and better information as regards those with which we are partially acquainted."

It would be impossible to enumerate all the individual languages existing in the world now, or that have existed in the past. Language has always been in a state of constant flux. If we may not exactly say of languages that "they quickly fall and in their room as quickly others rise," yet it is undoubted that many languages have suffered total shipwreck, not leaving even such waifs and strays to remind us of their existence as the Basque of the Pyrenecan slopes or the Etruscan inscriptions of ancient Italy. Within historical times we know of languages that have passed out of use. The last Wendic speaker died in 1404; Tasmanian has passed away in spite of all the efforts of Government to preserve it; Cornish has long since been replaced by English; and Welsh and Gaelic will probably soon share the same fate.

What, then, if the Science of Language must abandon the dream of its youth; if it must confess that the world, having kept no record of its first speech, has forgotten it as completely as we have all forgotten the babblings of our infancy? It will still remember that there was a time when the Macedonian Empire made Greek the language of the East, and when Rome effectually stamped out the idioms of the West. It will remember that it was only an invasion of barbarism and the overthrow of Roman organization and culture that restored the period of linguistic disunion. In short it will remember that the growth of civilization means the increase of union in many departments of social life; that "every conquest over a horde of barbarians, every attempt to found a settled Government, to establish a code of laws, to systematize a religion, or to originate a literature, is a step forward in the direction of linguistic unity." It may thus be induced to transfer its golden age from the past to the future; and, instead of carrying on the quest for a single primitive form of speech, to adopt for its practical aim the formation of a universal language. "The inventions of the present century—the steamer, the railway, and the telegraph—are bringing all parts of the world into a closer connection with one another, and abolishing the barriers created by differences of speech. Commerce demands a *lingua franca*, and now that commerce is world-wide its *lingua franca* must be world-wide also." I believe the prophecy has been hazarded that the universal speech of the future will be the pigeon-English of Canton. But, however this may be, the Science of Language has a great future before it. Our civilization, like the languages which reflect it, is imperfect, but we may take courage for the future from what has been achieved in the past. The pagan spirit of classical antiquity, which localised its gods and its institutions and could discover in a foreign language nothing but a barbarous jargon, has happily been put down; and, were the spirit of Christianity—which has always seen the same blood, the same origin and the same hope in all men—more thoroughly infused into our civilization, we might then dip 'into the future, far as human eye could see,'

> Till the war-drum throbb'd no longer, and the battle-flags were furl'd
> In the Parliament of man, the Federation of the world

and there should be but one faith and one hope, and one language to express it.

G. MILNE RAE.

A POSSIBLE UNIVERSITY.

IT is the purpose of this article to say a few words about two Indian towns, but more particularly about one of them. The smaller of the two stands almost in the surf of the Coromandel coast. So close is it to the Bay of Bengal that the roar of the billows breaking on the beach is sometimes nearly deafening in the grass-grown streets and quiet homes of Tranquebar, and the air there is generally moist and cool from the presence of salt sea-spray. The other town is also close to water, but it is that of the Hooghly mouth

of the Ganges. Serampore has a pleasant, cheerful site amidst grass and trees on the right bank of the fast-flowing river. Both places once upon a time belonged to the crown of Denmark, but have long ceased to be Danish. Though a thousand miles apart they are united in having had similar fortunes. By one single act of transfer, by a stroke of the pen held by "the Royal Dane" thirty-eight years ago, they became British possessions paid for in hard cash, twelve lakhs and fifty thousand Company's rupees, which were valued, as appears from the first article of the treaty of transfer, at two shillings each rupee. It will not now be attempted to tell in all its fulness the Tale of these Two Cities, or rather towns; their history, their extent and population can be found recorded in any gazetteer of India, and missionary writings regarding the early Christian Church in this country testify to what was accomplished at Tranquebar by Ziegenbalg and Schwartz, and at Serampore by Carey, Marshman, and Ward. Denmark by means of these two towns encouraged the introduction of Christianity into India, and German and English Missionaries found protection under the Danish flag from the East India Company, which had rather a rough way of proceeding with men of their vocation. When Tranquebar and Serampore were transferred, Denmark, clinging to the very last to a protectorate of Christianity, bargained, as is seen by Article VI of the Treaty, that "The Church Missionary Board at Copenhagen for the Propagation of the Gospel shall be at liberty to continue their exertions in India for the conversion of the Heathens to the Christian religion."

CAREY and MARSHMAN were as active in building at Serampore on Danish soil, as they were in preaching and teaching, and in acquiring a knowledge of Oriental languages. They resided in a spacious and noble mansion—it deserves no less imposing name—which they built for their own personal accommodation and that of their helpers, and which once was crowded by young men who came to live under Danish protection, and to carry on with them their great work. In front of the house flows the river at the distance of an easy stone-throw. On the other side of the rapid stream, the quiet waters of which are disturbed twice daily by the tidal bore from the estuary at the entrance to the Bay of Bengal, is visible the vice-regal palace of Barrackpore with its park stretching far along the water's edge. Carey and Marshman had close at hand a small English chapel which was also their handiwork. They adorned the whole neighbourhood with gardens and trees, some of the latter being of a rare description in Bengal, as the mahogany tree. More than one large

and handsome dwelling house erected by them stands embosomed in foliage, a pleasant object to persons passing in boats along the great waterway. But as builders their master-piece was the Serampore College. This, when we remember that it is now half a century old, can only be regarded as an astonishing structure. Its halls both on the ground-floor and upper storey are spacious; the position on the grass-grown and tree-shaded bank of the Ganges is beautiful; and the contemplation of the purpose for which this noble building was designed is pleasing to the mind. It was intended that this College should be a great educational centre, and that its influence should be felt far and wide in the East. The great extent of its area is due to the use Carey and Marshman made of girders as a roof-support. In turning girders to good purpose in house-building in India they were pioneers, as they were in regard to so many other things. They introduced into this country the very first steam engine. They were, too, the first paper-makers on the European plan of manufacture, and regarding their paper-mills a few words in the nature of a digression may perhaps be permitted. When Carey and Marshman had long passed away from this earthly scene, certain Government authorities at Calcutta, finding the Military Stores Department was running short of Boxer cartridges, and that an expected supply would be months in arriving from England, indented on the Serampore paper-mills for some greasy kind of paper to serve, in lieu of the proper Boxer cartridge-paper, until such time as there should be no necessity for the use of a spurious article. The proprietors of the paper-mills became at once large purchasers of tallow. By beat of tom-tom they proclaimed in the bazaar of the neighbouring military cantonment that they required grease, and that any description of the commodity would be acceptable; immediately afterwards the great Indian Mutiny began its course at Barrackpore, but we do not venture to say *post hoc ergo propter hoc*. As a matter of fact no cartridge made of the Serampore greasy paper was ever issued to the troops, for, not long after the beat of tom-tom, there was only a remnant of the great Company's army remaining.*

* As there has been a difference of opinion as to the cause of the Mutiny, the latest utterance by a public man on this subject may be quoted. Sir H. Sumner Maine at p. 48 of *Early Law and Custom* published in 1883 says:—"We can find in this most ancient literature" (that of India) "the germs of many superstitions still exercising pernicious effect—of the caste prejudice which forces the wounded sepoy to die of fever rather than take water from his low-caste fellow-soldier or his English officer; of that terror of pollution which, twenty-five years since, led to the frightful mutiny of the mercenary troops; of that rejection of meat and drink

When it was found necessary to disband the native soldiery at Barrackpore, fear fell on the inhabitants of Serampore, as the high road to the North-West runs through the town, and it was expected that the insubordinate and wrathful men would cross the river to make use of this road on their journey home. The river was indeed crossed by party after party, but no mischief was done until the march had lasted for several days, and Lower Bengal had been left far behind. As the boats filled with red coats were seen pushing off from the Barrackpore bank of the river the work-people in the paper-mills of Serampore and the compositors of the *Friend of India* newspaper, and other people as well, fled from the town; but one person remained quiet and undisturbed at his desk, albeit, it is said, no one was left to answer his call. This was Mr. Meredith Townsend, then the Editor of the *Friend*. It is needless to say he was unharmed. For many years since then he has been, and still remains, Editor and Proprietor of the London *Spectator*. It may be altered now, but there was a time when the high road to which allusion has been made was afflicted by a visitation of Hunterian spelling, a large nameboard at a turn of the way guiding or misguiding the traveller with the information that he was on the Grand *Trank* Road, trunk road being presumably intended.

Carey and Marshman, (for when they were living in Serampore, the town had not become British, and a transfer from Denmark was not contemplated,) obtained from the King of Denmark a Royal Charter which made the Serampore College a University, that is, granted it the power of conferring academic degrees. The College received at the same time a corporate seal of handsome appearance. The face of the seal exhibits the front of the College-building with its lofty portico and extensive wings; pediment and columns are neatly engraved, and no body-corporate could well require a better "*sigillum*" for the adornment of parchment-diplomas. This Royal Charter is still carefully preserved at Serampore. It is enshrined in a suitable casket and lies in the grand library, where visitors to the College can see it. The last occasion when the librarian spread it before us was during a visit paid to the College by Sir Richard Temple, then Lieutenant-Governor of Bengal. Someone made bold

which still limits the food-supply of an over-populated country, and contributes to its periodical famines. But in close contact with this frame of mind is now-a-days an ever-growing body of thought stirring with the leaven of Western knowledge and Western scientific method; and the juxtaposition of the two makes the government of India by the English an undertaking without a parallel in its novelty and difficulty, and in the amount of caution, insight, and self-command demanded from its administrators."—W. F. H.

to request His Honor's particular attention to the roll. He was good enough to inspect the Charter, but, when told that, though given by the king of Denmark, it was still as valid a document for the conferring of degrees as the Acts of the Governor General which had created the Universities of Calcutta, Madras, and Bombay, he simply gave a diplomatic shake of the head, and smiled. Lord Burleigh knew what could be done by a shake of the head, for he settled much of his business that way, but a lawyer is hardly likely to regard a shake of the head from Sir Richard Temple as very discouraging.

That the Serampore College still has power to confer academic distinctions is proved, first by the possession of the Royal Charter signed in his own hand by King Christian, and secondly by Article VI of the Treaty of the 22nd February, 1845, the latter clause of which runs thus—"The rights and immunities granted to the Serampore College by Royal Charter, of date 23rd February, 1827, shall not be interfered with, but continue in force in the same manner as if they had been obtained by a Charter from the British Government, subject to the general Law of British India." Why the Serampore College authorities, who still continue within their walls the educational work begun by Carey and Marshman, have never made use of the powers they thus possess, is best known to themselves. They are Baptist Missionaries, and are well educated and carefully trained men, but from some cause or other have never raised the standard of teaching at Serampore very high. Their classes consist, or did some few years ago, of lads with no higher ambition or prospect while pupils of the College, than that of matriculating in the University of Calcutta. Carey and Marshman were Baptist Missionaries, but only in the sense that they were of the Baptist persuasion and were teachers of Christianity to Hindus; they were independent of all control from the Baptist body in England. Not so their successors, who are Baptist Missionaries through having a Mission entrusted to them by the Baptist Mission Board in England. To that Board they are responsible, and from it they receive their orders. Without authority from home they would never, it is presumed, think of conferring degrees on academical aspirants; and it might not be palatable to the Mission Board of their Society that they should engage in greater educational labours than those with which they are at present occupied. But still it is well it should not be forgotten that here in

India we have a body who, when the right time comes, can arise from their educational nap, if the '*far niente*' policy they have adopted may be so termed. They can when they please establish a University at which residence within College-walls shall be a still greater necessity than it is at Oxford, and they can model their system of teaching on another plan than that which is required when students have to be instructed for the mere purpose of obtaining a degree from one of the great Indian Universities. On the '*pros*' and '*cons*' of this question we do not wish to enter; the question is one which should be left in its integrity to persons capable of its wise discussion. All we wish to do is to call attention to the Serampore College Charter and to point out that it is not a dead letter.

WALTER F. HOOPER.

MODERN THOUGHT NO DEPARTURE FROM ISLAM.

In his very interesting and instructive paper on what is called "A new departure in Islam"* the Rev. Mr. Sell, commenting on what has appeared to him as an "inherent defect of Islam—its fixed and final nature," would have his readers understand that the modern school of Mussulman thought "is not Islam; it is a departure from it." The general reader who has not studied Mussulman life and Mussulman institutions will have ample excuse in the above expressions if he permits himself to believe that the Hon'ble Messrs. Syed Ahmad and Amir Ali and their followers are no Mussulmans *i.e.*, that they are *kâfirs* or infidels—infidels from a Mussulman point of view. But how absurd would it be in the eye of a Protestant Christian if one were to say, judging of Christianity from the standpoint of the Roman Church, that members of the Church of England or Scotland are not Christians!

If Mr. Sell has used the term Islam in a restricted sense, *i.e.*, to denote what may in Christian parlance be called the orthodox school of Islam, his observation is thoroughly justifiable. But if it is meant to represent the general religion of the Khoran, I must beg his pardon and refer him and his readers to the numerous departures *in* Christianity and ask them if they would call them departures *from* Christianity. What is Christianity? Is it merely a theology of dry and lifeless dogmas and doctrines? That would indeed be a very dangerous religion for any one to rely on. If I am not wrong, Christianity consists solely, or at all events mainly, in the living example of perfection and purity in the life of the Lord Jesus, and the ever-working influence of that example, coupled with the unconditioned dependence on God, Christ and the Holy Ghost. Can any one who believes in and practises this Christianity be called a non-Christian? Why should then poor Islam be condemned as a lifeless school of stagnant dogmas? Is it because there have been *Moulavis* who in common with certain Christian divines of all ages, have held that certain faiths and dogmas are necessary adjuncts to their religion? Why should what is conceded to one historical religion be denied to another? What is Islam? I will quote that learned Christian writer Mr. George Sale in answer. He describes the fundamental position of Islam in the following passage. "That from the beginning to the end of the world there has been, and for ever will be, but one true orthodox belief; consisting, as to matter of faith, in the acknowledging of the only true God, and the believing in and obeying such messengers or prophets as He should from time to time send, with proper credentials, to reveal his will to mankind; and as to matter of practice, in the observance of the immutable and eternal laws of right and wrong," together with other precepts. Mr. Sale goes on to say that "to this religion he (Mohammed) gives the name of Islam, which word signifies resignation or submission to the service and commands of God;" or as the root '*salama*' implies, the religion of salvation. Whether this religion excludes and in spirit is different from Christianity is beyond my present purpose. All that I have now to show is whether it includes the modern school of thought.

Mr. Sale's exposition of Islam and Mr. Sell's account of the modern school are sufficiently clear and need no comment. But I cannot conclude without refering to what Mr. Sell is pleased to call the finality and fixity of the nature of Islam. That such is the belief of a numerous section of Mussulmans themselves I do, in justice both to Mr. Sell and to myself as an earnest *seeker* after truth, openly admit. But to believe that such is the true character of Islam I have scarcely any evidence. In "the incarnate *kalamulla*," I find nothing which points unmistakeably to such a conclusion. On the other hand it is expressly stated in it that *Alkhoran* or the

* See the November number of this Magazine, page 275

book is a "direction," merely a direction: nowhere is its obligatory and final character asserted or maintained. That such is not merely the interpretation of the modern school, which as Mr. Sell rightly says is influenced by western culture, but the natural sequel of the teachings of such ancient divines as *Ghazali* and *Jahedh* is testified to by no less an authority than George Sale.

Ghazali holds that the original idea, the spirit, of the Khoran is eternal and immutable, while the verbal or literal version of it is a creature and work of man. Jahedh has often spoken of the Khoran as a body susceptible of being turned into a man or a beast; "thereby intimating," as Sale conceives, "the double interpretation it will admit of according to the spirit or the letter." Apart from what Ghazali and others have said and what an impartial and unbiased reader of the Khoran may find for himself, there are facts both in the history of Islam and in that of other historical religions which prove beyond doubt that, in spite of the contention of its votaries no religion, not even Islam, has "been fixed and final." Has Christianity been so? Has Islam been so? Has the most conservative Hinduism been so? And yet have not Christianity and Hinduism as well as Islam had ecclesiasts who have contended from time to time, even in this nineteenth century of wonderful progress and free thought, that their respective religions are the most perfect and therefore final, and in consequence the only perfect and final ones? That the "inherent defect" of finality is not peculiar to Islam alone, but is common to every historic religion has conclusive proof in the history of the world.

MIR SHUJAAT ALI.

P. S.—Since writing the above short dissent I have been told by a Christian friend that the subject is "worthy of fuller treatment" and should be dealt with from "the stand-point of Mussulman authorities and history." I do not mean to deal with the question at greater length in this paper as I have in preparation a fuller work on the subject. All that I wish to do is to request the readers of this Magazine to judge for themselves whether the Mussulman thought of the day does not bear the character of Luther's reformation of Christianity. What was Luther's authority? Was it episcopal or scriptural? Did he quote the Popes and Bishops to support his position? Did he not solely depend on the Bible, that holy book of revelation? Was he then not a Christian? Was his religion not Christianity? I could accompany this paper with a roll of Mussulman authorities; but what purpose would that serve? My

Ghazalis and Jahedhs might in a moment be rejected as Soofis and Molazalites, *i.e.* dissenters from orthodoxy. Why should we give up the impregnable divine support of the Khoran and pin ourselves to the authority of human writers, especially when our aim, like that of Luther, is not to defend the religion as it has existed but to reform it, not to show what it has been in the hands of an interested priesthood, but what it is on its own foundation—the book of Mussulman revelation? Why should the example of the Christian Luther be denied to a Mussulman Luther? That Islam has been more progressive and less stagnant than Christianty before the Reformation I have ample proof; but my purpose is not to make war with Christianity. Why should I then waste time upon such proof? I have a common cause with Christianity; nay more I entrench myself, as I have said above, behind its subsequent progress. Read the history of Latin Christianity and that of Islam in the 18th and the 19th centuries; examine the general—not the immediate—causes of Luther's reformation, and pause and see if you do not find their parallels in the Mussulman history. I am only speaking of the preceding period of *stagnation* not of *progress*. History repeats itself. What Germany aided by England did for Christianity, India aided by the same benevolent England, though in a different manner, is, as it seems to me, destined to do for Islam. Honored be the name of England!

M. S. A

GOOD NIGHT!

From the French of Victor Hugo.

Good night! Good night!
Far from us day speeds on its flight,
But the clear celestial flame
Of heavenly favour will remain,
To guard and follow as our light:
Good night! Good night!

Till to-morrow! Till to-morrow!
But uncertain is to-morrow;
The eyes now folding for repose
May ne'er with morn their lids unclose,
Nor tarry here for joy or sorrow,
Till to-morrow! Till to-morrow!

N. M. WATERBURY.

LITERARY NOTICES.

OUTLINES OF THE LIFE OF CHRIST. *A guide to the study of the chronology, harmony, and purpose of the Gospels. By* EUSTACE R CONDER, M.A. *Religious Tract, Society. London.*

This is an admirable handbook. It does not profess to be a complete 'Life.' There is no reference to the teaching of Jesus, no study of his character, no doctrinal discussion, no portraiture. The author's purpose is to present a "trustworthy guide to the study of the chronology of the Gospel History and of the harmony, contents and purpose of the Four Gospels." Questions of authorship are not discussed, but the traditional view is assumed; and it is rightly pointed out that in this treatment we are concerned not with the inspiration of the Gospels, but with "their truth as authentic narratives." Thus in a small volume of 200 pages we have a summary of the fourfold history, with a brief discussion of the date and sequence of almost all the recorded events of the life of Jesus.

It is impossible, in a region that has been so sounded by historic criticism, to obtain on every point unanimity of opinion. It was no part of the plan of the Evangelists, in preserving for the world the life and image of Christ, to record in exact chronological order every event that had happened, or to furnish motives such as our curiosity seeks for every movement in the great plan. And in ourselves the historical sense is as yet weak. The mind has to weigh diverse suggestions and conflicting hypotheses as it struggles onwards to truth. Criticism often runs wild; still there are some results that have been reached, and of these our author is not always conscious.

The life of Christ he divides into three parts of one year each, from passover to passover. The disputed feast (John v. 1) is held to be a passover, and thus there are four in the public life of Jesus. The brief period before the first passover is regarded as private and preparatory. In this portion where the relations of the Baptist and the Christ fall to be considered, and where in the paucity of details considerable historic insight is required, the treatment is not quite so satisfactory.

Mr. Conder discusses the early retirement from Jerusalem and the transference of the scene of the ministry to Galilee, warmly repudiating the view that Christ was actuated by regard for personal safety. To some extent he is right. Galilee which produced the Apostles was in many ways a fitting scene for the ministry of Christ. Yet motives of prudence, though not of timidity, may rightly have had influence. Christ's work was not as yet complete, was indeed but beginning. In Galilee, where also opposition manifested itself early enough, the hatred was less fierce and less determined than amidst the priestly families of Jerusalem. When his work was completed he set his face irreversibly to Jerusalem and the coming death. Still we must regard the breach with the Jewish leaders (John v. 16) as a turning point in the history. It was after this that Jesus more distinctly made it his aim to realise the Kingdom of God by the organization of a permanent society, and the Galilæan ministry is chiefly remarkable for the training of apostles and disciples for this end.

Similarly, at the close of the Galilæan ministry, our author fails to see the importance of the great week preceding and including the Transfiguration. (Mark vii-17—ix. 10). What strikes him as remarkable in the scene at Cæsarea Philippi is not the apostolic confession of Messiahship and the consequent announcement of the Cross which are prominent in all the narratives, but the fact, indicated only in Matthew, that then for the first time the term Church was used by Christ.

We notice also a class of errors that should now be out of date. In every case, where an event is recorded by different evangelists with material variation in the fulness of details, Mr. Conder sees not one but two distinct circumstances. Of this there are several examples; and the method is applied even to the Sermon on the Mount. This discourse as given by Luke is not, as is sometimes said, a condensation of the longer discourse in Matthew. The one difference is that in Matthew several other sayings are incorporated, most of which are to be found elsewhere in Luke. Otherwise the agreement is almost verbal. Yet we are told that the evidence for their identity is "very weak."

Notwithstanding these strictures we cordially commend this handbook as a valuable aid to the historical study of the Gospels. No disputed question is left untouched, and where the reader cannot agree he may still learn. For its literary style—condensed, clear, vigorous, and occasionally eloquent, we have nothing but praise.

THE RESURRECTION OF JESUS CHRIST *an Historical Fact; with an examination of Naturalistic Hypotheses. By* JOHN KENNEDY, M.A., D.D. *The Religious Tract Society, London.*

This is another little treatise published by the Tract Society. Apologists of the day are occupying themselves more with the miracle of the Resurrection in particular than with questions of miracles in general. And in this they are right. Abstract discussion is of little avail. Some miracles may be explained away, but the Resurrection cannot. It is either true or false, and its truth as a fact of history is the key to the catholic conception of Christianity. So it was understood by Paul: "If Christ is not risen your faith is vain." "Blot the Resurrection" is Dr. Kennedy's summing up, "out of the story of the Christ and you may as well blot out the Christ Himself. Blot out the Christ and you may as well blot out God. For all our true conceptions of Him, and all our true affections towards Him grow out of the filial relation to Him to which Christ lovingly restores us."

The author begins with a statement of the tests of history and the principles of historic criticism as laid down by impartial writers, such as the late Sir G. C. Lewis and Dr. Arnold. By these he tests the evidence we have, and then investigates the criticisms and counter theories of sceptics or unbelievers.

It cannot be too emphatically stated that our belief in the Resurrection does not rest merely on the accounts in the four Gospels, in which critics have laboured to find variation if not discrepancy. The argument would indeed be unaffected if the synoptic Gospels ceased to exist. The strongest argument, as we conceive, is the immediate effect that was produced, general in the

growth of the Church, particular in the minds of the apostles and New Testament writers. Our chief witnesses are four, Peter and John the apostles, James, the 'brother of the Lord,' and Paul. But there is no reason to suppose that the faith of these was stronger or clearer than that of others who, though unknown by literary work, went forth to all lands to preach this doctrine and to testify their faith by martyrdom. Here the first place is given to the testimony of Paul, whose evidence is of singular clearness and value. But it appears to us that the evidence may be yet made more effective by a fuller study of the thought and life of the four we have mentioned. The Resurrection of the "Lord of glory" was to one and all of them not a mere transient fact. It was an ever-living remembrance. Christ was ever present in fellowship with them, living for them in Nature, in Providence, and in their hearts. By their belief they were purified, transfigured, ennobled.

In the Apostolic age the effort of faith was not to realise the fact, but to understand its significance. For us that significance has been unfolded. The event stands before us in history, not isolated but as the central point in the manifestation of God to man. And it is the source of the higher life and the living hope. The effort of faith now is to realise the fact, and thus to enter into the possession of this truth; not to linger as it were on the borders of a promised land with dazzled eyes but unbelieving hearts.

In this treatise the reader will find the question of the historic fact fairly treated and the hostile hypotheses met. If convinced, he may then pass to the fuller and more doctrinal treatment of the subject in such recent works as those of Dr. Westcott and Dr. Milligan.

RECOLLECTIONS OF MY YOUTH. *By* ERNEST RENAN, *translated from the original French by C. B. Pitman, and revised by Madame Renan. London: Chapman and Hall.* 1883.

Nothing from the pen of the author of the *Vie de Jesus* can fail to be interesting. There is an unusual charm in the naive simplicity with which he here reveals himself and his mind to the world. A considerable part of the volume is an account of his masters and his mental evolution at the period when the current of his life was determined. M. Renan, as is well known, was intended for the Church, and went through the successive stages and successive Seminaries by which a student in Paris advances to the priesthood. These studies, as we learn, went on after he had ceased to believe in Christianity; and thus M. Renan became a philologist and historical critic, distinguishing himself in a science which is "no sooner made than it is unmade" instead of in the natural sciences, for which he believes his genius was better fitted and in which permanence accompanies progress.

Renan is, however, well pleased with himself and his work. He has had a pleasant journey through life and would be glad to repeat it. This age, whatever else it is to him, is the most amusing of ages. It is not to him a solemn matter that he has made it the chief effort of his life to revolutionise the world's conception of Christ. He has had no soul-struggles and he cares for none. He has lived virtuously indeed, but he laughs at virtue. The same individual, he says, should not offend both in morals and in thought; but his mind

is apparently as heterodox in the one sphere as in the other. He says nothing of the consequences of the unbelief which his own works have produced. He scarcely indicates that the loss of public virtue would be a calamity to the world.

His faith was shaken through historical criticism. Writing of his first acquaintance with German literature he says—

"This was just what I was in search of, the conciliation of a truly religious spirit with the spirit of criticism. There were times when I was sorry that I was not a Protestant, so that I might be a philosopher without ceasing to be a Christian. Then again I recognised the fact that the Catholics alone are consistent. A single error proves that the Church is not infallible; one weak part proves that the book is not a revealed one, outside rigid orthodoxy there was nothing, so far as I could see, except free thought after the manner of the French school of the eighteenth century."

And again.

"To abandon a single dogma, or reject a single tenet in the teaching of the church is equivalent to the negation of the church and of revelation."

In these sentences we see the genius of the Frenchman. France knows no golden mean. Her political history alternates between submission to despotism and the "red fool fury" of communism. It is the same in religion. Renan by his Hebrew and historical studies was assured that the Jewish scriptures were not an infallible book and that Rome was not an infallible Church. Hence to him Christianity was untrue. A hasty conclusion surely. M. Renan knows that Christ left no book and did not organise the Roman church; and if, as he says the disciples were unable to understand Jesus, that only brings into greater relief His sublime personality. Surely, theories of inspiration apart, the facts of the life and resurrection of Jesus may be believed on the testimony of simple witnesses, and particularly of such men as Peter and Paul and John, whose lives were by their faith raised to the loftiest heights of self-sacrifice and holiness and wisdom.

One other point we notice. M. Renan leaves on his readers a very favourable impression of his teachers, most of whom he loved and admired. As regards temperament he has remained through life their pupils. They taught him disinterestedness, modesty, politeness and virtue. All that is good in him he acknowledges to be due to them, and since he left the St. Sulpice Seminary he "has been constantly losing ground." This confession, confirmed as it is in other little ways, is not without value from the light it throws on the great questions of the relation between faith and moral life. Can that be truth which makes man less truthful? Or may we not find in these admissions another argument for the truth of the faith which the writer has sought to undermine?

THE REFORMATION OF THE SIXTEENTH CENTURY *in its relation to Modern Thought and Knowledge. Lectures delivered at Oxford and in London in April, May and June* 1883, *By* CHARLES BEARD, M.A. *London: Williams and Norgate.* 1883.

It is a happy, though perhaps not accidental, coincidence that in the year 1883, when the four-hundredth anniversary of Luther's birth is being celebrated in Germany and in all English-speaking lands, the Hibbert Trustees should have furnished us with a study of the great movement in religious

thought and life with which the name of the Saxon Reformer will be for ever associated. Nor have they been unfortunate in the choice of a lecturer. Mr. Beard brings to his task a well furnished mind, a competent knowledge of a vast field of history, warm sympathy with the chief actors in the great work, and a style clear, rich and eloquent. This volume will, we think, bear favourable comparison with any of the five volumes bearing more distinguished names that have preceded it.

In saying this we do not mean to imply that Mr. Beard has rightly estimated all the forces of that great movement or satisfactorily defined its results. To do so perfectly is perhaps impossible. To Mr. Beard the Reformation is but "part of a mightier movement than itself, the manifestation upon religious ground of the intellectual forces which inspire the speculation and have given us the science of to-day." And if this is so, if we are still under the impulse of the great forces that manifested themselves three centuries and a half ago it is scarcely possible for us to form a calm and final judgment. It will be scarcely possible perhaps, until the Churches be able in some more advanced age to arrive at a unity of thought and feeling in the place of the unity of form that was then broken up. But we do not think that Mr. Beard has done what he might to solve or interpret the historical facts. His purpose is practical as much as critical. He desires to emphasize the fact that the Reformation is as yet incomplete and that a new advance is necessary. To this he devotes the last three lectures, in the first two of which he gives us the results (as accepted by him) of critical study on the one hand and of philosophic speculation on the other during the last two centuries, and more particularly during the present. Of the tone of these lectures there is little to complain. The successor of Dr. Martineau is naturally at variance with the orthodox churches, and some 'results' favourable to his own position are put confidently forward though they will never be established. Still much that is true is brought before us in these lectures. We agree with Mr. Beard when he teaches that the work of reform must be to take us back closer to Christ, and to a deeper perception of the religious truths which He uttered. This may or may not imply a simplification of our creeds. It is at least the assurance of a deeper religious life.

From this leading purpose, or from lack of sympathy, Mr. Beard has devoted his energies less to a study of the doctrines and principles of the Reformation than we should have desired. It is in this respect that the volume appears to us most meagre. The reader will perhaps find more interest in sketches of the foremost leaders—of Luther, Zwingli and Calvin, and of some connected with the Anabaptist extreme whose names have been almost forgotten. Luther is on the whole his favourite. He presents to us different aspects of that many-sided but richly human character, and he finds him notwithstanding his occasional severity the most tolerant and largely sympathetic. But he is under no temptation to disparage the others. Zwingli whose truly heroic and large minded spirit has rarely found justice with historians, whom Mr. Froude in his recent articles on Luther has been pleased to class with the fanatics, is here in his proper place; and we are truly told that "had Zurich conquered on that field of Cappel where Zwingli left his life, had the tide of Swiss reformation in consequence risen over the whole land, her Reformer would have escaped

heavy censure and much invidious comparison with Luther." In the English Reformation Mr. Beard finds no hero unless it be William Tyndale, and he emphasizes the points of difference between the reform in England and on the Continent. What must strike the student of England is the diversity of character and the variety of tendencies that it has always contained. And it is on this account that it is almost impossible that one man should ever arise who would represent England as Luther has represented Germany. But we believe that from the beginning of the 16th century there were in England many more than Mr. Beard supposes of kindred sympathy with the Continental Reformers There is good reason to believe that Dean Colet warmly approved of the work of Luther which was but beginning when he died.

Of Calvin Mr. Beard says:—

"He is the only one of the Reformers who can justly be called international. Though he never re-entered France after his first flight from it, he is the director of the French Reformation, dictating as it were to the Huguenots both their theology and their Church government. During the reign of Edward VI he is the adviser to whom Somerset and Cranmer listen with the deepest respect, while it is from Geneva that Knox goes out to mould and to teach Scotland. Among the Swiss Reformers he is something more than *primus inter pares*; when Luther is gone and Melancthon is more and more the mark for the rage of theologians, he represents the Reformation in the eye of Pope and Emperor."

And on Calvinism he concludes:—

"It was the form of faith in the strength of which the Dutch Republic was sustained and the American Republic was founded; to propagate which Tyndale gave to the English people the Bible in their own tongue and with it his life; which formed the royal intellect of Cromwell and inspired the majestic verse of Milton. Shall I say more, or is not this enough?"

AMONG THE MONGOLS. *By* THE REV. JAMES GILMOUR, M.A., *London Mission, Peking. With Illustrations. London: The Religious Tract Society.*

The Religious Tract Society, during the last few years, has done much to remove the reproach of unattractiveness from publications of a distinctively religious nature. In point of printing, paper and general get-up, as well as in literary finish, its publications will bear comparison with those of any of the great private firms. The book before us is one of the neatest, from the trade point of view, that we have seen, and its contents are of very great interest.

The Mongols are a people little known to the rest of the world. Occupying the eastern portions of the territory of the Czar and the extreme west of the Chinese Empire, they are completely away from the great ocean and its lines of traffic. The Central Asian region is practically as little known as the Central African, and the flying visits of mere travellers, hurrying westwards to write and publish their books, cannot be the source of really trustworthy information. Such writers see but the outside, and in their thirst for the picturesque, must often misrepresent what they see. Mr. Gilmour's book on the other hand, is the work of a man, who has not merely visited the country, but traversed it far and wide, living with the people, speaking their language, and getting that knowledge of them which only sympathy can give. His sketches are plain and straightforward, impressing one favourably with his

general truthfulness of mind. Although there is and can be nothing of the romance of Livingstone's Travels in a book upon Mongolia, yet Mr. Gilmour shows himself a shrewd and careful observer, and adds a great deal to our knowledge of an interesting people. Missionary travellers have laid the world under a deep debt of gratitude, which it cannot altogether forget, and we cordially recognize Mr. Gilmour as one of a noble brotherhood.

The Mongols are still a nomadic people as in the days of Zenghis Khan, but they have lost the ferocity which then made the Mongol hordes the terror of the world. Their devotion to Buddhism with its doctrine of the sacredness of life and its cultivation of the passive virtues, seems to have not merely made the people mild, but to have destroyed their manly spirit. The utter helplessness of the Mongols and their spiritless submission to any gang of robbers that may choose to prey upon them illustrate this very clearly. They are a people of flocks and herds, and though their climate is very severe, the tent is still their home. It is a very primitive structure of felt, hot in summer and intensely cold in winter, occupied on equal terms by human beings and the young of their flock. The Mongol's coat of sheepskin is in such a dwelling equivalent to another and warmer house, and the last duty of the servants of the establishment at night is to tuck their master into its warm folds before going to sleep. Though Buddhists, they are not vegetarians, and a good deal of casuistry has to be used to justify the killing of animals for food. Tea is one of the necessaries of life, and a kind of porridge called 'meal-tea' is one of the principal articles of food. Hospitality is the great virtue of the Mongols.

"Any host who did not offer tea, without money and without price, would soon earn the reputation of being not a man but a dog, the reason being that Mongolia has no inns, and all travellers are dependent on private houses for shelter and refreshment. At first sight, it seems rather exacting to leap off your horse at the door of a perfect stranger, and expect to find tea prepared and offered to you free; but probably the master of the tent where you refresh yourself is at the same moment sitting likewise refreshing himself in some other man's tent some hundred miles away: and thus the thing balances itself. The hospitality received by Mongols in travelling compensates for the hospitality shown to travellers."

Now that Buddhism is becoming a favourite subject of study, and that there are many who declare an enlightened preference for it above all other religions, it is interesting to learn what effects it has upon a people so devoutly Buddhist as the Mongols. The most striking manifestation of the religion among these people is the *lama* system. Everywhere the traveller meets the red-coated clergy, in such numbers that they constitute sixty per cent. of the male population. It is nothing short of a national blight to have so many of the men withdrawn from productive employment, and made to live a life of enforced celibacy. As a natural consequence, the temples are the great centres of wickedness, and the lamas the worst men in Mongolia. It is the system that is to blame rather than the men.

"Few lamas have any hand in their assuming the sacred garb. When children of six or ten years of age, their parents or guardians decide that they shall be lamas. The little fellows are pleased enough to put on a red coat, have their heads shaven, carry about the leaf of a Tibetan book between two boards, and be saluted as lama. It is all very fine at first. As mere children, they do not know how much the full extent of their vows means. After some years, they do know, but then it is too late to turn back. They cannot get free from their vows; they cannot keep them; so they break them repeatedly and systematically: their conscience is seared, and now that they are started, they do not stop with merely violating vows they cannot keep, but having cast aside restraint, and acquired a momentum in sin, they go on to the most unthought-of wickedness."

Here we come upon a great difference between our Christian religion and many others besides Buddhism. It is only in Christianity that a clerical scandal is posssible. We hear of no such thing among Buddhists or Hindus simply because the requirements of priestly morality are so low that conduct which, in a Christian minister, would fill the land with shame and derision, excites no remark.

That Buddhism has a lofty and beautiful moral code, Mr. Gilmour repeatedly shows. The instructive thing however is that the code has but little influence. Here again the superiority of the Christian religion stands forth. Take such a very elementary piece of morality as the duty of refraining from theft. There are plenty of Christian thieves, and there are plenty of so-called Christians in a higher station who would steal on the largest scale if they dared. But is there any Christian country of which a statement like this could possibly be true?

"The alarming thing about Mongol dishonesty is, not the actual amount of stealing that goes on, but the seemingly universal inclination to steal in almost all, and the utter want of public sentiment against it. * * * In books, I have read some extraordinary examples of honesty and integrity in Buddhists; stories which, if true, would almost cast the integrity of some Christians into the shade. These stories *may* have been true, but the state of things I have seen among the Mongols, who are extremely pious, makes wonderful stories of Buddhist truth and uprightness hard to believe; and if any one wants to exalt Buddhism as compared with Christianity, the farther he keeps from Mongolia the better. Thieves and stealing abound in Christian countries, but all Christians are not thieves: and known thieves are not regarded as respectable members of society: and it is not too much to hope that one of the fruits of Christianity in Mongolia, will be the creation of a healthy and honest contempt for thieves and stealing among a people whom even the Chinese regard as personified dishonesty."

Mr. Gilmour's remarks upon Mongolia's neighbours, Russia and China, are very interesting. He is not enamoured of Russian despotism, but he prefers it to Chinese. Northern Mongolia is under Russian influence, while the Chinese are the ruling power in the south, and the former have immense advantages as compared with the latter. If Russia is a tyrant, her tyranny is parental and protective, giving to her subjects security of life and property, whereas China does nothing for hers but exact 'squeezes.' She has not even provided them with a convenient currency. Bricks and baskets of tea form the most of the circulating medium. Morally and materially, the influence of China is degrading, while Russia is gradually raising her subjects in the scale of civilization. She tolerates all religions, and in only one particular does she interfere with the Mongolian Buddhists. The law of Russia is that not more than 20 per cent. of the male Mongols shall become lamas. The Chinese, fearing an increase of the population as dangerous to their tottering supremacy, foster the lama system with its 60 per cent. of celibates. But strong Russia does all she can to people the vast spaces of her eastern empire with peaceable and industrious subjects.

NATIVE LIFE IN TRAVANCORE, *by the Rev.* SAMUEL MATEER, F. L. S., *Author of the "Land of Charity," &c. London: W. H. Allen and Co.* 1883.

Mr. Mateer has spent a quarter of a century in close and friendly intercourse with the natives of Travancore. During this time, as his previous publications show, he has been a careful observer of their ways and manners, as well as a close student of their history and opinions. The matured results of twenty-five years work are thus presented to us in the large and handsome volume which furlough to Europe has enabled him to give to the world.

Mr. Mateer's object has evidently been to lay before his readers as much reliable information on this most interesting part of India as his limits would allow, and in doing this he has sought not so much the graces and beauties of style as condensation and accuracy. This is as it should be. It would no doubt have been pleasanter to the writer, and perhaps also sometimes to the reader, had the style adopted been more discursive. But this would have impaired the utility of the volume. On a subject so rich in interest peculiarly its own half a dozen volumes might well be written; but in these busy days few readers would have either the requisite time or courage to attack such a work. Hence we think Mr. Mateer has done wisely in choosing the course he has, and though, as he tells us in his preface, he has yet "much material on hand which it was found impossible to include in this volume—further particulars of Castes and Ceremonies, and chapters on the more abstract and statistical topics of Legislation and Judicial Administration, Land Tenures, Taxation Revenue &c." this need not be lost, but may, as we trust it will, see the light in some form or other when leisure and opportunity present themselves. In following out his plan Mr. Mateer has not scrupled to use freely all that has been written by previous workers in the same field. Where a thing has been well said by another no hankering after apparent originality has led him to re-say it. There is beyond doubt much that is both original and valuable in the work, but what will most strike the cursory reader is the enormous number and bulk of the quotations worked into the text. This again, in our opinion, is, in a work of this kind, as it should be. Indian subjects have often enough suffered at the hands of authors with a *penchant* for 'fine' writing; and it is refreshing therefore to meet a volume almost entirely descriptive in its nature, in which the author shows himself content to lose sight for awhile of his own reputation as a writer in the interests of his readers and of truth. Nothing is lost by this line and much is gained.

Mr. Mateer's volume is thoroughly readable and interesting. Indeed a subject so rich and various as Native life in such a state as Travancore, where there are peculiarities of social and family life almost unknown elsewhere could hardly be otherwise. It is of course impossible for us to give any adequate idea of the book or even to enumerate the subjects dwelt upon. Every section of the Hindu community from the lowly Pulliars—formed, according to their own tradition, out of the surplus earth left over after the creation of the higher castes,—to the lordly Namburis; the Muhammadans; the Syrian Christians and the Hill Tribes, are first made to pass in order before us, and their habits and customs, occupation and social condition are described. This we may call the first part of the book. Then follow chapters on peculiar as

pects of social economy such as nepotism; the produce of the country, the coffee, cotton and cocoanut cultivation, and fisheries; semi-political chapters on distillation and excise, political and social conditions in former times, slavery, reforms accomplished and reforms needed; history; caste and polution; serpent worship; the condition of the educated classes; and lastly mission work. Dove-tailed rather curiously between produce and excise come two interesting chapters on Indian music and musical instruments. These are to us amongst the most interesting chapters in the book, and might well have been made somewhat fuller. We agree entirely with Dr. W. W. Hunter that "the contempt with which Europeans in India regard it, merely proves their ignorance of the system on which Hindu music is built up." In spite of much good work that has been done in this field by such men as Capt. Willard, Sir W. Jones and Sir F.A.G. Ouseley, Indian music remains almost unknown to Europe, and "still awaits investigation by some eminent Western Professor." Hindus themselves have not however been idle. Owing chiefly to the example set by the Rajah Sourendro Mohun Tagore, and the writings of Mr. L. N. Ghose, Hindu musical societies have sprung up at various centres, whose aim it is to investigate, develop and preserve the Indian art. Such a society, under the name of the "Sangit Samaj," has recently been established in Madras. The introduction into India of Western ideas and processes has done much to destroy many of the ancient arts of India; its music at least might surely be preserved. Mr. Mateer gives a clear though of course very abridged account of the principles upon which the Indian art proceeds, and illustrates the subject by sixteen or eighteen Lyrics in various systems of notation.

In the chapter entitled "Further reforms needed" there is some straightforward writing which proves Mr. Mateer to be an honest friend as well as a patient student of the people of his choice. The necessity for a more equal distribution of public offices amongst the different sections of the educated community; for the conversion of the *grain* into a *money* tax; for a better standard of weights and measures; for an improvement in the character and conduct of the lower officials whose corruption and avarice, as Mr. Mateer shows, leads sometimes to an unsufferable oppression of the poor and often to "an utter want of humanity in the treatment of low-caste prisoners;" and for the abolition of forced labour and the State *Ootooperahs* for feeding Brahmans are all dwelt upon. On the subject of forced labour Mr. Mateer quotes a remarkable letter written in 1881 by the R. C. Vicar of Poonthory a village within two miles of Trevandrum, and addressed to the Dewan:—

"The subordinate officials take advantage of any exigencies to enlist forced labour for State purposes, with an indifference to the hardships they entail on the poor approaching to utter recklessness. The press-gang system is employed by the granary superintendent of Valiatory and the Nemum police to secure boats and men to man them, whenever required for Sirkar purposes. Every boat and every man in this parish is seized, and black mail levied from such as wish to escape this oppression. On the last occasion that boats were required for His Highness and suite to proceed to Attingal, 35 fanams were contributed by the people of Poonthoray as black mail, while the people at Vilenjam, being required to furnish 14 boats had to purchase immunity to themselves with another bribe, when the demand at once fell down to two boats. The boatmen prefer infinitely to engage in any service, rather than to hire out their labour to the Sirkar, * * to be, in the end, fleeced of payment. It not unfrequently happens that the boatmen decamp; and the head villager

buys off the myrmidons of the press-gang by a bribe assessed on the whole village, to escape the grudge that would otherwise inevitably follow in the shape of fines or imprisonments."

Mr. Mateer is himself equally outspoken on the Ootooperahs, a much more delicate subject, any interference with which would probably be deeply resented in high quarters.

"Whatever may be said in favour of the expenditure on Temples as being principally provided for by ancient endowments assumed and managed by the State, it seems evident that the Ootooperahs for feeding Brahmans should by degrees be abolished; and the funds, over three lacs of rupees per annum, be put to better and more general use, or expended on Education, Science and Art, on which not much more than half this sum is spent throughout the kingdom.

"Nowhere is there a parallel in civilized countries to the waste on Brahmans, the undue preference of this class of subjects, and the abuses hitherto prevalent in the administration of this so-called charity. The proportion which goes towards real charity is insignificant, a large part being for mere strangers and vagrants. The whole system tends to foster mendicancy and pauperism, and to increase the number of unproductive and useless members of the community. Brahmans (and other classes in times of famine) are allured from British territory and demoralised by this mistaken hospitality, so unfair and injurious to the mass of the indigenous population; while the resident Brahmans are kept in a state of real degradation and dependency, and self-respect destroyed, instead of being impelled by the ordinary motives which actuate mankind into useful and profitable channels of activity."

These are plain and honest words.

Mr. Mateer has been fortunate in his publishers. Messrs. Allen and Co. have issued the work in a most artistic and attractive form. It is beautifully printed on good paper, and embellished with a multitude of excellent engravings, twelve of which are full plates. Prefixed to the volume is a map of Travancore.

LAMB'S TALES FROM SHAKESPEARE *rendered into Malayalam.* *By* K. CHIDAMBARA VADHYAR, B.A. *Part I. "As you like it;" Part II. "The Winter's Tale." Trevandrum: Keralavilasum Press.* 1883.

The translator of these tales laments that the only popular literature in the Malayalam language consists of verse renderings of the Puranic stories. Prose works have indeed "made their appearance under the guidance and superintendence of the Madras Book Society, the Book Committee of Trevandrum, and some Missionary agencies, and fortunately several of these are being used in many Educational Institutions. But most of the prose works referred to are didactic in form and spirit; and we are very poorly provided with that class of books coming under the category of novels and light literature. That the public feel the want of such literature is proved by such publications as the translation of 'The Comedy of Errors,' 'Meenakethana Charithram' &c." Mr. Chidambara Vadhyar's intention is to add to this class of books by translating the whole of Lamb's Tales from "the great Kalidasa of the Western world." The two specimens of his work already published are certainly good, and prove Mr. Chidambara Vadhyar to be well cut out for the work he has set himself. He has wisely discarded English names, substituting Malayalam ones "suggestive of the nature of the persons." Here and there he has introduced speeches from Shakespeare, and short original descriptions suited to the capacities and modes of thought of the class he writes for. He has thus

sought to eliminate the foreign flavour almost inseparable from translations, and to some extent he has succeeded. The idea is undoubtedly a good one, and we shall be glad to hear that these modest little books are appreciated as they deserve to be. Romeo and Juliet, The Merchant of Venice, and Hamlet are announced, and others are to follow at intervals.

CHAPTERS FROM THE REPORT OF THE INDIAN EDUCATION COMMISSION. *Madras: W. H. Moore Lawrence Asylum Press.*

This is a handy little volume of about 250 octavo pages containing those parts of the Report of the Education Commission in which the general public is most interested. The Chapters re-printed are the 1st, 8th, 12th and 13th. In the 1st we have an account of the constitution of the commission, the instructions given to it, and its methods of operation. The 8th, which is the longest and most elaborate chapter in the Report, deals with the external relations of the Department to individuals and public bodies. The 12th consists of a financial Summary, and the 13th is a recapitulation of the 222 specific recommendations which embody the results of the Commission's work. The volume is well printed and is issued at the small price of one rupee including postage. Many, no doubt, who would not care to have the whole Report in its bulky folio form, will be glad to invest a rupee in this little re-print.

THE BOMBAY CHRISTIAN ALMANACK *for* 1884. *Bombay: The Tract and Book Society.*

This is an illustrated quarto household Almanack. It is printed on thick paper, the illustrations are good, and in point of printing and general finish it is almost equal to anything issued in England. The Calendar for each month is surrounded by an elaborate coloured border and headed by a woodcut of some place of interest. Opposite to every alternate month is a full page engraving and each engraving, large and small, is accompanied by descriptive letterpress. In addition to the ordinary information of a general and local character to be found in almanacks, there is in this one a number of short articles on various subjects apparently written especially for it. A prominent feature is a descriptive list of the chief Religious, Educational and Philanthropic Societies of Bombay with statistics of their progress during the past year. The information given respecting the Bombay Presidency is full and accurate but this cannot be said of that on other parts of India. The Editor refuses Major Baring his new title and retains him as Finance Minister in India. The Hon'ble C. G. Master, has also been twice promoted since he was Revenue Secretary of Madras. Leaving out of account a few errors of this description the Almanack reflects equal credit on the Bombay Tract and Book Society by which it is published and the Caxton Press at which it has been printed. Its price is only eight annas.

NOTES AND EXTRACTS.

In the *Harvest Field* for November and December two somewhat remarkable articles have appeared, from the pen of "A Brahman Liberal," on the storm which has recently agitated the usually placid depths of Brahman society in the Mysore State. In the following paragraphs we give, in the writer's words, the facts of this agitation, recommending our readers to turn to the articles themselves for the bold and thoughtful reflections of this sturdy advocate of progress.

"A young Srîvaishnava gentleman, a scion of one of the first families of that community in Mysore, finding his prospects in this country by no means encouraging, and animated by a laudable ambition to enter the higher grades of the legal profession, left for England early in February this year, became enrolled in one of the Inns of Court, and thus began to qualify himself as a barrister-at-law. His father and relatives are thoroughly orthodox, and being assured that such a step would never be permitted by them, he did not inform them of his plucky undertaking until he was beyond their reach at Aden. There was, of course, the usual wringing of hands and gnashing of teeth, but his friends soon reconciled themselves to the inevitable, and determined at least to make a sincere and energetic attempt to prevent his being lost to society. With very practical good sense, they incurred much extra trouble and expense in keeping their relative as much aloof in London as possible, so that his caste might not be broken more than was unavoidable under the circumstances. There is absolutely no reason to suppose that the adventurous young gentleman was not true to his Brâhmanical instincts, or that he was not a strict vegetarian and teetotaller."

"The friends of our traveller were anxious on two grounds that he should continue a member of their society; viz. (1) with a view to spare the natural feelings of his parents, and to maintain intact the ties which bound him to wife and children; and (2) with the less selfish hope that the enlightenment and enlarged experience gained by a trip to and sojourn in the countries of the west should leaven the inert masses of his countrymen, and thereby awaken in their minds a spirit of enterprise and greater activity. But the first plunge is always most unpleasant. An inventory was taken, therefore, of such members of the community as would consent to associate with the traveller when purified after his return. Nearly all his well educated fellow-caste people agreed to treat him as before; * * * The majority of the Srîvaishnavas were, however, passive, as they usually are to changes of all kinds; and the case of the traveller would not have evoked more than a languid and ephemeral interest in the country, but for the officious zeal of a few gentlemen whose intellectual attainments and status were worthy of a better cause. It should be noted here that the Srîvaishnavas are straining every nerve to give their sons the benefits of a high English education. the disintegrating results of which are manifested in mental, religious and moral differences between the members of every family. The parents of the educated Brâhman belong to a fast disappearing and fossilised past, and are only tolerated. He himself stands on a platform to which his wife has had no access. His children, if he has any, are yet more advanced, and jeer at observances which even their scoffing parent holds sacred."

"It was very natural therefore that when the question was put, many educated Srîvaishnavas who were in all respects their own masters consented to identify themselves with the cause of the sea-traveller. Although they are fathers themselves, it is their blessing that some of them have their parents alive, and these latter were lashed to fury by their own wounded self-importance and by the influence of the dissentient educated members. One of them went so for as to itinerate through certain parts of the country, and stir up his quiescente cast-men to excommunicate the sea-traveller, and his friends. Meetings were held at Bangalore, Mysore and other places, in which the Shâstras were consulted; and an unusual and highly artificial cohesion was lent to the heterogeneous ingredients of the Brâhman world."

"Taking advantage of the long vacation, the traveller was induced to pay a flying visit to his family, and underwent a very tiresome and costly penance at a sacred shrine under the auspices of a very learned and holy sage. But his return served as the very apple of discord among the already over excited members of his caste. The leaders collected together the majority of its members, and passed resolutions not only excommunicating the sea-traveller, but also those who sympathised with him, although the latter have not as yet broken bread in his company. In this manner, the would-be defenders of the caste have virtually dug the ground from under its foundations, and introduced discord aud disunion where there was on the whole a general feeling of unanimity."

"The further development of this agitation in Mysore is as amusing as it is suggestive. After a few weeks' stay with his family, the young gentleman whose adventurous act has disturbed the stagnation of ages among his castemen, has returned to England to complete his legal studies in the Inner Temple. His father and friends have spared themselves no pains and trouble to send him fully equipped, so as to enable him to live in the land of the caste-less Hûnas without unnecessarily infringing his own traditional caste segregation and vegetarian habits."

"But the storm unwittingly raised by him does not show any sign of abatement. On the contrary, even sober and temperate people, ordinarily engrossed in religious and caste duties, have forgotten themselves, and are microscopically examining, from sunrise to sundown, the motes in their neighbours' eyes, while neglecting the possible beams in their own. Wherever Brâhmans of what denomination and marks soever congregate, whether in temples, *maths*, bathing ghâts, or *pials*, the staple topic is *Samudra yânam* (sea-going), and the conduct of the people *supposed* to have had direct or indirect social intercourse (*Samsargam*) with the unlucky traveller. It may safely be asserted that this question haunts the mind of the Brâhman world more disturbingly than the now famous Ilbert Bill has ever haunted that of the Anglo-Indian and Eurasian world."

"During the last Dasara festival, a number of the friends and sympathizers of the traveller paid a visit to Mysore, which was at the time the scene of gay festivities. The traveller has an estate near one of the stations on the Mysore Railway, where himself and a few friends stopped for a day. A curious circumstance in this connection is the Argus-eyed watch the orthodox leaders keep over the actions of their go-ahead members; and it will therefore be easily understood that, on that occasion, people were not wanting to report to the conservative leaders the fact that the traveller and his friends had spent a day together near the former's estate. Shortly after the Dasara feast was concluded, one of the orthodox gentlemen laid hold of the cook who prepared and served food to the party, and obtained from him at night, in a closed room, a deposition tn the effect that the traveller and his friends had on the above occasion eaten together and in the same line. Many of the orthodox leaders were magistraten and judges, and some of them are still gracing such positions in the Mysore public service. Ordinarily they themselves would have voted it to be the height of injustice and absurdity to condemn an accused person unheard, on packed evidence, taken at an unusual hour behind his back. But "all is fair in love and war," and the *Mahâjanas*, as the orthodox style themselves, are avowedly waging a crusade against heterodoxy in general, and seagoing in particular!"

"The friends of the traveller (not himself) stopped with their friends at Mysore, and several dinners were given. On the 28th October, 1883, the *Mahâjanas* sat in solemn conclave in a temple at Bangalore, and, after due deliberation, issued a printed bull excommunicating twenty-two persons, including, first, the friends who had stopped a day with the traveller at his

estate, and second, those who dined with these friends at Mysore. As a rule, modern Brâhman orthodoxy does not act on the axiom that "things which are equal to the same are equal to one another." But in this instance their aversion to the traveller overcame their usual toleration and the fiat has gone forth, severing the connection of the aforesaid individuals with their community."

"It is a suggestive circumstance that the expelled consist of sons, brothers, relatives and friends, and the expellers have thus put an enormous pressure on their natural and healthy emotions, to carry out the behests of the caste inquisition. Whether and how long the gulf between such near relations, caused for such a reason, will remain unbridged is a curious problem. Most of the orthodox leaders are only persevering in the matter for the sake of a mistaken notion of consistency. They were driven at first to an attitude of unrelenting defiance towards sea-going by the officious zeal of some not overwise friends and relations, and now think it dishonourable to retreat. It is too late in life for them to believe that it is not ignominious to acknowledge an error, although they are ready in their calmer moments to admit that to err is but human. There is not at the present moment a single Srivaishnava family of the traveller's community in Mysore in which the most deplorable violence is not being done to the noble instincts implanted by nature in man's breast, by the offering of a most suicidal and ineffectual opposition to one of the healthiest onward movements of the age."

SCIENCE JOTTINGS.

Professor Nordenskjöld has communicated to Nature some account of his recent expedition to Greenland giving a few of the more important details of the journey. The expedition, it will be remembered, was made for the purpose of discovering whether or not there was land free from ice in the interior of the country, and though no such land was found many valuable observations were made. Not the least interesting of these were those made upon the so-called 'Kryokonite' (*i.e.* ice dust) which was previously observed by Dr. Nordenskjöld in his expedition in 1870. This dust is very widely distributed over the ice and snow, and has through the melting of the snow collected in cavities which are filled with water, and are so numerous that they were a real danger to the expedition. They had however, on the other hand, this to be said in their favour that they yielded a supply of the purest drinking water. These holes were some three feet deep and just wide enough to admit the foot, and so the explorers were constantly falling into them. During seven days of the journey Professor Nordenskjöld estimates that for the whole party the number of falls was not less than 7,000! And yet fortunately no bones were broken. The Kryokonite seems to consist of a sediment from the air and is probably chiefly of terrestrial origin; but the presence of iron containing nickel and cobalt shows that in part it is 'cosmic dust' or the debris from falling meteors. The journey inland could only be made at a slow rate, and after proceeding as far as they were able with their sledges, two of the Lapps were sent forward for a distance of over 100 kilometres (62 miles) on 'Skidors' to see if there was any hope of reaching open ground. These 'Skidors' or 'Skids' are a kind of snow-shoe made of "long strips of fine wood slightly bent at the top, polished and as elastic as if they were of the finest steel, with a strap for the feet in the centre." The two Lapps were absent for only 57 hours having been compelled to return sooner than had been intended on account of the want of water and fuel. They reported that there was no trace of land to be seen.

The short period comet discovered by Pons at Marseilles in 1812 is at present visible as a telescopic object, and it is probable that it will be visible to the naked eye when it reaches its maximum brightness about the middle of January. Hitherto it has shown great fluctuations in brightness and it is hardly safe to predict what its appearance will be; but it is expected to appear about as bright as a third magnitude star.

A new equatorial telescope has been erected at the Paris Observatory which possesses some very novel features. The telescope is bent at right angles, the part towards the eye end being the axis on which the telescope turns and being parallel to the axis of the earth. At the bend there is a mirror set at an angle of 45 degrees to turn the light through the required angle of 90°. In front of the object-glass is another mirror by moving which the light from a celestial object can be thrown into the telescope. The light thus has to undergo two reflections, but the mirrors are so perfect that the loss of light is said to be very small. One great advantage of this form of telescope is that the observer has not to move about as the telescope follows a star, but can remain seated in an ordinary chair and make his observations with the same ease as a microscopist can do. Should the results of this experiment meet the expectations of the designer it will form a new and important departure in the manufacture of telescopes.

Pike's Peak, 14,151 feet high, is one of the meteorological stations of the United States. The extraordinary displays of atmospheric electricity which take place there make it an interesting, but certainly rather trying, post for an observer. In the August weather report, for instance, it is stated that "the observer on the summit of Pike's Peak reported that during a sleet and thunder storm on the evening of the 4th the anemometer cups revolved in circles of electric light. After a flash of lightning the light encircling the cups became dim, but would soon regain its former brilliancy. The observer states that, by holding up his hands, electric sparks would form on the ends of his fingers, and that his hair and clothing would be full of them. A peculiar crackling noise was heard about the anemometer cups, and at the corners of the office building there were continuous sparks of bright light." This is certainly not a station for a nervous meteorologist.

The piercing of the Arlberg tunnel was completed on the 13th of November. It ranks third among the great tunnels of the world, being surpassed only by the Mont Cenis and the St. Gothard tunnels. It has a length of 10,270 metres and will be finished within four years of its commencement. This is a great contrast to the time spent on the Mont Cenis tunnel (12,323 metres) which was over 14 years. This difference shows how enormously the methods

for boring large tunnels have been improved during the last few years. One of the most important features of such works now-a-days is the use of compressed air which works the boring machines and at the same time supplies the required amount of fresh air for ventilation.

CHARLES WILLIAM SIEMENS, whose death we announced last month, was born at Leuthe in Hanover in 1823. He was educated at the Gymnasium of Lübeck, the Polytechnic School at Magdeburg and the University of Göttingen. At the age of 19 he became a pupil in Count Stolberg's engine works. In the following year he went over to England to introduce a patent taken out by himself and his brother on a new process for electro-gilding. The first person he went to with this invention was an 'undertaker' under the idea, as he used himself to tell, that this must be the most suitable person to introduce a new invention! Fortunately however he met with Mr. Elkington the great manufacturer of plated goods who purchased the patent. In the following year he returned with another patent and soon after settled permanently in England where he became a naturalized subject. Being one of four brothers who were all inventors and who all worked together, it is quite impossible to determine exactly what share each had in the various patents which they have brought out during the last fifty years, but in several of them and these amongst the most remarkable William had the largest share. One of these is the regenerative furnace in which the hot gases which used formerly to be allowed to escape into the air carrying with them a vast amount of heat are made to yield up nearly the whole of their heat before they finally escape. The way in which this is accomplished is as simple as it is ingenious. Two large chambers are loosely packed with bricks and are connected by passages with the upper and the lower parts of the furnace. Doors are arranged in these passages in such a way that when the one is connected with the upper part so as to receive the waste gases the other is connected with the blowing machine by which air is forced into the lower part. The hot gases in passing through the chamber give up nearly the whole of their heat to the bricks and these in turn give it up to the air which is drawn through them afterwards to form the blast. By the use of this 'hot blast' a great amount of fuel is saved; for evidently if we introduce cold air below and let it escape as hot air above, all the fuel employed in heating this air is wasted. Another most successful invention due to Willam Siemens is the process now known under the name of the 'Siemens-Martin' process for the manufacture of steel. Steel, cast iron and wrought iron differ from each other in the quantity of carbon which they contain, that in steel being intermediate between that in the other two. The 'Siemens-Martin' process takes advantage of this property and produces steel by melting together scrap iron and pig iron on the hearth of a regenerative furnace. By this process no less than 340,000 tons of steel were made in Great Britain in 1881.

Turning now to a different subject we find Dr. Siemens was no less distinguished in electrical engineering. He was one of the three who first brought prominently forward the principle employed in Dynamo-electric machines, a principle which it is not too much to say has revolutionized our methods of generating electricity. Machines called magneto-electric machines, in which electricity is generated by the motion of coils of wire near the poles of permanent magnets, had been in use for some time, and even others like Wilde's in which a small magneto-electric machine was used to magnetize the powerful electro-magnets of a larger machine. In the dynamo machine however no permanent magnets are employed, but the current generated by the machine itself is passed through the coils of the electro-magnets and magnetizes them. The machines made by Siemens Brothers on this principle still hold a foremost place amongst the hundreds of different forms that have been introduced within the last few years. In electric lighting the same firm has been very prominent and has met with a large measure of success.

The manufacture and laying of telegraph cables was another branch of engineering in which Siemens distinguished himself, and the Direct United States cable manufactured at his works at Carlton, and laid by the S. S 'Faraday' is a proof of the skill with which the firm carried out their contracts. The 'Faraday' is itself a most interesting example of the skill with which Siemens adapted means to ends. It was built solely for the purpose of laying telegraph cables, and is filled from end to end with devices for facilitating this very difficult operation.

Dr. Siemens' inventions and patents are spread over a large variety of subjects and almost all of them have been found to be of real practical value. In pure Science his work was less remarkable, but still was considerable, and there can be no doubt that many of his inventions have re-acted most beneficially on pure science. In scientific societies he took an active part; he was a Fellow of the Royal Society, a member of the Institution of Civil Engineers and the first President of the Society of Telegraph Engineers. Many other scientific and engineering societies claimed him as a member and a few years ago he was President of the British Association. His discoveries and inventions brought him many honours the last of which—that of Knighthood—he received last April. For a combination of scientific knowledge and practical skill Dr. Siemens had probably no equal. His sudden death, brought about by injury to his heart caused by a fall in the street, is a sad blow to those who knew him as a hale a genial friend who to all appearance had much work still before him, work, alas! which others must now do without his ever ready help.

C. M. S.

QUERIES.

15. (V. T. KESAVA PILLAI, M. A., TREVANDRUM.) *Sends five questions, dealing with the origin of sin, the justice of hereditary evil, the reasonableness of the act of creation in the light of its consequences to man, and the real ground of an expectation of rewards and punishments in the future life.*

If we could answer all these questions in a way that would be satisfactory to our querist, it would be to supply him with a ready-made philosophy of life. To furnish such a philosophy would be to defeat the object that we have most at heart, namely, the rousing and stimulating of earnest thought on all subjects. There is a sense in which Lessing's choice of 'Search after Truth' in preference to 'Truth' itself is the only right one, for it is a nobler thing for the soul to struggle earnestly after a truth in which it can rest, than to sit

down indolently under the shade of authority. Only by arduous and often painful mental and spiritual struggle coupled with that teaching from on high, denied to none who seek it, can any man attain that assured conviction to which we all aspire. No man can fight this battle for his brother. Everyone approaches these all-fascinating problems from a stand-point peculiar to himself, and he wrings an answer out of them in terms to which he alone has the key. All that one man can do for another, even if he has attained to quietness of mind himself, is to show the painful process by which the haven of rest was reached. But each must face and fight and master these questionings for himself.

Take first the question of the origin of sin. For ourselves, we have no theory on the subject to offer, but merely suggest that the explanation must be found in our anthropology, if anywhere. The more profoundly we apprehend the true greatness of man and his creation in the Divine likeness, the more fully we perceive that this very greatness is perilous, involving the possibility of a fall. To be created in the Divine image means to be created good but free, to be nobly organized but not mechanically determined.

This suggests the third question. Was it proper to make man at all if these were the only conditions under which he could come into existence? The question is one that men may well be excused for putting, though it argues an extraordinary amount of human self-consciousness. It is a besetting sin of all introspection, and of the brooding type of character, to view creation from a false centre, namely man. Pain is a fact so important to the individual that we may possibly overate its importance in the whole Divine economy. The possibility of rising above it, of making this most grievous fact of life a stepping stone to the highest and purest life, in the presence of which we feel rebuked for the folly that makes life consist of pleasures only, surely suggests that the *prima facie* view of evil is not the whole truth. Just as external nature works out more glorious ends by the sacrifice of lesser things, so the divine economy may have its ways of transmuting pain into blessedness, that shall derive its essential character from its connection with what was most unpleasant as experience. Let the querist, if he would see this matter put as it ought to be, study again those matchless chapters in 'Sartor Resartus,' entitled. 'The Everlasting No' 'The Centre of Indifference' and 'The Everlasting Yea.' There he will see a picture, painted by the hand of a great artist, of the human soul struggling painfully but gloriously, towards a true stand-point.

With regard to the justice of hereditary evil, the first thing to be noted about it is that it is a *fact*, and that too one of the most prominent facts in the economy of the world. Men suffer for sins not their own, and transmit to unborn generations seeds of suffering for sins that ancestors alone committed. The family is as truly a unit as the individual. Ties as potent bind its members each to each as those that unite the various limbs of the individual body. If the family be a unit, may not the race be a unit likewise, with all its members united by bonds, invisible indeed, but of iron strength, with every part of it involved in a common heritage? Such a supposition is not contrary to what we might expect, but is itself suggested by the visible order of the universe. Christianity teaches us that the individuals of the race, who are partakers of this evil heritage, may, by laying hold of Divine strength, extricate themselves from the evil mass, in such a way that pain and misery,—the natural results of sin,—may become the means whereby, the soul may be led into the highest life.

To the Theist, the doctrine of future retribution is the simplest corollary from his doctrine of God. Apart from belief in a personal God, possessed of moral attributes, the doctrine has no great value as a doctrine, though its moral worth cannot well be over-estimated. As held by Buddhists and Theosophists for instance, it is nothing more than what Mr. Kesava Pillai calls "a transference of our experiences in this world to a state of things quite unknown." With Theists, however, the doctrine stands and falls with the belief in God himself; its truth is just as certain as the Divine existence, but not more so.

CORRESPONDENCE.

TREVANDRAM, 22*nd November, 1883.*

TO THE EDITOR,

Christian College Magazine.

MY DEAR SIR,

In page 249 of your October issue, you quote the "somewhat remarkable definition," as you are pleased to call it, given by the President of the London Branch of the British Theosophical Society, of Theosophy as the science that leads to a knowledge of the Divine, hidden and interior essence of being,* and append the following note with reference to it:—

"As far as this means anything it is Pantheism; but Pantheism stripped of everything whereby it has ever fascinated and chained the mind of man. The world of phenomena is no longer an outshining of the Divine radiance, and all that we know is *ipso facto* non-divine. The name "Theosophy" then becomes one of the greatest misnomers man has ever perpetrated. No wonder that with such a definition we should be informed that the knowledge of the Divine belongs to "Seers and Poets only."

Now on seeing this note I am constrained to express my opinion that it has not the slightest show of logic in it. For it first postulates the absurd notion that anything that his hidden to ordinary vision may not be visible to living men who have attained a higher stage of psychic development. The mere fact that Theosophy aims at penetrating behind the phenomenal veil that shrouds the 'Divine', unknown and unknowable to the untrained mind, does not make it a misnomer. In penning the above remarks you seem to have entirely lost sight of the philosophical idea, familiar to Carlyle, Jesus Christ, Socrates and other great men, that as the world becomes grosser and more material, the inner Divine radiance of things, the presence of the God Who made them and Who is in them becomes more and more hidden and invisible, and all that is outwardly visible is all but transitory, fleeting and changeable. This is pure Vedantism, or Pantheism as you would prefer to call it. This is whole truth and nothing but the Truth. This is what your great Apostle himself, who fully realized this Divine-in-things, taught, "the things that are seen are transitory, but the things that are unseen are eternal." Theosophy, while showing that to the ordinary physical sense perception the Inner splendours are inscrutable, at the same time points out the latency of the human 'psyche' to acquire the capability of perceiving these, and teaches also the scientific method by which such a state of development might be reached. The fallacy underlying your notion seems to be that everything which is unknowable to your ideal human being (who is only man whose psychical powers are yet in an undeveloped state) must be unknowable to all beings alike, and to speak of so developing these latent psychic powers as directly to be face to face with the Divine in existence is in your view absurd. There are various animals of inferior mental organisations to man to which many things that are

* For the benefit of our readers we quote again the definition referred to:—"Theosophy is the science of the Divine. In this age the word *science* is readily understood: not so the word Divine. We Theosophists understand by the word Divine, the hidden, interior, and primal quality of existence; the noumenal as opposed to the phenomenal. Our relations to the Divine we hold to be relations not to the exterior, but to the within, not to that which is afar off, but to that which is at the heart of all being, the very core and vital point of our own true self. To know ourselves is, we hold, to know the Divine. And, renouncing utterly the vulgar exoteric anthropomorphic conception of Deity, we renounce also the exoteric acceptation of all myths and legends associated therewith, replacing the shadow by the ubstance, the symbol by the significance, the great historical by the true ideal."—[ED. *C. C. Mag.*]

within the power of man to perceive are unknowable and inconceivable. Does it therefore follow that such things do not exist? Similarly according to strict logic there might exist many things that are beyond the sphere of the ordinary sense perceptions. And if a philosophy, unearthed from the records of bygone civilizations, is offered for the benefit and guidance of the world in general, to seek the best means of diving into the hidden truths of nature and unriddle the mysterious problems of life, birth and death, by enlarging the sphere of human perception in consonance with the normal higher evolution which marks the progressive order of nature (a sure passport for truth), what more is wanted to increase the sum of human knowledge and happiness? And is it not unreasonable to object to it on the ground that the Divine Truth which it unveils is unknowable to man as he is, and not as he might be, reaching a higher phase of development? Now, dear Mr. Editor, I am not going to defend Theosophy in this letter. If it has really any vital spark of truth in it (as every honest and inquiring thinker must grant it has) it will certainly conquer despite the calumnies cast upon it by an interested class of critics bent upon distorting the actual facts of the case. My only aim in writing to you this letter (which I humbly request you will have the fairness to publish in your valuable magazine) is to show you and your readers that your passing remarks upon such a subject are quite irrelevant and have not been thrown out after an intelligent appreciation of its merits.

I do not really understand why your sneers should have been so profusely lavished on poor "Seers and Poets." Certainly no man can have access to the higher spiritual truths while at the same time having a keen relish for the tinselled grandeur of a sinning world. No ordinary man, it is certain, unless he be a seer, will by merely undergoing Christian baptism, become the equal of a Veda-Vyasa, a Jesus Christ or a Socrates. For it was this Theosophy (or if the term be a little loathing to you) this full knowledge of the "inscrutable Divine," Shelley's "veiled spirit of Nature," that ennabled the great Poets and Prophets of the World.

And those same "Seers" who are objects of bitter ridicule to those who think the road to Salvation to be an ox-passage that may be crossed at a single bound by means of blind faith, have bequeathed to posterity this Divine Wisdom in ceremonial institutions, allegorical stories and moral parables, falsely considered as myths and intelligible only to those cultivated minds that have the moral courage to make the requisite sacrifices and undergo the necessary training,—in fact, in those Sacred Books of the East which Prof. Max Müller's verdict has pronounced to be no longer a mere butt for the taunts of the Missionaries and the sarcasms of philosophers.

Your criticism upon the letter of Mr. Sankariah, published at page 189 of your September number seems to be written much in the same spirit. You there coolly propound doctrines upon blind faith without any reference to truth in this XIXth century of free inquiry and honest scepticism in which all manner of dogmatic assertions are canvassed and sifted by reason and argument, when your aim should be the finding of truth and not mere guessing it. You say that any inquiry into the origin and nature of soul is not of any importance to religion. But you have previously said that man has sinned and is sinning, and you dream of building a religion for this sinning man without knowing what his real origin and nature is. Moreover your assertion seems to imply that you have discovered the true origin and nature of the soul and found it a useless discovery. Otherwise how are you justified in presuming that the enquiry is a fruitless one? It is very bad science to set aside an investigation on the ground of its uselessness. For there is nothing so worthy of intelligent research as Truth. Truth is THE HIGHEST END after all. "There is no Religion higher than Truth."

Yours Sincerely,

R. PADMANABHA CHARYAR.

CORRIGENDA.—*Page* 431 *line* 2, *for* Molazalites *read* Mutazalites.
Page 428 *line* 2 *from bottom* (et passim) *for* Khoran *read* Koran.

THE CHRISTIAN COLLEGE MAGAZINE.

FEBRUARY, 1884.

THE VEDIC CONSCIOUSNESS OF SIN.

Professor Weber says, "The religious notion of sin is wanting altogether, and submissive gratitude to the gods is as yet quite foreign to the Indian in the Vedic Age."(1) Max Müller on the other hand says, "The consciousness of sin is a prominent feature in the religion of the Veda, so is likewise the belief that the gods are able to take away from man the heavy burden of his sin."(2) And the author of the 'Sacred Poetry of Early Religions' remarks, "Of that moral conviction, that moral enthusiasm for goodness and justice, that moral hatred of wrong and evil, that zeal for righteousness, that anguish of penitence, which has elsewhere marked religious poetry there is singularly little trace" in the Vedic hymns. The first of these statements is far too sweeping: the second is exaggerated to the extent of "prominent;" and the third is upon the whole correct.

The fact is, that when the Aryans appear first before us in the 'Land of the Five Rivers,' their consciousness of sin had become more obtuse than it formerly was, and hence the burden of their songs was not 'Lord grant us forgiveness of sins;' but 'grant us food, wealth, and victory.' The following hymn addressed to Indra,

(1.) History of Indian Literature, p 38.
(2.) Chips from a German Workshop, Vol. i, p. 41.

who was then their Supreme Deity, is a fair specimen of the spirit pervading three-fourths of the Vedic hymns.

(1.) "Voracious drinker of the Soma juice, although we be unworthy, do thou Indra, of boundless wealth, enrich us with thousands of excellent cows and horses.

(2.) "Thy benevolence, handsome and mighty lord of food, endures for ever. Therefore, Indra, of boundless wealth, enrich us with thousands of excellent cows and horses.

(3.) "Cast asleep (the two female messengers of Yama). Looking at each other let them sleep never waking. Indra of boundless wealth, enrich us with thousands of excellent cows and horses.

(4.) "May those who are our enemies slumber, and those, O hero, who are our friends be awake. Indra, of boundless wealth, enrich us with thousands of excellent cows and horses.

(5.) "Indra, destroy this ass (our adversary) praising thee with such discordant speech; and do thou, Indra, of boundless wealth, enrich us with thousands of excellent cows and horses.

(6.) "Let the (adverse) breeze with crooked course, alight afar off on the forest. Indra, of boundless wealth, enrich us with thousands of excellent cows and horses.

(7.) "Destroy everyone that reviles us; slay everyone that does us injury. Indra, of boundless wealth, enrich us with thousands of excellent cows and horses."(1)

The consciousness of sin, however, is a prominent feature in the most *ancient* hymns addressed to Varuna, either alone or in conjunction with other deities, especially the Adityas, 'the eternal ones,' and occasionally manifests itself more obscurely in hymns addressed to other gods. "This day, ye gods with the rising sun, deliver us from heinous sin."(2) "Preserve us, O Agni, by knowledge from sin, consume every malignant spirit, raise us aloft that we may pass through the world; and that we may live, convey our wealth to the gods."(3) "Agni far remove from us all iniquity, far remove from us sin, far remove from us all evil thought.(4) "The divine Savitri travels by an upward and by a downward path:—he comes from a distance removing all sin."(5) "When knowingly, when unknowingly we have committed sins, release ye us from them, O all gods full of loving kindness." "Be it waking, be it sleeping, I the sinful have committed sin."(6) "Let those renowns and those praises of thine be proved true by the showing mercy on us, O Indra—slay us not for one sin, nor for two, nor for three, nor for

(1.) Rig Veda, i, 20.
(2.) *Ibid.* i, 115-6.
(3.) *Ibid.* i, 36-14.
(4.) *Ibid.* iv, 11-6.
(5.) *Ibid.* i, 35-8.
(6.) Ath. Veda, cxv, 12.

many, O hero."(1) "Protect us, Soma, from calumny; preserve us from sin: pleased with our sacrifice be our friend."(2) "Prolong our existence, Asvins, wipe away our sins; destroy our foes; be ever our associates."(3) "May our sins be removed or repented of" is the burden of a whole hymn.(4)

The Aryans' infantile notion of sin is forcibly expressed in the terms which they used to denote it. Those terms are *pāpam* (Greek *ptōma*, Latin *peccatum*, Welsh *pechod*, Hebrew *pesha*,) from root *pat* (Greek *pet*. Latin *pec*. Welsh *pech*. Hebrew *pasha*) to 'fall,' to 'fall down'; *aghas*, (Greek *agos*,) *enas* and *amichas*, from roots signifying first 'to go,' and then 'to go astray,' 'miss the mark.' *Nirriti*, another word for sin, which was afterwards personified as a power of evil or destruction, is derived from the same root which yields *rita* in the sense of *right*; and Nir-rita, *not right*, or deviating from the right path. Sin therefore according to the earliest conception of the Aryan mind is a fall from a higher to a lower moral state, a deviation from the path of duty, a missing of the mark of moral excellence once set before the mental vision. The same ideas are conveyed in the Tamil (Turanian) words *tappu*, *tappidam* and *kuttam*, sin, fault.

Words are fossilized thoughts; and their testimony to the remotest conceptions of the human mind must be regarded just as valid, as is the testimony of the rocks to the existence of animals that have become extinct. What a striking confirmation of the Fall of Man recorded in the third chapter of Genesis, have we in the words used for 'sin' in the Semitic, Aryan, and Turanian Languages! If the career of man has always been 'upward' as evolutionists affirm, how did the idea of sin as a Fall involving calamity, such as is implied in the oldest words used for sin, originate?

But sin is more explicitly recognised as a voluntary transgression of divine laws. "However we break thy laws from day to day, men as we are, O God, Varuna, do not deliver us unto death, nor to the blow of the furious, nor to the wrath of the spiteful."(5) "Whenever we men, O Varuna, commit an offence before the heavenly host, whenever we break the law through thoughtlessness, punish us not, O God, for that offence."(6) "May we be sinless before Varuna, who is gracious even to him who has committed sin, and may we follow the laws of Aditi."(7)

(1.) R. V., viii, 45, 33-4.
(2.) *Ibid.* i, 91-15.
(3.) *Ibid.* i, 157-4.
(4.) *Ibid.* i, 97.
(5.) *Ibid.* i, 25-12.
(6.) *Ibid.* vii, 89-5.
(7.) *Ibid.* vii, 87-7.

Sin was felt to be a great calamity, which is evident from the figures of speech used to represent it. It is a *bond* or a *rope* from which the sinner prays to be released. "Deliver us from sin as from a rope; let us obtain thy path of righteousness." "May the thread not be torn while I am weaving my prayers; may the form of my pious works not decay before its season." "Varuna, take all fear away from me; be kind to me; O just king! Take away my sin like a *rope* from a calf; far from thee I am not the master even of a twinkling of the eye."(1) "Far from me be *bonds*; far from me be sin."(2) "O Adityas, deliver us from the mouth of the wolves, like a bound thief, O Aditi."(3) "Whatever, O youthful God, we have committed against thee, men as we are, whatever sin through thoughtlessness, make us guiltless of Aditi, loosen the sins on all sides, O Agni."(4) "O Varuna lift the highest *rope*, draw off the lowest, remove the middle, then O Aditya, let us be in thy service free of guilt before Aditi."(5) "O King Varuna keep afar from us *nirriti*, and liberate us from whatever sin we have committed."(6)

Sin is a *heavy burden* which the gods only can take away,(7) and a *thick darkness* which 'forgiveness' alone can dispel.(8) It is also a *sea* or a *flood* across which we can only go in a divine boat. "We invoke the well-protecting earth, the unrivalled sky, the well shielding Aditi, the good guide. Let us enter for safety into the divine boat, with good oars, faultless and leakless."(9) "Carry us, O Vasus, by your blessed protection, as it were in your ship across all dangers."(10) "Let not unknown wretches, evil disposed and unhallowed, tread us down. Through thy help, O hero, let us step over the rushing eternal waters."(11) "May Agni convey us as in a boat over a river, across all wickedness."(12) "Do thou, Indra, waft us in safety over the ocean of sin, repel all the assaults of the ungodly."(13)

Man having a natural tendency to sin is a prey to temptations. "It was not our own doing O Varuna, it was necessity (or temptation), an intoxicating draught, poison, dice, thoughtlessness. The old is there to mislead the young, even sleep brings unrighteousness."(14) "Let not one sin after another, difficult to be conquered, overcome us; may it depart together with lust."(1) "May that blazing weapon of yours, Maruts, be far from us, although through human infirmities we offer you offence."(2) "Whatever (offence) we have committed by want of thought, against the divine race, by feebleness of understanding, by violence, after the manner of men, and either against gods or men, do thou, O Savitri, make us sinless."(3)

This tendency is not only transmitted by the law that 'like produces like'; but the sins of the fathers are in a mysterious way imputed to their offspring. "Absolve us from the sins of our fathers and from those which we have committed with our own bodies."(4) "Let us not suffer, Mitra and Varuna, for offences committed by another, let us not, Vasus, do any act by which you may be offended."(5) "May Agni (free) me from the sin which my mother or father committed when I was in the womb."(6) "If thou liest there in consequence of any sin committed by thy mother or thy father, with my voice I declare thy release and deliverance from them all."(7)

The effect of sin is to separate man from God. "Do I say this to my own self. How can I get unto Varuna? Will he accept my offering without displeasure? When shall I with a quiet mind see him propitiated? I ask, O Varuna, wishing to know this my sin. I go to ask the wise. The Sages tell me the same. Varuna is he who is angry with me. Was it an old sin, O Varuna, that thou wishest to destroy thy friend who always praises thee? Tell me, thou unconquerable lord, and I will quickly turn to thee with praise freed from sin."(8) Again Vasishta exclaims:—"Where are those friendships of us two? We seek the harmony which we enjoyed of old. I have gone, O self-sustaining Varuna, to thy vast and spacious house with a thousand gates. He, who was thy friend, intimate, thine own, and beloved, has committed offences against thee. Let us not who are guilty reap the fruits of our sin. Do thou, a wise god, grant protection to him who praises thee."(9)

As it is difficult for us with our Christian conscience to understand the precise meaning which the ancient Aryans attached to the word 'sin,' let us enquire (1) What acts were not, and (2) What acts were, considered sinful by them. This alone will preserve us from the error of either over-estimating or undervaluing their moral sense.

(1.) R. V., ii, 28-56.
(2.) *Ibid.* vii, 29-5.
(3.) *Ibid.* viii, 67-14.
(4.) *Ibid.* iv, 12-4.
(5.) *Ibid.* i, 24-15.
(6.) *Ibid.* i, 25, 8-9.
(7.) *Ibid.* ii, 29-1.
(8.) *Ibid.* ii, 27-14.
(9.) *Ibid.* x, 63-10.
(10.) *Ibid.* viii, 13-17.
(11.) *Ibid.* viii, 32-27.
(12.) *Ibid.* i, 99.
(13.) *Ibid.* ii, 33-3.
(14.) *Ibid.* viii, 86-6.

(1.) R. V., i, 38-6.
(2.) *Ibid.* vii, 57-4.
(3.) *Ibid.* iv, 54-3.
(4.) *Ibid.* vii, 86-5.
(5.) *Ibid.* vii, 52-2.
(6.) A. V., v. 30, Muir, vol. 5, p. 66.
(7.) *Ibid.* v, 30-4. Muir.
(8.) R. V., vii, 86, 2-3-4.
(9.) *Ibid.* vii, 88, 5-6.

(1) What acts were not considered sinful by the Vedic Aryans.

Aristotle says, "as men regard the forms, so also they consider the lives of the gods, to be similar to their own." Whatever acts therefore a nation attributes with approbation to its gods, we may reasonably conclude are highly esteemed by itself. Throughout the Vedic hymns the inebriety produced by quaffing the soma-juice is celebrated with unfeigned satisfaction. All the gods are constantly invited to drink of the "immortal stimulant" (*amartyam madam*) which invigorates them and increases their strength beyond all praise. "Indra has drunk, Agni has drunk. All the gods have become exhilarated."(1) "Indra drinks like a thirsty stag, or a bull roaming in waterless waste."(2) And all the effects produced on man by 'strong drink' are ascribed to him. It is stated in the Aitareya Brahmana that, "The gods get drunk, as it were, at the midday libation, and are consequently at the third libation in a state of complete drunkenness."(3) The *Sautramani* was a ceremony appointed to expiate the evil effects of too free indulgence in the soma juice.

Wine (*Sura*) was also in use; for we read;—"I place the poison in the sun, like a wine skin or leathern bottle, in the house of a vendor of wine."(4) Wine-swillers are also mentioned.(5) The Asvins gave a hundred jars of wine to Kakshivat.(6) The Soma draughts are said to contend in the interior of Indra, like "men maddened with wine."(7) It is obvious therefore that drunkenness was not considered a sin in the Vedic age. Over-indulgence, however, in 'strong drink' on the hot plains of India gradually bore its evil consequences; and among the thoughtful a revulsion of feeling was the result. Hence in Manu's time, spirit-drinking was strictly prohibited as being a most heinous crime, equal to that of killing a Brahmin.(8) All honour to those ancient Sages who resolutely set their faces against a habit, which if continued in, would probably have destroyed the Hindu Aryans long ago.

Though monogamy was doubtless the prevailing custom in the Vedic age, polygamy is often spoken of without any disapprobation. We read that the Rishi Kakshivat married the ten daughters of Raja Swayana; and we are told that when the Sage Chyavana had grown old, and had been forsaken, that the Asvins divested him of his decrepid body, prolonged his life, restored him to youth and made

(1.) R. V., viii, 58-11.
(2.) *Ibid.* vi, 47-6. viii, 66-4.
(3.) *Ibid.* vi. 11.
(4.) *Ibid.* i, 191-10.
(5.) *Ibid.* viii, 21-14.
(6.) *Ibid.* i, 116-7.
(7.) *Ibid.* viii, 2-12.
(8.) Manu, x. 55.

him "the husband of maidens."(1) Soma is said to have made the dawns bright at their birth;(2) and to have formed them the wives of a glorious husband.(3) The Sage Yajnavalkya had two wives, Maitreyi and Katyayani. One Rishi exclaims, "The magnificent lord, the protector of the virtuous...has given me five hundred wives."(4) The following are a specimen of many passages which allude with approbation to the possession of more than one wife: "Powerful Indra, their minds adhere to thee, as affectionate wives to a loving husband."(5) "Indra took to him all the cities as one common husband his wives."(6) "Thou dwellest with thy glories like a Raja with his wives."(7) "Agni is the lover of maidens, the husband of wives."(8) Even polyandry is hinted at in the fact that the two Asvins had one wife in common;(9) and Rodasi was the common wife of the Maruts.(10)

The Satapatha Brahmana(11) distinctly avows the principle of polygamy and explains its origin. "He sacrifices to the man first, then to the women. He exalts the man in consequence of his vigour. He sacrifices to the man as to one, and to the women as to many. Hence also one man has many wives."(12)

The re-marriage of widows was not considered a crime in the Vedic age as it is now; and the horrid rite of Sati was then unknown. "When a woman has had one husband before, and gets another, if they present the *aja panchandana* offering, they shall not be separated. A second husband dwells in the same world with his re-wedded wife, if he offers the *aja panchandana*."(13)

It appears from the following verse addressed to the Asvins that it was not an uncommon thing for a widow to marry her deceased husband's brother. "Where are you by night Asvins, and where by day? Where do you alight? Where have you dwelt? Who draws you to his house, as a widow does her brother-in-law to the couch, or as a woman does a man?"(14) The same custom was in vogue in the time of Manu, for it is enacted in his code that, "the damsel, indeed, whose husband shall die after troth verbally plighted, but before consummation, his brother shall take in marriage according to this rule."(15)

The Vedic Aryans considered it neither a sin nor a disgrace for

(1.) R. V., i, 116-10.
(2.) *Ibid.* vi, 39-3.
(3.) *Ibid.* vi, 44-33.
(4.) *Ibid.* viii, 19-36.
(5.) *Ibid.* i, 62-11.
(6.) *Ibid.* vii, 26-3
(7.) *Ibid.* vii, 18-12.
(8.) *Ibid.* v. 66-4.
(9.) *Ibid.* i, 119-5.
(10.) *Ibid.* i. 147, 4-5.
(11.) *Ibid.* ix. 1. 4-6.
(12.) Muir, vol. 5, p. 458.
(13.) R. V., x, 5. 27-3.
(14.) *Ibid.* x- 402.
(15.) Manu, ix, 69.

adult females to remain at home unmarried, or for those growing old to marry. We read, " as a virtuous maiden growing old in the same dwelling with her parents (claims from them her support) so came I to thee for wealth."(1) And the Asvins are highly praised for having cured Gosha the daughter of Kakshivat, and given her a husband when advanced in years.(2) There are indications even that women exercised the liberty of choosing their own husbands in those days.(3)

The plunder and destruction of the non-Aryan races was a theme of great rejoicing. Indra destroyed the Dasyus and cut them in pieces, he slew fifty thousand Krishnas, or dark ones, and utterly demolished their cities.(4) He consumed the Rakshasas with his bolt, as fire a dry forest;(5) yea, " he slew with his host a thousand, ten thousand, a hundred millions of the Dasyus."(6) " Destroy every one that reviles us, slay every one that does us injury ; may all aliens perish" is the constantly recurring prayer.(7) We find no trace here of the ancient brotherhood of man that is so much boasted of by certain educated Hindus of the present day !

(2.) What acts were considered sinful by the Vedic Aryans.

Gambling is represented as most ruinous in its effects upon persons and families. " The Gambler finds no comfort in his need ; his dice give transient gifts and ruin the winner, it vexes him to see his own wife, and then to observe the wives and happy homes of others." " His wife rejects him and his mother-in-law detests him." His father, mother and brothers, ashamed of him, cry out, " We know nothing of him, take him away." " In debt and seeking after money, the Gambler approaches with trepidation the houses of other people at night." No wonder then that the advice of the Rishi is, " Never play with dice: practise husbandry, rejoice in thy property esteeming it sufficient."(8)

The gods are haters of falsehood and punishers of all untruth. Hence the prayer, " Take away whatever sin has been found in me, whether I have done wrong, or have pronounced imprecations, or have spoken untruth." " May the untruth which the wise and sinless Varuna observes in us through thy favour, Indra, disappear," for, " those who practise untruths attain not the inconceivable deity."(9)

(1.) R. V., ii, 17-7.
(2.) *Ibid.* i, 117-7.
(3.) *Ibid.* x, 37, 11-12.
(4.) *Ibid.* vi, 16, 12-13.
(5.) *Ibid.* vi, 18-10.
(6.) A. V., viii, 8-7. R. V., ii, 14, 6-7.
(7.) R. V., i, 9-7. viii, 39.
(8.) *Ibid.* x, 34.
(9.) *Ibid.* i, 15-21. i, 23-22. ii, 27-4. vii, 28-4. ii, 35-6.

Stealing was a crime and dishonesty in business was deprecated. Pushan as the god of travellers is invoked to " drive away from our path the waylayer, the thief, the robber," and Indra is entreated " not to take advantage of us like a dealer."(1)

Illiberality towards one's own kith and kin was severely condemned, while liberality is highly praised. " He who keeps his food to himself has sin to himself also." The wise man makes the giving of gifts his breastplate." " The car of bounty rolls on easy wheels." " The house of the liberal man is like a pool where lotuses grow." " The property of the liberal man never decays, while the illiberal finds no comforter." " The givers of gifts abide aloft in the sky ; the bestowers of horses live with the sun ; the givers of gold attain immortality, the bestowers of raiment prolong their lives.(2)

The non-performance of religious rites ; the reviling of the soul-inspiring Soma juice, disobedience to parents, and want of peace and concord in the family were considered wrong. The following benediction from the Atharva Veda has lost none of its force and beauty for domestic happiness by the lapse of three thousand years ; " I impart to you concord with unity of hearts and freedom from hatred : delight one in the other as a cow in the birth of a calf. May the son be obedient to his father, and of one mind with his mother. May the wife at peace with her husband speak to him honeyed words. Let not brother hate brother, nor sister, sister : concordant and united in will speak to one another with kind words."(3)

It is obvious that the great soul-burden of the Vedic Aryans was sin. Sin in the priest and sin in the people, sin in the heart and sin in the home, sin in the village and sin in the city;—Sin, Sin, Sin, everywhere ! And though the consciousness of sin in India has been blunted by the performance of sinful acts for ages, yet, sin is still felt to be a ' burden,' a ' calamity,' and a ' fall,' by the Hindus as a nation, ' *papo aham, papakarma aham, papatma, papasambhava,*' &c., ' I am sin, I commit sin, my nature is sinful, I was conceived in sin,' &c., is the daily prayer of millions. Oh ! that they would turn to the only Hearer of prayer, the only Forgiver of sin, and ask Him in child-like confidence—" Have mercy upon me, O God, according to thy lovingkindness ; according unto the multitude of thy tender mercies blot out my transgressions." " Wash me thoroughly from mine iniquity, and cleanse me from my sin." For

(1.) R. V., i, 42-3. i, 33-3.
(2.) *Ibid.* x, 107-117.
(3.) *Ibid.* vii, 104, 2-4. vi, 52-2. A. V., iii, 30.

I acknowledge my transgressions: and my sin is ever before me." "Create in me a clean heart, O God; and renew a right spirit within me." (Psalm li.) Then only will the 'rope' of sin which keeps the soul in misery be broken, and loving fellowship with the Universal Father be restored.

MAURICE PHILLIPS.

THE RUBAIYÁT OF 'UMR KHAYYÁM.

About seven centuries and a half ago, three lads, each destined to become famous, were play-fellows in the city of Naishápúr, the capital of Khorásan. They were diligent students of Imám Muaffik, a renowned Sunni Doctor, and an instructor of youth in all the sciences a knowledge of which was necessary for those who wished to take any position amongst the educated classes of that day. The story goes that the three lads made a compact to the effect that the one who first arrived at a position of eminence should use his influence on behalf of the other two. Nizám-ul-Mulk, who became, in due course, the Vizier of Alp Arslan and of Málik Sháh had the privilege of fulfilling the engagement and this he did most loyally. At his request, his former schoolfellow, Hasan-bin-Sabbáh, was appointed to an office in the administration of the Sultán's dominions, but being dissatisfied on account of the slowness of his promotion, he commenced to intrigue against his benefactor, and was finally disgraced. After many adventures, he became the founder of the sect of the Assassins. His fortress was the Castle of Alamút, situated in the mountainous tract south of the Caspian Sea. He is known in accounts of the Crusades, as the 'Old man of the mountains.' Nizám-ul-Mulk fell a victim to an assassin's dagger.

The third lad was 'Umr Khayyám, Nizám-ul-Mulk wished him to remain at the Court of the Sultán, but this he declined to do. "The greatest boon," said he, "you can confer on me, is to let me live in a corner under the shadow of your fortune, to spread wide the advantages of science, and to pray for your long life and prosperity." His request was agreed to and a small pension was granted to him. In the reign of Málik Sháh he was appointed, in conjunction with seven other learned men, to the work of reforming the Calendar. The result of their labours is known as the Jaláli Era, of which Gibbon says, "it is a computation of time, which surpasses the

Julian, and approaches the accuracy of the Gregorian style." 'Umr Khayyám also compiled the astronomical tables, called Zíj-i-Málikshái, and wrote a treatise on Algebra. The Sultán Málik Sháh esteemed him highly for his scientific attainments and 'showered favours upon him.' Still neither his attainments in this direction, great for the age in which he lived, nor the many marks of favour the Sultán showed to him, could make 'Umr Khayyám a popular man. The reason of this will be seen, as we consider in some detail the poem with which his name will be, so long as Persian literature shall last, indissolubly connected. It is not as a man of science, but as a poet that his name has come down with fame to posterity. In the whole range of Persian literature there are few books more attractive, though none more sad, than the Rubaiyát* of 'Umr Khayyám.† The scathing sarcasm, the wit and the vigour of the expressions, the possible esoteric teaching of many verses, the utter despair and despondency which runs through the whole, render this short poem unique of its kind. It possesses a special interest for all students of human thought and life, for it shows how a man, learned in his day, found no abiding consolation in scientific researches, no rest in the pantheism of the Súfi, no satisfaction in the sterner creed of his orthodox Muslim friends and no peace whatever in a cynical rejection of religious belief. He was a bold brave man and gave free utterance to his thoughts. It is said that the Súfis hated him, but later poets have used his figures of speech in a mystical sense and some have claimed him as a Súfi. This he is not. The scorn for external rites shown by the Súfi is one way of declaring his belief that all existence is illusion, but he has no intention of destroying all religious feeling. The amourous language of the mystic is meant to be devout. 'Umr Khayyám at times uses Súfi language, but only to show his contempt for orthodoxy, and his own epicurean tastes. The Súfi does believe something, 'Umr Khayyám believed nothing and was a saddened man. This is the great lesson the Rubaiyát teaches us. Unbelief in the twelfth, as in the nineteenth century, could give no peace, no settled calm to the restless soul of an earnest, thoughtful man. In order to appreciate the beauty of the Rubaiyát we must remember that

* The term Rubai is used for a quatrain, in which the first, second and fourth lines always rhyme, and sometimes the third as well. Rubaiyát means a collection of such quatrains in one poem. No edition, so far as I know, contains more than 'two hundred and fifty three verses.'

† Khayyám is the Takhallus, or *nom de plume* of the poet, and literally means 'tent maker.'

the author was a man utterly wearied with the religious conflicts of his day, and the hollowness of many professors of religion, a man who turned from all in blank despair and who, finding no Gospel to direct him to the Light of the world, fell into utter darkness. It may be the lot of many thoughtful men to pass through the earlier stages of 'Umr's mental career, yet none need follow him into the gloom of despair, for now, far and wide, the good news of the kingdom of God has reached, and life and immortality are brought to light.

Let us now turn to the poem. There is no definite order or arrangement in it, and 'Umr's views must be gathered here and there. 'Umr is looked upon as a Súfi by some, as a mere Epicurean by others who speak of his views as 'Rindána Mazhab.' It is the latter with whom we agree, although we think that he only came to be this, when he failed to satisfy the cravings of his nature for higher truth. However, we may first notice some of the verses, on which Súfis base their claim to him. To enter now upon an exposition of Súfiism would exceed our limits. It is enough to state that the professed end and aim of all Súfi teaching is to gain the knowledge of God, and by intuition to enter into the mystery of the Unity (Tauhid). All other knowledge is of slight value. "Sense and reason cannot transcend phenomena, or see the real Being which underlies them all; so sense and reason must be ignored and superseded in favour of the 'inner light,' the divine illumination of the heart, which is, according to Súfi teaching, the only faculty whereby men perceive the infinite." The enlightened man is said to "annihilate self in the absolute, to become eternal in the absolute, to be made one with the One and to abstain from evil." To learn this secret is the great object of life—

"Once and again my soul did me implore
To teach her if I might, the inspired lore;
I bade her learn the Alif well by heart,
Who knows that letter well need learn no more."

The letter Alif, the first letter of the alphabet, is used in the numerical notation called Abjad to represent the number one, and so "to know the Alif" is a figurative expression meaning to know God as the One, the sole existent Being. It is a common expression amongst Súfi poets. Thus Háfiz says—

"My Loved one's Alif form stamps all my thought,
Save that, what letter has my master taught,"

That is, he who knows the God as One, knows all—he needs no other teaching.

"The search for that 'single Alif' was a great spur to enquiry. It struck the imagination as a kind of vista which narrowed, the further one advanced, by the progressive elimination of all unimportant accidents from the vast and complex phenomenon which had to be investigated, until at the far end the enquirer was brought to the philosopher's stone, the single Alif, the narrow portal which gave admission to the temple of universal knowledge."

A belief in the Unity is supposed to cover a multitude of sins.

"Khayyám strings not the fair pearls of good deeds,
Nor sweeps from off his soul sin's noisome weeds;
Nevertheless he humbly hopes for grace,
Seeing that One as two he ne'er misreads."

It is possible that 'Umr Khayyám is here speaking satirically. Anyhow, it is good Súfi doctrine. The doctrine of the Tauhid is the central dogma of Islam. In ordinary language it means 'there is no god but God,' but in the mystical language of the Súfis it means 'there is no Being—no real existence—but God.' Everything else but God is phenomenal and non-existent. Thus "One as two he ne'er misreads" means that he looks on all else but God as illusion.

The final goal of all Súfi aspiration is absorption in the Divine, and this 'Umr seems to teach in,

"O Soul! when on the Loved one's sweets to feed,
You lose your *self*, yet find your *Self* indeed;
And when you drink of His entrancing cup,
You hasten your escape from quick and dead."

"To die to self, to live eternally in God" is the mystic doctrine round which the Súfi system professedly gathers, though it is not so much life *in* God, as Faná, or extinction, which leads the Murid (disciple) on stage after stage, in the mystic journey until the end is reached, and the phenomenal 'Not-being' is lost for ever in the Eternal 'Being.' This belief in the illusion of phenomena is described by 'Umr thus:—

"The drop wept for his severance from the sea,
But the sea smiled, for, 'I am all,' said he,
'And naught exists outside my unity,
My one point circling apes plurality.'"

The 'one point' is the 'Being'. It is not easy to get much sense out of the last line as it stands here, but some light is thrown upon it by a somewhat similar statement in a well-known Súfi book, the Gulshán-i-Ráz:—

"Go! whirl round one spark of fire
And from its quick motion you will see a circle."

The circle is not real, it is phenomenal, and thus the "point circling *apes* plurality" and, after all, the sole existence is the "one

point." The Súfi does not trouble himself much with creeds and confessions. He has little faith in systems of religion. If what he deems 'The Truth' is known, he cares very little about an objective revelation, or an ecclesiastical system. If earth and all it contains are an illusion, so also, he considers, heaven and hell may be. Such notions may be needed for those weaker souls who in Jewish synagogue or Christian cloister, or Muslim mosque need an outward law as a restraint and a guide, but for the Illuminated all these things are worthless :—

"In synagogue and cloister, mosque and school,
Hell's terrors and heaven's lures men's bosoms rule;
But they who pierce the secrets of the 'Truth',
Sow not such empty chaff their hearts to fool."

In fact, such beliefs are held to be a positive hindrance, for

"While heaven and hell stand on your way
How is your soul cognisant of the mystery." *

Even fate has no objective existence :—

"Pen, tablet, heaven, and hell I looked to see
Above the skies from all eternity;
At last the Master sage instructed me
'Pen, tablet, heaven and hell are all in thee'."

Thus far 'Umr is Súfiistic, but yet he is not a Súfi. There is a certain calm in the life of the Súfi, to which 'Umr never attains. He is full of despair, in spite of the rollicking mood in which many verses are written. Life is not worth having, not worth living.

"I never would have come, had I been asked;
I would as lief not go, if I were asked;
And, to be short, I would annihilate
All coming, being, going, were I asked."

'Umr was, in reality, a fatalist. His training as a youth in the orthodox school under Imám Muaffik would naturally produce this result. Neither his scientific studies, nor the lighter ones of literature seem to have led him to a brighter view of the universe.

"The 'tablet' all our fortune doth contain,
Writ by the 'pen' that heeds not bliss nor bane;
'Twas writ at first whatever was to be,
To grieve or strive is labour all in vain.

"We are but chessmen, who to move are fain
Just as the great Chess player doth ordain;
He moves us on life's chess board to and fro,
And then in death's box shuts us up again."

So he gives it all up. It is useless to contend against irresistible decrees. It is useless to grieve over it, so

"O heart! this world is but a fleeting show,
Why let its empty griefs distress thee so?
Bear up and face thy fate; the eternal pen
Will not unwrite his roll for thee, I trow."

* Gulshán-i-Ráz.

"O Soul, so soon to leave this soil below,
And pass the dread mysterious curtain through,
Be of good cheer, and joy you while you may,
You wot not whence you come, nor whither go."

The result is that all sense of personal responsibility to a Personal God is lost. Good and evil are matters of indifference to the fatalist. The restraint of a moral law is taken away. The man simply follows his own desires and casts the blame of the result on God.

"Khayyám why weep you that your life is bad?
What boots it thus to mourn? Rather be glad,
He that sins not, no title makes to grace,
Sin entails grace, then prithee why so sad?"

A recent Muslim Commentator on the Rubaiyát explains this last line by quoting, as a well-known saying, the words "Mustahiq-i-karámat gunáhgárán and"—"Sinners are those who have a right to favour."

To eat, drink and be merry is 'Umr's real creed. Any aspirations he may at one time have had after higher and better things are destroyed. The constant teaching of the Rubaiyát is,—indulge the senses and let the future go, or as 'Umr puts it, "nor cash in hand for promised credit sell." A revel with boon companions is the true joy.

"We make the wine jar's lip our place of prayer,
And drink in lessons of true manhood there,
And pass our lives in taverns, if perchance
The time mis-spent in mosques we may repair.

"In paradise are Houris as you know,
And fountains that with wine and honey flow;
If these be lawful in the world above,
What harm to love the like down here below.

"Come fill the cup, and in the fire of spring
Your winter garment of repentance fling;
The bird of Time has but a little way
To flutter—and the Bird is on the wing."

To those who held out future joys in Paradise for orthodox belief and right conduct here, the answer is ready to the effect that cash payments are better than credit accounts—

"They preach how sweet those Houri brides will be
But look you, so is wine sweet, taste and see,
Hold fast this cash, and let the credit be,
And shun the din of empty drums with me."

No one can accuse 'Umr Khayyám of not having the courage of his opinions. In his position he could say and do what men of lesser note could not. Moollá and Pir, Philosopher and Saint, all have to bear his bitter sarcasm. He calls upon them to leave their dogmas,

vigils and researches, and to join with him in the enjoyment of an animal existence. To the Philosopher he says:—

"Slaves of vain wisdom and philosophy,
Who toil at Being and Nonentity,
Parching your brains like dry and shrivelled grapes,
Be wise in time, and drink grape-juice like me!"

To the Súfi he says:—

"The joyous souls who quaff potations deep,
And Saints whom the mosque sad vigils keep,
Are lost at sea alike, and find no shore;
One only wakes, all others are asleep."

To the Moollá, for whom he has no mercy, he says:—

"Moollá! give heed, if thou true Muslim be,
Quit saintly show and feigned austerity,
And quaff the wine that blessed 'Ali pours,
And sport with Houris 'neath this shady tree."

"A Moollá spied a harlot, and quoth he,
'You seem a slave to drink and lechery.'
And she made answer, 'What I seem I am,
But, Moolla, are you all you seem to be.'"

There is a verse in the Qurán which says, "Kill them (your foes) wherever ye shall find them" (Súra, 12.v.187). 'Umr makes a curious use of this verse, and by it refutes and confounds the Moollás who objected to his use of wine.

"From right and left grave Moollás came and stood,
Saying, 'Renounce this wine, this foe of good;'
But if wine be my foe, as they declare,
I swear by Allah I must drink his blood."

The Moollás held out hopes to all the Faithful of Houris in Paradise. 'Umr on his principle of 'ready cash' cannot see that what is morally right there can be morally wrong here. The satire is perfect in

"All a long summer's day her Khayyám lies
On this green sward, gazing on Houris' eyes,
Yet Moollás say he is a graceless dog,
Who never gives a thought to Paradise.

"In Paradise are Houris as you know,
And fountains that with wine and honey flow;
If these be lawful in the world above
What harm to love the like down here below."

No doubt he heard these men speak much of God's mercy, a sentiment too often, then as now, a cloak for evil doing. 'Umr, whatever his views on the subject as an abstract question may have been was far too honest a man to treat it, in the way he heard it, as more than a mere shibboleth.

"O thou who hast done ill, and ill alone,
Think not to find forgiveness at the throne;
Hope not for mercy, for good left undone
Cannot be done, nor evil done undone."

It is thus no wonder that seeing unreality all around, in the

mysterism of the Sufi as in the formalism of the orthodox, and with no true gospel placed before him, he should get utterly weary of the world.

"Ah! would there were a place of rest from pain,
Which we poor pilgrims might at last attain,
And after many thousand wintry years
Renew our youth like flowers, and bloom again."

'Umr Khayyám was a strange compound. He often utters nobler sentiments than those we have yet quoted from his poem. His better nature comes out in the earnest longing for a true, a perfect guide.

"Open the door of Truth, O Usher purest!
And guide the way, O thou of guides the surest!
Directors born of men shall not direct me,
Their counsel comes to naught, but thou endurest."

Cynical though he was, he retains kindly feeling for others. A noble sentiment is contained in

"Whate'er thou doest, never grieve thy brother,
Nor raise a fume of wrath his peace to smother.
Dost thou desire to taste eternal bliss?
Vex thine own heart, but never vex another."

It is quite natural that he should show a spirit of toleration, but this is merely the result of indifferentism, which looked upon all systems of religion as equally true and equally false.

"Pagodas are, like mosques, true homes of prayer;
'Tis prayer that Church bells waft upon the air;
Ka'aba and temple, rosary and cross,
All are but divers tongues of world-wide prayer.

"Hearts with the light of love illumined well,
Whether in mosque or synagogue they dwell,
Have their names written in the book of love,
Unvexed by hopes of heaven or fears of hell."

Still in spite of an occasional glimpse of a better nature, of more hopeful qualities, the student of the Rubaiyát will come to see that 'Umr Khayyám was a saddened man, that he had no hope in the future or in God. What bitter words are these with which the poem concludes:—

"Khayyám of burning heart, perchance to burn
In hell, and feed its balefires in thy turn,
Presume not to teach Allah clemency,
For who art thou to teach, or He to learn?"

Is it any wonder that in spite of his bitter nature he should become cold and heartless, that he should be callous and careless?

"Quoth fish to duck: 'Twould be a sad affair,
Should this brook ever leave his channel bare,'
To whom the duck: 'when I am dead and roasted,
The ocean may run dry for aught I care.'"

'Umr neither attempted to construct a philosophy or to build up a system. He only puts forth his doubts and difficulties, he "loves to balance antitheses of belief, and to settle himself in the equipoise

of the sceptic." This brought him no peace of mind. For all we know he died, as he lived, in despair, a witness to all ages of the saddened gloom which settles on the minds of those who wish to know the truth, and yet fail to find it.*

EDW. SELL.

ROMAN COINS IN SOUTH INDIA.

III.

There are, at least, two instances on record of Roman coins having been discovered buried along with Sáláka or Punch coins, a circumstance which led Sir W. Elliott to remark that both coins must have been in use about the same time. A few facts connected with Roman history have been gathered together, suggested by the Roman coins found here, what is there to be said about their fellow-sleepers of nineteen centuries ago? The earliest Roman coin yet found is of the time of Augustus, certainly not earlier than B.C. 30; Nero or Trajan is almost the latest; but roundly speaking the period of intercourse indicated by these coins is about two centuries, from B.C. 30 to the death of Antoninus, about A.D. 167. After describing the circumstances connected with the striking of the coins, and then their voyage across the ocean it is but natural to ask what state of things they found here on their arrival, and as the Sáláka coins have been found buried with them it may be well to put them in the witness box and see what they have to make known about the matter.

It will need to be noted in the first place that in these Punch coins there is nothing answering to the *head* of Cæsar in the Roman ones. The features of the reigning monarch in South India rarely if ever graced the currency of his realm, until European rule was established there. It is also remarkable that no *alphabetical characters* appear on these coins; and in connection with this remark it may be added that very few indications are to be found showing what sort of letters were used in those days, or to what extent letters were known. What carved, engraved, or written characters are now extant in South India, which, with any show of reason, can be said to have been executed previous to the beginning of the third century of the Christian era? At first sight such a question may seem preposterous. Some will say 'surely in a country with such an ancient literature, with Puránas, Shastras, and Vêdas, and possessing such an infinite variety of learned writings in prose and poetry, it must be the height of absurdity to enquire what alphabet was in use sixteen centuries ago.' Perhaps so, but still the enquiry may be made in the hope that something useful may spring out of it. It must, however, be premised that in a country like India the wear and tear, the destruction of fragile things such as books, palm leaves, &c., is very great, and that with the greatest care it is difficult to preserve such materials even for a century.

To begin with, a few questions may be asked about the chief Puranas. Monier Williams thinks that the Markandeya is one of the oldest, and is probably as old as the 8th century A.D. Dr. Hunter in the article on 'India' in the Imperial Gazetteer says "the composition of the existing Puranas probably took place from the 8th to the 16th century A.D." These then are out of the question, and the Tantras share the same fate.

But what of the two great Epics—the Ramayana and the Mahabharata, the three Law books—the Grihya Sutrás, the Code of Manu, and that of Yajnavalkya? What of the Upanishads, the Brahmanas, and the Vedic Hymns? It may be asserted that probably all these were *composed* before the close of the 2nd century A.D. Of the Vedas Monier Williams writes "We may be justified in assuming that the hymns of the Vedas were probably composed by a succession of poets at different dates between 1500 and 1000 years B.C." Of the law books the Grihya Sutrás date probably as far back as the 7th century B.C., Manu a couple of centuries after, and the Code of Yajnavalkya about 200 A.D., or a little later. There is reason to think the Mahabharata was compiled before the time of Goutama Buddha, and the composition of the Ramayana may be taken as about the 5th century B.C.

We see then that in all probability an immense amount of Sanscrit literature was in existence, previous to the Christian era. But in what *form* did it exist? Dr. Hunter states, and I have

* "That 'Umr in his impiety was false to his better nature we may readily admit, while, at the same time, we may find some excuse for his errors, if we remember the state of the world at that time. His clear strong sense revolted from the prevailing mysticism where all the earnest spirits of his age sought refuge, and his honest independence was equally shocked by the hypocrites who aped their fervour and enthusiasm; and at that dark hour of man's history whither, out of Islam, was the thoughtful Muhammadan to repair? No missionary's step, bringing good tidings, had appeared on the mountains of Persia; the few Christians who might cross his path in his native land, would only seem to him idolaters."—*Calcutta Review*, lix.

no doubt he has good authority for his statement, that "even the more ancient of Sanscrit manuscripts are only 400 years old, very few have an age of five centuries, and only *two* date as far back as 1132 and 1008 A.D. The earliest of them comes from the cold, dry highlands of Nepaul."* Probably earlier written manuscripts existed but have perished by the corrosive hand of time; for traces remain in imperishable granite, and in enduring brass, of the existence of an alphabet or alphabets in which the Vedic hymns and the Sutras of Pannini *might have been* written, but at the same time it has been very significantly remarked that "the whole of the Brahmana literature" (and Vedic too) "however incredible it may seem shows not a single vestige of the art of writing. Nay more than this during the Sutra period all the evidence we can get would lead us to suppose that even when the art of writing began to be known, the whole literature of India was preserved by oral tradition only."† A quotation from an old Hebrew writing dating at least some centuries B.C. will make this remark more obvious. It runs as follows:—

> "O that my words were now recorded!
> O that they were engraven on a tablet!
> With an iron graver upon lead;
> That they were graven in a rock for ever." ‡

The Mahávamsa quoting from the Dipavamsa has the following relating to the committal to writing of the Three Pitakas of the Buddhists in the 1st century B.C.

> "The wise monks of former days handed down by word of mouth
> The text of the Three Pitakas, and the Commentary upon them;
> Seeing the destruction of men, the monks of this time assembled,
> And, that the faith might last long, they wrote them in books."

On this Mr. Rhys David, remarks:—

"To understand the real significance of this record it is necessary, in the first place, to get rid of the European notion that books can only be preserved in writing. The Indian opinion is just the other way. ... If you depend upon written copies, they would argue, you are sure to make, and to perpetuate mistakes; but the text as handed down by word of mouth is preserved, not only by being itself constantly repeated, but by the assistance of the commentaries in which every word of the text is carefully enshrined... Mahinda could have written the texts had he so chosen. We know that the square alphabet which Asoka used was at least known in Ceylon, if it did not originate there."§

The next question that arises is, were the Vedas, the Brahmanas, the Dhurma Sastra and the Great Epic poems known in *South India* at the period we are reviewing? Had their Aryan custodians made

* See article "India," Imperial Gazetteer, p. 216, and note.
† *Max Müller*, History of Sanscrit Literature, p. 501.
‡ Job. xix, 23—4. §Buddhism by Rhys David, page 234.

their way across the Krishna and Tumbudra, or were the Dravidyans of the South still left in undisturbed supremacy? Dr. Caldwell is of opinion that the first introduction of Aryan civilization into the Pandyan country must have been previous to 550 B.C. On the other hand Dr. Burnell says—

"There is not much historical evidence to prove that there were Brahmans in South India before the 7th century A. D."

Another scholar declares

"That the Southern Indian alphabet the oldest forms of which we possess is the Maurya and Andhra (Nanaghat, Nasik Kârlî and Amaravatti Inscriptions) no doubt comes before us as a fully developed system about B.C. 300, ... as far as I can see there can be no doubt that this alphabet was an old institution in India about 300 B.C. and that it owed its development to the *Grammatical schools of the Brahmans.*"*

Mr. L. Rice of Bangalore, says:—

"Brahmans are stated to have been introduced into the countries East of Mysore in the 3rd Century of the Era by Makunta Pallava; and into the countries to the West a little later, below the Ghats by the Kadamba King Mayûra Varuma, and above the Ghats by his son"†

These quotations are given to show that the opinions of those who have made a study of such subjects do not perfectly harmonize. My own impression is that Brahman influence was little felt, if at all, south of the Tumbudra at the end of the second century. I am fully aware what this contention implies. It means a great work of demolition, a removal of layer upon layer of more modern encumbrances, in order that a fair view may be obtained of the state of the country as it really existed between the middle of the first century B.C. and the end of the second of our era. It means in fact such a change in the present appearances of things that little would be left untouched except perhaps the ryot's hut, his plough, and the "everlasting hills." Towering *Mantapams*, and vast piles of granite in famous temples are all comparatively new things in view of the time we are now thinking of. Chillumbrum, Conjeveram, Madura, Sreerungam—which of these temples can show a stone that has not been placed in position within the last ten centuries? And some are much more recent than that period. Dr. Hunter laying hold of a remark in the *Periplus* jumps to a conclusion in a very singular fashion. The writer of the Periplus says—

"Next to this is another place called Komar, where is a Cape of the same name, and a haven (Cape Comorin) those who wish to consecrate the closing part of their lives to religion come hither and bathe, and engage themselves to celibacy, this is also done by women, since it is related that the goddess once on a time resided at the place and bathed there."

* Dr. Buhler, Indian Antq., Sept. 1882.
† Rice's Mysore Inscriptions, Intro. p. 88. Krishna District Manual, p. 5.

On this Dr. Hunter remarks—

"At the time of the Periplus the Southernmost part of India was apparently a seat of their (Brahmans) worship. A temple of the wife of Siva stood on Cape Comorin Cir. 100 A.D."!!

Who makes mention of a temple on Cape Comorin, and who says that it was dedicated to the wife of Siva? Is there anything in common between the one statement and the other, between what the Periplus says of the goddess of his day, and Durga now worshipped at Cape Comorin? Was Durga known at all when the Periplus was written, or are Siva and Durga later developments? I never heard that those who worship Durga do so with the motives mentioned in the Periplus. However more of this anon. Respecting Tamil literature we must conclude, at least upon the evidence at present available, that in the period of our coins the use of written signs to represent uttered words was not common if at all known. In the Rev. W. Taylor's translation of the Kongu Desa Rajakkal it is true he makes Mahdava (the 9th King of the Kongu country who reigned in Vijaya Scandapuram, Karur perhaps, about the beginning of the 3rd century,) able to understand 'law books,' but Mr. Dowson's translation of the same MS. has 'maxims of justice' in that place, and it is quite certain that the earliest trace of either Vatteluttu or Cera character, does not occur for some time after that date.

But what are the *sure* evidences that alphabets were known and used in South India about the beginning of the Christian Era? (1.) There are the edicts of Asoka carved on rocks, in caves, and on pillars in various parts of northern and central India, the furthest South being in the neighbourhood of Nagpore, and Ganjam, which by common consent are dated about B.C. 250. (2.) The remains at Amaravatti, and Jaggayapett on the Krishna river, and in the Krishna district—the latter only recently discovered, and supposed by Dr. Burgess from some inscriptions already deciphered to date about B.C. 200. The inscriptions here, and at Amaravatti, are in the Gupta alphabet. (3.) A rock inscription at Shravana Balagola in Mysore in the old Hala Cannada alphabet. (4.) A few words at the Seven Pagodas. Others no doubt exist but these, to the best of my recollection, are all that have been fixed upon as really previous to the beginning of the second century; several *Sássanams* have recently come to light, but none of them date so far back. Nothing has been found as yet in the south (so says Dr. Burnell) older than the 4th century A.D., and the oldest is a grant made to the Jews and Christians at Cochin by a West Coast Raja.

Now there is one thing common to our Saláká coins and these old

inscriptions—*they are all Buddhist or Jain remains.* On the four coins in my possession, though other marks are somewhat obscure the *chakra* or wheel so frequently associated with Buddhist rites is very distinct; and there are indications that the *chaityá*, and *Bo-tree* have both once been represented there. The inscription at Shravana Balagola is more properly Jain than Buddhist, and refers "to a "great migration of Jains from Ujjayini to the South under the leadership of Bhadrabahu in order to escape a 12 years famine." Having reached Balagola, and feeling his end approaching the leader resolved to finish his course there, and so he did. Of the Amaravatti *stupa* much has been written. Messrs. Fergusson, Elliott, R. Sewell and Burgess have described it at large, but a few words from the Krishna District Manual will show what sort of a place it is.

"The excavation of this mound laid bare a circular processional path, stone flagged, with an inner and outer railing of carved marble. At the points of the compass, were four mud chapels, or perhaps entrances with pillars. In the centre was probably a *dagaba* but of that there is now no trace. The pillars and slabs and cornices are covered with sculpture of an astonishing degree of excellence. The Rev. W. Taylor says it was never surpassed at any time or place, and another author says that this is the most interesting monument of antiquity east of Greece! without being so enthusiastic as this, and giving to Amaravathu the superiority over Nineveh, Jerusalem and the Pyramids, one must admit that the marbles are of very great interest. The sculptures depict scenes in the life of Buddha, and various Buddhist emblems symbols, Inscription in the Gupta or Pali character are frequent . . . One inscription mentions Dharanikota. It has been thus translated by Dr. Hultzsch of Vienna: success! adoration to the Holy one, the sun of the world! 'The gift of the worshipper Buddhurikita of Dhamnakata, the son of the Gomdi, and of his wife Padma, and of their son Hamgha . . . of the pious disciple Buddhurikita." Thus we may conclude there was a Buddhist monastery here before the Christian era, some authors suggest that this must be the famous shrine near the "diamond sand" whence the relics of Buddha were conveyed to Ceylon in A. D. 157." *

Jaggyapett on the northern bank of the river and near the Hyderabad frontier is now being examined. Dr. Burgess has published some notes from which it appears that by the letters used in the inscriptions their date may be given as from 200 to 170 B. C.

The edicts of Asoka are of course highly interesting, but there are only two things in connection with them which make it necessary to take note of them here. Part of the second edict runs as follows."

"Everywhere within the conquered province of Raja Piyadasi (Asoka) the beloved of gods, as well as in the parts occupied by the faithful such as Chola, Pida, Satyaputra and Keralaputra even as far as Tambapurni and moreover within the dominions of Antiochus the Greek." †

So far back as 250 B. C., Chola, Pandya and Kerala were known as kingdoms of the south. But about this time, *viz.*, the 18th year of Asoka (B. C. 245) the *thero* Mahadeva, and the *thero* Rakshita were

* Krishna District Manual, p. 166—167. † Cunningham Asoka, vol. 1, 116.

sent as missionaries, the first to Masishamandalam (Mysore) the second to Wanawasi (Banavasi).* Rice quoting from Wilson also states that Buddhists came from Benares to Conjeveram in the 3rd century, but, if they were so strong in Kalinga four centuries before, it seems odd that they had not pushed their way to the capital of the adjoining kingdom before this time. Here we may ask if the description of Komar (cape and town) given by the author of the *Periplus* does not much better agree with the existence of a Buddhist monastery than with the worship of the Hindu goddess Durga ?

"Those who wish to consecrate the closing part of their life to religion come hither and bathe, and engage themselves to celibacy. This is also done by women."

Two extracts from Buddhist works may fitly illustrate this remark :—

"Drinking of the water of a life of seclusion, of the water of the subjection of his passions, drinking also of the pleasant beverage called the perception of the truth he becomes free from excitement and sin." "He who maintains a wife and is at the head of a household; and that other who lives righteously, possessing nothing, these are equal. The head of the house lives unrestrained, and brings about the destruction of men; but the wise and restrained is a protection to all living beings."†

Women also were found under similar circumstances, for we read of Saughamitta, and her band of nuns passing over into Ceylon to assist her brother in his missionary work. The *devi* mentioned in the *Periplus* might be a Turanian or Dravidyan goddess such as are worshipped still in the villages of South India, and at Komar there may have been a monastery and nunnery for Buddhist pilgrims to settle in, and then the place would show in the 1st Century how completely Buddhism had possession in the southern part of the peninsula. For really every indication we have of these two centuries goes in the direction of showing the prevalence of Buddhism or Jainism. If any authority is to be attached to the Kongu Desa Rajakkal we gather from thence that within the first two centuries after Christ *three* Kongu kings had Jaina religious instructors, and Govinda Rajah in A. D. 82 is said to have given a grant of land to one Arichunna for the Jaina Kongani Varunna Basti. In A. D. 177 Tiruvikrama is said to have left the Jaina religion, and to have given a grant of land to the Sankara deva temple. To say the least about this chronicle it must have been written centuries after the events narrated occurred, and it is to be feared its dates are untrustworthy, and that there are too many evidences of purpose in the composition to make it quite satisfactory.

We get a few glimpses of the political distribution of the country

* Rice's Mysore Inscriptions Intro. 33. † See Rhys David's Buddhism, p. 155.

by means of the imperishable records of the rocks referred to above, and by means of these Punch coins as well. The existence of such coins bespeaks some measure of civilization and government. To a horde of savages a mint would be useless. In the edict of Asoka quoted above mention is made of Pandya, Chola and Kerala. We may be pretty sure from this reference, supported as it is by passages in the Mahavamsa Ceylon, in Ptolemy, in Pliny, in Megasthenes, and in the Periplus, that these three Kingdoms were in existence and occupied the whole of the extreme south of the peninsula at the time now under consideration. Madura was the capital of the Pandya country, and Korkai a place of importance as being the chief sea-port on the Eastern side of the Kingdom, having direct communication with Ceylon and China and the isles of the East. Of the early kings of Pandya, or the state of the kingdom, we know next to nothing. Two writers* have gathered together all the information that can be had from Native sources, chiefly the Madura Sthala Puranam, and the Tiruvilaiyadal Puranam a translation and enlargement of the former, dating about the 16th century, concerning which Dr. Caldwell says—

"I do not mean to assert that all the Kings in the Madura lists are to be regarded as purely inventions of later times. I mean only that until they have been verified by inscription, which has not been the case, they are of no conceivable historical value. For the present they must take rank, I fear, with the long roll of Pre-Christian Caledonian Kings whose pictures ornament the walls of Holyrood Palace, Edinburgh.†"

Proceeding due north from Pandya, we should find the Chera Desam of 2000 years ago, but not altogether in the north; it formed also the western boundary of the Pandyan kingdom. Most scholars agree in thinking that Chera and Kerala mean one and the same thing; and according to Ptolemy we should have to place the capital of the country at Karur. But if this be the case where was the Kongu Desam ? Mr. Dowson in a translation of the chronicle of the Kongu Desa Rajakkal published in the Journal of the Royal Asiatic Society in 1846 applies all that is said there of Kongu to Chera, thus indicating that he thought them one. The Rev. W. Taylor, however in connection with his translation of the same manuscript, contends that the two names refer to different parts of the country.‡ The Rev. T. Foulkes, in a remarkably able chapter, introductory to the Salem District Manual, discusses the matter very fully and sums up

* See Wilson's Historical sketch of the Kingdom of Pandya, and Nelson's Madura Manual, Vol. II.

† Caldwell's History, Tinnevelly p. 27. ‡ See Madras Journal of Literature, vol. XIV.

in favour of a separation between the two in the following manner:—

"There can be no doubt that the Tamil name Chera is the Kerala of the Sanscrit, and the languages which follow it. If therefore Kongu and Chera were synonymous names Kongu and Kerala must be synonymous also. Kerala however is named . . . amongst the foreign countries which were invaded and spoiled, and rendered tributary by the Kings of Kongu, and subsequently by the Chola and Bellala Kings while ruling over Kongu, and with which they sometimes formed friendly alliances from the 2nd century down to the 14th of the Christian era."*

And Mr. Shungoony Menon in his recent history of Travancore says—

"Many seem to suppose that Konga is identical with Chera, but in our opinion it is not, for these two dynasties, Konga and Chera are separate families. The Kongas having invaded and ruled over a part of Chera, came to be considered as the Kings of Chera itself; but several local and circumstantial facts prove the absurdity of this supposition."†

At the time of Ptolemy probably Govindarajah, or Tiruvikramadesa Chukruvarti the Kongu king who is said to have invaded Kerala or Chera, was then ruling the West Coast from his inland capital, and Skandapuram the Kongu capital, was, for aught we know to the contrary, the Karura of the Greek historian, about the time our coins landed on the shores of India. Karur has certainly as good claim as any place yet mentioned, to be the Vijaya Skandapuram of the Kongas and their successors the Gangas, who removed their capital to Talavanapuram, or Talakad on the borders of Mysore, but still kept up Skandapuram as a stronghold against the Pandyas and Cholas. What place was situated so suitably for such a purpose as Karur on the banks of the Amaravatti?

East of Chera or Konga there was ancient Chola. The Kolleimallei Hills, and a mound commencing near the Kattallei station on the South Indian Railway, are said to have been the ancient boundaries between the two kingdoms. In Ptolemy's time Ureiyur (Warriore a suburb of Trichinopoly) was then the capital of Chola. Tanjore became so later, but Dr. Burnell thinks there is reason to conclude that at one time *Malukuta*, now identified as a suburb of Kombhakonam, was the chief town of the Chola nation. Little is known of Chola so far back as the 2nd century; later it became *the* great power in the South, subduing the Tondumandalum of the Pallava kingdom, and even reaching as far north as Rajamundry, south to Madura, and west over Konga and Chera. Canchi or Conjeeveram became the capital of the Chola country eventually but when our coins reached India it was probably the residence of one of the

* Salem Manual, p. 15. † Ibid.

kings of the finest race the early records of South India give us any account of—the Pallavas.

"Salivahana whose era, used throughout the South of India, dates from A. D. 78, is acknowledged to have ruled at Pratisthana, now known as Paidiāna on the Godavery. From him are said to have descended Mâdhava Varunna, Kulaketana, Nilakantha and Mukunti Pallava. The last appears as the founder of the Pallava line with his capital at Dharanikota. * * He is placed about the year 200, and is according to local tradition the king under whom was erected the splendid tope or stupa at Amaravathi, which is called in the spot the Dupa Mogasala (or assembly hall) of Mukunta Maharaja."*

Those who wish to know more of the Pallava kingdom will find an eloquent and comprehensive summary of all that is at present known about them on page 10 of the first volume of the Salem District Manual. It is probable that between the Palar and Krishna rivers were a northern and a southern Pallavadesam, the capital of the north being not far from Amaravatti and called at one time Dhuranikota and at another Vengi, the country being then called Vengidesam. In the south was the country of the Kurumbers, and its chief city Kanchi was both a sacred place and a fortress. The intelligence and skill as well as the piety of this Pallavan and their chief men are well illustrated by the magnificent carvings which they left behind, not only at the places mentioned previously (Amaravatti and Jaggyapett) but in the older sculptures at Mahamallipuram or Seven Pagodas. It was in the very midst of this country that the first *find* of Roman coins now on record, was made, *viz.*, at Nellore, and there is every reason to believe that a most active commerce was carried on along the coast, also with the far East, and with Greek ships from Egypt.

One more ancient kingdom must be mentioned—the Kadámba kingdom with its seat of Government at Bannavasi in the north of Mysore. One special feature attaching to this dynasty (the earliest date in connection with which is A.D. 109) is the introduction of Brahmans into their dominions early in the 3rd century. It is said that for some reason or other these colonists wished to return to their native Rohilcund, and actually started on their journey, but they were overtaken and brought back. It was from this part of the country too that the Vellallus were brought who peopled the Tondermândalam after its capture by Adondaicholan.

But it is time that these somewhat discursive remarks should be brought to a close. My object in writing them will be accomplished if students who have the time at their disposal, and the neces-

* Rice's Mysore Inscriptions, Intro: LIV.

sary amount of education are led to see that in the early history of this country apart altogether from the region of mythology and fiction, there are a sufficient number of ascertained facts at their disposal to enable them to form some idea of the condition of their country and forefathers at the dawn of the historical period; and not only so but also a palpable nucleus round which other certainties may gather until in process of time what was once all nebulæ and *kathei* (romance) may assume shape and organization and become at once a pleasant picture, and an instructive story for future generations of students to dwell upon with gratitude. No doubt many more facts have come to light illustrating the period from the 3rd to the 12th century, and the material for history is in a much more forward condition, but that makes it only the more necessary to pay additional attention to what is still uncertain, that the whole chain of events during what is called the *historic period* of the world at least may be of sufficient strength to stand the severe tug of critical testing. From discoveries in Egypt, Greece and Assyria, which point back to a time much further off than the beginning of our era, how much light has been cast upon the ancient history of the western world! Is that far off time in India to be completely lost sight of? Bricks and tiles in Egyptian tombs have been identified as of Indian workmanship: may we not hope to find in India something corresponding in age—older than our Roman coins—older than those introduced by Alexander and his successors in the North—older than the primitive alphabets in which Indian thought whether Aryan or Dravidyan was first pictured to the eye—something left behind by those who took the tiles to Egypt sixteen or eighteen centuries before Christ? An expectant mind, and a habit of intelligent and patient observation such as is possessed by a thousand youths educated in the Colleges of South India will do more towards the detection of hidden treasures than all the labours of all the foreigners who have given themselves to these studies in India.

HENRY LITTLE.

THE INFLUENCE OF RELIGION.

We live in times of continual discovery in every direction. Scarcely a day passes that does not bring to our notice some fresh discovery, not only of unknown parts of the globe, or of new

wonders in the workings of nature, but also of many a long lost link in the history of mankind. We know more to-day than we knew yesterday and there is no doubt that we shall learn much more to-morrow. The advantages we derive from these discoveries are too numerous to be treated in a paper like this. But we may mention one instance; without Chemistry, we could know nothing of the air we breathe, the water we drink, or the food we eat, we could not understand the processes of combustion, respiration, fermentation, putrefaction, or the endless chemical changes which are continually in operation around us, and which affect our lives for good or for evil. Without the aid of these discoveries in arts, sciences and literature, the universe full of wonders would have remained, more or less, an inscrutable mystery. As the poet truly says :—

> "There are more things in heaven and earth,
> Than are dreamt of in our philosophy."

If we are able now and then to spare a few hours to glance over the valuable records collected by earnest and persevering men, we have opened to us many secrets of the ancient world, that throw light upon the dark pages of its history, and place before us vividly, not only the works, manners and customs, but the thoughts and hopes, the cravings and feelings, of the men who lived on our earth in past ages. In entering on this subject we must observe that the first divine law of nature, if we may so speak, by virtue of which *goodness* has become from the beginning the destiny of man, is applicable alike to every class, and every nation, to each individual as well as to mankind in general. In a rude as well as in a civilized state of society, in modern as well as in primitive times, we see in man a longing to find, not only the Great Spirit, but the Good Spirit, the source of all goodness. For the very germ of religion is the love of and the striving after goodness. Gifted as he is with the power of discerning between the right and the wrong, the good and the evil, man has an innate love for the good, even when he yields himself as a slave to the evil. And the truer his sense of religion is, the higher is his standard of morality, for in the highest and the truest sense, morality and religion must always go hand in hand. Religion strictly speaking does not consist in ceremonies and mythology, but it is the noble tie that binds man to man socially. We give here a definition of religion by a master-thinker of the nineteenth century,—Thomas Carlyle :—"It is well said, in every sense, that a man's religion is the chief fact with regard to him.

A man's or a nation of men's. By religion I do not mean here the church-creed which he professes, the articles of faith, which he will sign, and, in words or otherwise, assert; not this wholly, in many cases not this at all. This is not what I call religion, this profession and assertion; which is often only a profession and assertion from the out-works of the man, from the mere argumentative region of him, if even so deep as that. But the thing a man does practically believe (and this is often enough *without* asserting it even to himself, much less to others), the thing a man does practically lay to heart, and know for certain, concerning his vital relations to this mysterious universe, and his duty and destiny there, that is in all cases the primary thing for him, and creatively determines all the rest. That is his *religion*; or, it may be, his mere scepticism and *no-religion*: the manner it is in which he feels himself to be spiritually related to the unseen World or No-World; and I say, if you tell me what that is, you tell me to a very great extent what the man is, what the kind of things he will do is. Of a man or of a nation we inquire, therefore, first of all, what religion they had?" It must be admitted that religion is the root which gives life, hope, strength and stability to all the ties which connect human beings to one another in all their transactions. In short, the relations between man and woman, between kindred, between fellow citizens, between fellow countrymen, owe their force and sacredness to the uniting and binding influence of religion, and would crumble to pieces were that influence withdrawn. This truth has been ably expounded by Schlegel, in his "Philosophy of History." He remarks:—"In religion alone are to be found the remedies and the safeguards, the emancipation and consolidation, of the whole civilized world as well as of every particular state." This is admitted even by cold-hearted Comte, who claimed to be called religious, because he thought man could not do without religion.

It is worthy of remark that the true living element of religion is the longing of man in all ages and in all grades of society. This does not arise from mere reflection as advanced by Voltaire, Huxley, and Bradlaugh, but is a need implanted in our souls. This assertion is daily strengthened by the facts ascertained by modern travellers. According to some of the most trustworthy accounts recorded by travellers, many of the savage tribes discovered in Asia, Africa and America, have had an idea of some sort of religious feelings or form of worship suited to their state of society. The authentication and verification of facts like these are of great importance in an enquiry

like the present. Innumerable instances of this kind are furnished by Sir John Lubbock, in his interesting works—"Origin of Civilization" and "Pre-historic Times." It is evident from these facts, that religion in some form is a necessity to man as man.

Now in seeking to trace the influence of religion upon mankind, we shall have to scrutinize the records of the past and compare them with the present. This task requires an amount of training and leisure which few possess. Therefore we must be satisfied with the discoveries that have been made by scholars who have devoted deep attention to the study. The philological investigations of modern times added to the established truths of psychology, and the successful attempts of archæologists to decipher the hieroglyphics on the great pyramids of Egypt and various other inscriptions that are found in the ancient temples of India and China, have helped in a great measure to recover this lost leaf in the world's history. For these valuable discoveries modern scholars deserve much praise. They have brought to light the sacred writings of men who lived hundreds and thousands of years ago; and which were covered in darkness and silence less than a century ago. We have now before us a complete history of generations of men who trod our earth in past ages. We can read their lives, and compare their feelings with our own, and satisfy ourselves that a close similarity exists between ourselves and men of widely-different races and in different parts of the globe in regard to thoughts, longings, fears, conflicts, hopes and visions. Does this not prove the great question of *the unity of the human race?* We often fancy that we are entirely separate from nations whose language, colour and customs seem different from our own. But in reality without a shadow of doubt we are all of one human family. It is not less interesting to study everything that tends to draw us more closely to our kind. Surrounded as we are from infancy with a peculiar society, it is natural that we cannot all at once intermix with foreign society in its feelings and customs, though we know that we are all from a common stock. It is this which creates an imaginary gulf between one nation and another.

The virtues which constitute true family life, and true national life, are based on religious principles, and decay when those principles are disregarded. This fact has been proved by history and experience. We see in our daily life that vice and intemperance lead to misery, virtue and sobriety to happiness. This is a plain matter of fact. And we can also say that the life we now

lead, will go to form our condition in the next life. The next is expressed by the Hindu in the doctrine of the metempsychosis or the transmigration of souls. As for historical fact, we can simply state that it is the force and sacredness of religious feeling that adjusts the peace of Europe at this moment. If not for this solemn religious binding the "Magna Charta" is not worth the paper on which it is written, and the "Queen's Proclamation" of 1857 is a silly romance. The religious influence works most strongly in every direction, and it is just the same in questions of politics and legislation. The most dreary and fearful times of corruption and degradation have been times when men, though living amidst the luxuries and refinements of arts and civilization, have come to imagine all religion a lie. Such a period there was during the French Revolution. The authors of these diabolic wrongs, deliberately cast off all religion and simply wished to carry out literally the odious maxims of the Machiavelian policy. What was the result? Let Carlyle tell us:—"The miserable millions burst forth into Sansculottism, or some other sort of madness. A chaos of crime and horror, in which men and women of all ages and ranks seemed transformed into worse than wild beasts." There are many instances of this kind recorded by Gibbon in his work on the fall of the Roman Empire. He tells us that during the worst days of the Empire the influence of religion was fast declining and corruption so deeply-rooted that it was impossible to revive the Empire. It was then that Christianity had the marvellous opportunity of taking root on the Roman soil. Referring to this remarkable historical occurrence, a great historian of Europe observes, that Christianity was the electric shock which gave birth to a higher sense of religion in the nations of Europe, it infused a new life totally different from all preceding forms of existence. Thus then on the seat of idolatry and superstition and amid that world once so brilliant, Christianity grew like an Indian banian tree by the river side. Here it will not be out of place to consider why Christianity has not conquered India spiritually as it has other countries. In our opinion this is sufficiently explained by the fact that we have in India various systems of religion that satisfy the wants alike of profound philosophers and illiterate dunces. In short, we find in the system of Indian religion all that is noble and admirable in morals, while on the other hand there is much that is overlaid with superstition. It was this which baffled the powerful attempts made by many Muhammadan rulers to convert their Indian subjects to Islam, and it is this that prevents to this day the rapid spread of Christianity in India. We do not deny that Christianity has effected great improvement in the condition of this country, but we doubt very much whether it can ever become the universal religion of India. Perhaps it may be said that the last census report of India shows an increase of the Native Christian population. This cannot alter our statement, for let the reader judge for himself what percentage of enlightened Hindus have embraced Christianity and from what classes of society the converts have come.

One of the most striking facts which history presents to us of the influence of religion is the impression which one man, by his strong belief or intense zeal can produce upon thousands of his fellow-men. This we can see in the history of every religion. One single man has often been the instrument of spreading a religion which has extended over countries and continents and throughout ages of time. And the most important events concerning the progress of national religion appear to have depended on the passions of individuals and the circumstances of time. Buddhism, Christianity and Muhammadanism are known to have owed their rise to their individual reformers. Buddha, whose real name was Goutama, an Indian sage, was the source of the enormous religious movement that bears his name and is professed to this day by a large portion of mankind. Next in order of priority we mention the religious movement of Jesus of Nazareth, which has spread over half of the civilized world. The religion of Muhammad with all its faults has delivered the inhabitants of western Asia and northern Africa from spiritual degradation. There are few who would not believe that every great deliverance from mental and spiritual darkness has been the work of God, acting either directly or indirectly. By this we mean either by incarnation or by inspiration. These theories are partly or wholly admitted by the five leading religions of the world; namely, Hinduism, Buddhism, Christianity, Muhammadanism and Zoroastrianism. Further we must say that the reformers of these religions were the chosen instruments of God, and were inspired to spread light and truth among men. No form of religion which has taken a strong hold on thousands of God's creatures can have been wholly evil or false. Impure means used by false prophets have produced great results but neither the fruits of their labours nor their names have remained after them. We are of opinion that all good must come from God, and whatever truth these religions contain constitutes their living essence which is the same in all. We have not come across any religion that advocates vice and discourages

virtue. But there is one melancholy fact which history reveals, *viz.*, that the passions which religion has awakened in men have been fiercer than the rage for political power, stronger than the love of country, cruel and stubborn in opposition. Even the sacred ties of blood and family were forgotten in the presence of the spirit of religious antagonism. In the third century before Christ a violent conflict occurred in India in which Buddhism became the subject of violent attack and persecution. The history of Christianity is not free from such blemishes. We cannot help shuddering when we read the horrible accounts recorded in the history of the martyrs.

Can this subject be better closed than by a few words on those peculiar characteristics of Hinduism which have remained unchanged from pre-historic times to the present. This is due chiefly to the venerable Divine Revelation it possesses. It has in the Veda not only the attributes of the God of all nations, but also a correct and true history of the origin and development of man, beyond which no religion or philosophy has advanced in the present day. Christianity, no doubt claims a Divine Revelation of its own, and it teaches many good things, but it can teach nothing that the *Veda* has not taught before. We do not hesitate to express the opinion that any religion without a Divine Revelation for its guidance cannot last long: its position is something like a regiment without a leader, the men will go together for some time but confusion will soon break the order and every man will go his own way. Moreover, the grand defect of an eclectic system, such as Brahmoism, is that it cannot give an authoritative account of any thing either before or after the present life. Such a system of religion cannot satisfy the highest cravings in man.

Great differences there have been in races, varying as much as individuals in their ideas, thoughts, feelings and dispositions. One race may have a strong inclination to the emotional side of religion and another to the reasoning side. One race is imaginative and another is practical. One race speculates on the hidden mysteries of religion in order to discover the unknown and unknowable, and another seeks in religion only that which applies to the present life and is more absorbed in deeds than in thoughts. Putting all this aside however, when we look beneath all these differences there are traces of essential truths of religion common to all nations. For we find truths of religion embodied in Pantheism, Polytheism Deism, Theism and even in apparent Atheism. The idea of one God pervades all these systems, it is dim in one and bright in another.

We are not bold enough to say that Pantheism is entirely erroneous for the idea of the Omnipresence of God is too well expounded in it, nor can we say there is no truth in Polytheism and even in Atheism.

We find the idea of one living God, the first element of religion is almost universal among mankind. Besides this, there is a conflict in the soul of man between right and wrong and it is the same in all mankind. The sense of sin and misery and the hope of future rewards and punishments depending upon (*Karma*) the merit and demerit in this life, impel us to lead a virtuous life; a great blessing for the well-being of society. Connected with the almost universal idea of the immortality of the soul there is the highest craving in man which would not be satisfied if life were to end here. Hence arises the general belief in a future life. The mysteries of life and death, pleasure and pain, hope and fear are the same to all men. All these facts prove beyond doubt *the universal influence of religion on the world.*

Carlyle once said :—" If you tell me what a man's religion is you tell me to a great extent what the man is." The truth of this assertion we generally discover in our daily experience. We believe it is not the influence of the climate or the country that forms a man's character, but it is his religion. It is the civilizing effect of Christianity that has distinguished the nations of Europe for their broad and liberal notions and actions.

B. KRISHNA SINGH.

THE MADRAS FISHERIES BILL.

The Supplement to the *Fort St. George Gazette* of the 21st December 1883 contains the first draft of a proposed Fisheries Bill for the 'territories under the administration of the Governor of Fort St. George.' The Government has long felt the impossibility of legally realizing the revenues of its fisheries, and so long ago as July 1873 the Board of Revenue published their opinion on the subject, and indicated the principles and scope of the necessary legislation. On the 24th May 1875 the Government issued orders for the drafting of such a bill as was required, entrusting the work to the Board of Revenue 'who will consult Mr. Thomas or other competent judges if they deem it necessary.' From that date until the middle of last

year the subject seems to have been in abeyance. The Board then wisely put the whole thing into Mr. Thomas's hands, and the result is the present draft with the mass of interesting information accompanying it. In drafting the Bill, Mr. Thomas has utilized the Fisheries Acts of England and Burmah, but every section bears clear impress of his own observation and experience. When we read what confusion has already resulted from the absence of such an Act we wonder, not that the Bill is now before us, but that the Government did not have it drafted years ago. Mr. Thomas says "the Government is without legal power to restrain or regulate the capture of fish or to prevent wholesale destruction of fish by poisoning in its own rivers or reservoirs, and in the interests not only of the Government rents, but much more of the popular food-supply represented by the fish, not to mention the true interests of the fishermen themselves, it is a necessity that the Government should take power by legislation." As an example of the confusion at present existing in India on the subject, let it serve also as an example of the beautiful uncertainty of law, this case, one of many such, is quoted. The renter of the fisheries of some Government tanks in Chingleput accused certain men of stealing fish from his tanks. The case came before the third class Magistrate, and he convicted the men of theft. An appeal to the Joint Magistrate led to the reversal of the sentence for "fish being *ferœ naturæ* (wild animals) could not be the subject of theft." The accuser appealed against this decision and Mr. Price, the District Magistrate, upheld the decision of the third-class Magistrate. The accused took the case before the High Court, and there the sentences passed on them were again and finally annulled, and the Joint Magistrate's opinion upheld! Several such cases might be cited, all tending to shew how powerless Government is to protect its own interests, not to mention those of private individuals and local Boards. To protect both private and public rights then, and to prevent destruction, legislation is necessary, and the *raison d'être* of the present Bill is established.

But Mr. Thomas goes further and shews what benefits will accrue to the country from a wise administration of the Act. The present amount of "the wreck of fishery revenues" in this Presidency is only Rs. 84,119; but, as Mr. Thomas remarks, "can any good cause be shown why Indian fisheries should not equal American fisheries in value, and yield like them an annual 20 millions sterling? If any one is disposed seriously to contest the proposition, let him

start with the data that Indian seas and rivers are more fertile of fish life than those of less tropical climes, and that labour is cheaper in India than in America or England, that freights also are probably in favor of the from-India goods; and then let him compare the total sea shore and river and lake and reservoir and canal areas of all India and America ..... If America after supplying herself and England can extend her market for tinned salmon as far as China, Japan, and Australia, places that are nearer to India than America, there is no reason why India, after supplying her own millions, should not find an export trade to those and other places, as well as in the lightly freighted return ships to England; and the hilsa (*Clupea ilisha*) and the mango fish (*Polynemus paradiseus*) represent as delicate and numerous an anadromous or river-ascending article as the salmon." Mr. Thomas expects an improvement in revenue from the working of the Act similar to what has occurred in Burmah, and regards it as not impossible that the "India Fisheries shall solve the financial problem of the annual loss by exchange." To shew how the public good is affected by this measure, he appends a careful calculation of the fish-eating people of the Presidency. Out of a total population of 39,565,777 in Madras, Mysore, Travancore, and Cochin 35,903,807, or 90·7 per cent. are meat-eaters. Remarking on this subject he says "I am told there are parts of India in which the fish eating portion of the population is comparatively small, almost *nil*, and I think the general idea is that it is so in this Presidency also. But it is not. The majority are vegetarians by compulsion of circumstances, not by rule of creed. Taking the last census report and going very carefully through the castes, I find that more than 90 per cent. are of castes that may and do eat meat when they can get it." Now the real object of the Bill is for the better management of the fisheries, so as to make them "yield a greater amount of nutritious and specially cheap food to the masses, thereby to strengthen all industries in ordinary times, and to save life in times of famine."

In determining the waters to which the proposed Bill shall apply, Mr. Thomas wisely goes beyond his instructions, and the Government may well feel thankful that in this matter it has the services of a gentleman so experienced and independent as Mr. Thomas is. The Revenue Board wished that the Act should neither apply to non-perennial waters nor to waters 'outside the coast line.' Mr. Thomas makes the Bill apply to *all* fresh water fisheries, and also to the sea fisheries within twelve miles of the coast. Demonstrating

that the exclusion of non-perennial waters virtually amounted to excluding nine-tenths of the pisciculture beds of the presidency, he writes—

"To make such a wholesale proposition is to ignore the peculiarities of the East and to presume without enquiry that Indian fish similarly ignore the peculiarities of the waters of their birth. The habits of Western fish would not suit them at all, and we too must diverge from Western practice if we wish to cultivate the fish of the East. Indian fish,—I speak specially of those that have come within my own knowledge in the Madras Presidency, but I know that the description covers also a large proportion of those found in the more Northern Presidencies—Indian fish, living as they do in tropical rivers, that are alternately a flood, a moderate stream, and a dry sand bed,—accommodate themselves to the position by being much more migratory than the fish of Europe, and to allow of their being migratory their commissariat is also migratory. In England the numerous *ephemeræ* are during their larval state stationary, keeping to the water weeds, the sedges, the sand, where they were born. It is in this stationary state that they form the spring and summer food of fish more than in their ephemeral imago stage, which is very short-lived, and in which also they wander but little; the earth-worms and slugs that are washed in from the moist banks in wet weather are also stationary in their nature. In India however, though this stationary food is not wholly absent, there is a very much larger migratory element in the economy of fish food. The food of fish consists much more largely than in England of the minuter forms of fish-life, which are in far greater variety as well as in very much more minute forms than in England, so that they are of all small sizes from less in their youth than the size of full-grown mosquito larvæ upwards. For instance one little perfectly transparent fish is at most three-fourths of an inch long, tail included, and one-eighth of an inch broad and deep when at its largest growth, with the heart, airbladder, intestine and vertebra clearly visible through the skin when swimming. What must be its size soon after emerging from the egg which is like the finest pin-prick. So small is it that, though it has a comparatively large mouth well armed with canine teeth, it feeds on the minutest forms of water insect-life, occasionally aspiring to very juvenile mosquito larvæ, half-grown larvæ being too large for it. It requires to be watched through a magnifying glass, and as it has no name I will call it *Gobius pellucidus*. I propose to detailedly describe it elsewhere for science at better leisure, and by the aid of stronger magnifiers than I possess. Here I only mention it as markedly exemplifying the Indian principle of a migratory commissariat of living fish food accommodated to the migrations of tropical fish. Then as to variety, loaches alone number 31 species against the single *Nemachilus barbatulus* of England. Then there is the similar *Lepidocephalichtys* and the tiny *Haplochilus*, of which two sorts *H. panchax* and *H. melastigma* are very minute and ubiquitous, and if we go to such comparatively large fish as minnows and bleak, India has some fifty to one corresponding fish, and of varied sizes, many of them much smaller than their English congeners, and in their smallness lies their usefulness both as a food for other fish, and as being able to pass anywhere. All these are a migratory commissariat in a

perfect fidget to be moving directly the waters swell and give them opportunity. They go where the fish that man eats go, and there propagate again and again in a season. Added to these is the ubiquitous mosquito of many sorts, breeding all the year round, but breeding more at certain seasons than at others. In the least little quantity of water, in all the still margins, they hatch out in three days, and then no one can over-estimate their value as a fish food in the larval state. Fish grow and fatten on them marvellously and prefer them to anything else. They are main spring of fish-life in India, as well as clarifiers of water. So minute at first as almost to elude the closest scrutiny, in breadth the merest filaments and of less than the sixteenth of an inch in length, they are very soon large enough to make excellent food for a quarter of a pound fish, and then, if one in a hundred escapes, in three days more the water is re-peopled with larvæ. These are doubtless the chief food of the minuter fish that are to be the food of those that feed man, and these are at hand everywhere and always, and between the two—between minute forms of fish and mosquitoes—we have every possible gradation of living, travelling commissariat from an almost imperceptible filament upwards. Then the freshwater shrimps and prawns seem, as far as I have yet noticed, to be very much more numerous in sort and variety of size than in England. Added to all this, we have yet another source of fish-life in mature fish (*Ophicephaleidæ*) æstivating buried for months in the sun-baked mire of a dry tank till the floods come and release and revive them to life. We have also ova believed to be kept alive through drought in the same way. And the very vegetable kingdom follows the same law of adaptation to alternate flood and drought, the very rocks in the river, which have for months been so hot that one can scarce place the hand on them with comfort, are suddenly covered with verdure which forms food for the largely herbivorous fish and food and shelter for aquatic insect-life. The frogs also (*Rana cyanophlyctis*) which have been existing on land the while, living on the insects with which India is rife, suddenly appear in multitudes on the filling of the tanks, and, unfriendly though they are to fry, make up for it by betaking themselves from the land to be food for fishes, notably for the *Ophiocephaleidæ* and *Siluridæ*. And so at a bound, a sun-dried Indian tank, thoroughly dry though it has been for months, fed by a channel from a river or stream, or from any other of a long string of tanks so fed, and even when not so fed, leaps into life, replete with all the elements of the growth and increase of fish.

The Revenue Board of 1873 can hardly have known this when they proposed at a stroke to throw away all the non-perennial waters of Southern India. Even an ordinary English expert could scarcely be expected to know it and calculate for it; and, therefore, it is important that here in India we should not be judged in all respects by English piscicultural knowledge, nay, nor even by American, for I believe they have no frogs. But every naked Indian fisherman knows it, though he may not have thought it out in sequence; else why should they eagerly contend for the liberty of paying Rs. 2,000 a year for the annual fishery of the river and channels of the Cauvery which are thoroughly dry for four months in the year; also why should they annually pay for the liberty to net annually sun-dried tanks? A considerable portion of the fishery revenues collected by the Engineers is derived from this

source, and the practice of the natives is to postpone the fishing till just before the tank runs dry. By this means the minute fish and fry which have entered with the floods have time allowed them to grow up to the latest date available, and the most is made of them, some hundredweights of fish being taken out of a tank that has been perfectly dry within the twelvemonth."*

Mr. Thomas well maintains the right of Government to disregard the three-mile, or gun-shot distance in the case of the seas round our coast, and to extend the limit of protection to any place within twelve miles of the shore at low water-mark. Pointing out the inefficiency of the present system to prevent the pearl fishermen from fishing on their own account, he says: "If their or other interests ran counter, there is nothing in the law to prevent, or to authorize any one in preventing, an organized Company from fishing our banks and realizing Rs. 1,10,000 in a month and a half, the sum realized at the last pearl fishery in 1862." The Revenue Board was of opinion that the administration of the Act should be left to Local Fund Boards, but Mr. Thomas earnestly opposes this and points out the evils likely to ensue were this suggestion acted upon. He does indeed give the Local Fund Boards and Municipalities a share in the control, and would make the members of those Boards 'Conservators,' with the custody of the funds and the liberty "to expend the surplus not required for fisheries." But he argues that a special department is needed, as these Boards of Conservators have not the scientific capacity required for the work, and moreover are not legally eligible to become the administrators of the Act. There will need to be a special Fisheries department similar to the present Salt department. If the Bill becomes law in its present form, the presidency will be divided into six districts, in each district there will be a Superintendent, assisted by Inspectors who will take about the same status as Tahsildars, and a 'Commissioner' will be at the head of the department. "With such a department life can be thrown into its several provisions. The Local Fund Boards and Municipalities become naturally custodians of its funds and administrators of the portion not devoted to technical working; Collectors and their staff aid collections: the Magistracy and the regular village Police perform their ordinary functions supplemented in exceptional positions by water-bailiffs; and so the special Fishery department falls harmoniously into the administrative arrangements of the country."

* Explanation of the scope of the Bill, Secs. 106 and 107.

Funds to pay for the department will be forthcoming from the two sources of revenue—license and permit fees. License fees are payable by every one who fishes, in fresh or salt, in private or public waters. The rate of the fee varies with the instrument for which the license is issued,—for weir, net, or rod. Permit dues are really *rents*, and represent proprietary rights. The charges for a license will eventually be equal to those made in England, but for the present only one-fourth of these maximum taxes will be levied; while the tax on sea fishing is again only one-fifth of this reduced charge. This latter tax will be paid of course by the owner of the net and boat, generally a well-to-do man, and so the poor sea fisherman will virtually escape even the infinitesimal tax levied on sea fisheries. The Revenue Board desired that there should be 'no restriction on rod-fishing,' as in Burmah, but Mr. Thomas thinks this is not fair towards the others and a very small tax is imposed as a rod-license.

In drafting the Bill, Mr. Thomas has had very little help. Speaking of coadjutors, and referring to the advanced riparian knowledge of the English Conservators, he remarks "In India we have no such coadjutors, as I know to my cost. My labors in the past would have been very much lightened if there had been. Only among the poor illiterate naked fisherman is there any knowledge of fisheries in Southern India. Such men only have been my coadjutors. From none others can any help be expected. By all others the subject is considered beneath them." It is perhaps well that Mr. Thomas has had none but these primitive coadjutors. Many hands may make light work, but they do not always make good work. The Bill in its present form is clear, straightforward and sufficient, and if it becomes law will inaugurate one of the greatest revenue reforms of the present century. The draft Bill has been communicated to Collectors, &c., for criticism, but as Mr. Thomas has had few coadjutors we trust he will have few critics, and that legislation will not be impeded by any unnecessary delay.

J. E. EVANS.

TRUTH AND FANCY.

(It has been suggested to me that in my lines on this subject in the December Number of this Magazine, Truth has scarcely had fair play, and is entitled to an answer. I therefore venture to give the following.)

'Tis fancy tips the scene with gold,
Whilst Truth stands ever stern and cold';
This the reply in mirth and play,
The birds and flowers seemed to say;
But whilst all heedless they rejoice,
Methinks, I hear an answering voice:—
"Tis true in Fancy's colours drest
All things look bright and at their best;
But Fancy's colours bright and gay,
Are tints that last for but a day;
And those who on this promise build,
Will find its touch can only gild.
We mountains may be hoar and old,
And seem, when gazed on, stern and cold,
But when you look at our pure snow,
You look, remember, *from below!*
Too cold those hills! those peaks too wild!
You cry; and like a foolish child,
Who shuns what causes fear or dread,
You pass us by as cold and dead.
But those who care our steeps to climb,
Will tell you, not ill-spent their time;
From our high peaks, which seem so drear
They gaze on all things far and near;
Whilst you,—of littleness so fond,
See there the hills, and nought beyond,
They, seeing all things from above
Can grasp the wideness of God's love!
Truth's heights once scaled, the wond'ring eye
Takes in the grandeur of the sky,
Sees the vast firmament around,
Where worlds move on without a sound,
Then glancing downwards at the earth
Sees what your littleness is worth!

To those who care on us to live,
And seek the treasures we can give,
What hoards of wealth can we unfold,
Of silver, precious stones, and gold!
Ours the true ore, and though you sneer,
Your golden touch is but veneer!
From whom, we ask, your babling brook,
Its wealth of water lately took,
But from our snows, whose melting flow,
Sends streams of health to all below?
And whence, we ask, has come the rain
Whose touch has coloured all the plain?
To us, ye birds! to us ye flowers!
Ye owe the clouds that bring the showers!
Then cease such idle words to prate,
Or strive with us to emulate,
Call us not cold and dead and stern;
But once for all this lesson learn:
Fancy may tint and gild the scene
And paint all things in dazzling sheen,
But Fancy lives for but a day,
Its colours fade and pass away;
Fleeting the joys and hopes of youth,
But lasting is the Gold of Truth!"

J. D. B. GRIBBLE.

THE LORELEI.

From the German of Heinrich Heine.

I cannot tell what it presages
That I so sad should be,
A legend of bygone ages
It ever recurreth to me.

The air is cool, dark it groweth,
And softly floweth the Rhine,
The peak of the mountain gloweth
In evening's slant sunshine.

See yon fair maid reclining,
So wondrous, over there,
Her golden jewels shining,
She combs her golden hair.

With a golden comb is she combing,
She singeth her song the while,
Of wondrous power, in the gloaming,
A melody of guile.

In his boat is the rower and o'er him
Is thrown that weird music's snare;
He sees not the reefs before him
He looks but up over there.

Still, still in his ears 'tis ringing
As o'er him the wild waves run;
And this with her fatal singing,
The Lorelei hath done.

M. R. Weld.

LITERARY NOTICES.

The Philosophy of Prayer, *and* Principles of Christian Service, *with other papers. By* Henry Robert Reynolds, D.D. *London: the Religious Tract Society.*

This book is made up of a number of fugitive papers, probably prepared for the periodical press. In itself each is fairly good and interesting, but there is no organic connection between them. The paper on 'the Philosophy of Prayer' is evidently the one for the sake of which the others have seen the light, yet it is by no means the best in the book. It is a distinctly popular treatise on a subject requiring somewhat technical treatment. The style is eloquent, too eloquent in fact, and calls up before the mind all too vividly the preacher and the pulpit. The paper is divided into four parts, the first of which deals very sensibly with what may be called the subjective usefulness of prayer. Men who differ in everything else agree in this that prayer is good for a man's soul, so good that even the atheist should try to find a substitute for it. Professor Reynolds argues from the suitability of prayer to man's nature that there must be an objective reality corresponding thereto.

"Otherwise, the whole human race has a lie enshrined in its inmost heart; and this lie perpetually emerges age after age, generation after generation, in the child and the philosopher, in the heathen and in the Christian. If it be so, the most noble are the most deceived; those who have risen highest, and

who have to the largest extent blessed their fellow men have been the most entirely baffled and deluded; while on the other hand, the sensualist, the barbarian with the fewest ideas, the imbecile who is most like the brute that perisheth, has made in a matter that is fundamental to happiness, honour, usefulness, the nearest approach to the truth of things. Such a conclusion—one which is perfectly demonstrable—would be an utter anomaly in the universe of beauty, order and aspiration in which we dwell."

The attempt to reconcile the possibility of prayer with the reign of absolute law is that to which our readers will naturally turn with most interest. Professor Reynolds wisely abstains from any effort to do so on the supposition that the relation of God to the universe is merely mechanical. He accepts the immanence of the Divine in nature, and recognizes the laws of nature as the modes of the Divine activity, changeless and unalterable only because the expression of a perfect will. Any bending of that will from the right line of its own purpose is impossible, and the grand subjective use of prayer is to bring this home to the devout soul. But Professor Reynolds sees nothing improbable in the determination of the Divine activity to a given point, the point indicated by believing prayer, while all the processes of the Divine economy go on as before. He works out in detail an analogy between the animal economy in man, and the economy of the universe. Much of the movement of the human body is automatic, but its automatism makes it none the less dependent on the cerebral centres. So the human soul may discharge many of its functions without consciousness of personal relation to the Supreme, yet its relation to the Supreme is none the less essential. The forces of nature are gifted by God with a certain relative independence, but they are none the less an expression of the Divine will. A local injury such as a wound sends instant communication to the cerebral centre in the shape of conscious pain. Other nerves of sympathy and motion are at once brought into operation to repair the loss and remove the pain. No law of nature is broken or suspended, but there is a distinct determination of reconstructive power to the injured part. So is it in prayer. All the processes of nature go calmly on, but the cry of prayer is the signal for a determination of Divine energy towards the suppliant. He is but a fragment of the universal framework, but this very fact is an assurance that he will not be overlooked in his time of need.

There is a fine essay on the 'Mission of Apollos' in the series of discourses, entitled 'The Principles of Christian Service.' The wit and wisdom of the paper headed 'Religious Ennui' will be recognized by all who are familiar with Western religious life. The only other chapter we would notice, is 'What Christianity has survived.' If only the fittest survive in the fierce struggle for existence then Christianity must be pre-eminently *the* religion of humanity, for it has survived more terrible disadvantages than any other. Its founder died discredited, and it gained expansive force from his death. Its cradle and home in the Jewish community was rooted up and destroyed, but the religion of Jesus showed itself fit to bear transplanting into all lands. The thought of antiquity rose against it and tried to laugh it down; ancient infidels, like those of modern times, borrowed its doctrines and set up fine ecclecticisms in its place, suited to 'advanced' intelligence; heretics disfigured and distorted its simplicity by heathenish admixtures. All these things it survived. Persecution did its utmost and failed, for the blood of the martyrs was the

seed of the Church. The Christian community lost its ancient loving spirit, and was rent with controversy Yet Christianity went on. The fall of the Roman Empire, the rise of new kingdoms, the terrific onslaught of Islam all failed to destroy it. Nay more, the very organization of Christianity fell to pieces. It was apparently discredited beyond hope of recovery by the vices of its professors. By all rules of life it should have died, and yet it lives. Amid the flood of changing opinions, while men's thoughts of heaven and earth have been revolutionized, Christianity has sat still, and waited for the nations to hear her voice. The religion that has stood unmoved while the Copernican Astronomy superseded the Ptolemaic, while the human mind has sunk from activity to lethargy, and awakened from sleep to wakefulness, that has seen unmoved the mightiest discoveries of physical science, is not likely to be displaced or disquieted by anything that can happen in the future.

REPORT ON THE ADMINISTRATION OF THE METEOROLOGICAL DEPARTMENT OF THE GOVERNMENT OF INDIA *in* 1882-83.

ADMINISTRATION REPORT OF THE METEOROLOGICAL REPORTER TO THE GOVERNMENT OF MADRAS, *for the year* 1882-83. *Madras, Lawrence Asylum Press.*

The first of these two Reports contains an unusual amount of interesting information, and indicates a steady and very marked progress in almost all branches of the work. One subject which can be taken up with special advantage by Indian meteorologists is that of solar radiation and its relation to the state of the sun's surface and to terrestrial meteorological phenomena. It is a subject however of great difficulty and most of the methods hitherto employed in its investigation have proved more or less unsatisfactory. The ordinary observations with a black bulb thermometer *in vacuo* are, as is well known, of little use in any discussion of the true radiation from the sun; and different thermometers set up side by side give such different results that even for comparative work they are of doubtful value. Under certain circumstances it seems to be possible to get good results by using a thermo-pile, but as far as we are aware this has never been tried in India. The Actinometer invented by Professor Balfour Stewart gives fairly trustworthy results, and observations were carried on with this instrument at the Alipore Observatory from 1880 to 1883. It has been found however, that the atmosphere of Calcutta is ill adapted to such work, and it has accordingly been resolved to establish an actinometric station at Leh, in Western Thibet, where the climate is particularly suitable. From April to October clouds are almost unknown. The air is perfectly dry and free from moisture and the rainfall averages only about two inches. A trained observer has been obtained for this station, and though some delay has taken place in getting the work begun, the time has been well employed by the observer in going through an additional special course of instruction under the care of Mr. Hennessey, Deputy Superintendent of the Survey of India.

Another subject of some importance which Mr. Blanford has studied, apparently with great success, is the connection between the snow-fall on the Himalayas and the monsoon rainfall. There can be no doubt of the sufficiency of the cause to produce a great effect for—

"When we consider how great is the contrast in the behaviour of a snow sheet, and a bare rock surface, and how differently they affect the superincumbent atmosphere, when equally exposed to the ardent radiation of a sub-tropical sun; and when, therewith, we note the fact that on the Northern limits of India, there is an area many thousands of square miles in extent, around the permanent *Nevée* and glaciers which alternates between those two conditions, accordingly as the Winter and Spring snowfall is copious or scanty, the idea that these differences must exert a potent influence on the meteorology of the plains is sufficiently obvious."

This connection was first brought prominently forward in reviewing the meteorology of the Madras famine, and subsequent experience has fully confirmed the view then expressed. In the Report before us the question is discussed at some length and the steps that ought to be taken for acquiring fuller knowledge on the subject are pointed out. A part of last year's work which will be of very general interest was the preparation of a chart of the average rainfall of India, which will be published on a scale of 64 miles to the inch. It will show the rainfall at 985 places and will be coloured in eight different tints representing the distribution of the rainfall over different areas.

The addition of Mr. Dallas to the meteorological staff as Scientific assistant has enabled the office to take up the systematic reduction of the observations made during the last 20 years, observations which if fully discussed should throw much light on many important questions. There is a great tendency amongst meteorologists to go on accumulating statistics without attempting to deduce from them anything but the most obvious conclusions, and it is certainly a great matter that the Meteorological Department is now working up these accumulated results and producing papers of such value as the recently published memoirs. Attempts are also being made by Mr. Eliot to obtain reliable information regarding the meteorology of the Bay of Bengal. The necessary data are obtained from observations made on board the light ships off the mouth of the Hooghly and from extracts from the log-books of vessels arriving at the Sandheads. The data thus obtained may not in all cases be very accurate, but they are the best obtainable, and in many cases are found to be of real value. As a preliminary result Mr. Eliot finds that these extracts clearly indicate the truth of what he had previously surmised, *viz.*, that "the weather in the whole extent of the bay (excluding the Andaman sea) is fairly indicated by the observations taken at the Coast stations, and that the progress of every important storm may be traced and followed, with more or less exactness, almost from its origin, from the shore observations.' We have no space to review in detail the reports for the various provinces which appear as appendices, we would only say that they show the result of much good work.

The Madras Report, owing to a temporary reduction in the Office Staff which made it impossible for the Reporter to prepare it in time, is not included in the General Report of the Meteorological Department. It shows that steady progress is being made in bringing the work into a satisfactory state. There are at present sixteen stations at which Meteorological registers are maintained, which is one more than last year, a new third class observatory having been opened at Kurnool. At the twelve first class observatories, observations

are taken three times a day, at 10 A.M. 4 P.M. and 10 P.M; while at the third class observatories the 10 P.M. series is omitted. Great care is evidently taken in having all the instruments properly tested and compared with standard instruments before they are issued. This is a point of very great importance for whole volumes of observations are to be found which are of almost no value on account of this precaution not having been taken. In this connection we are glad to see it noted that the Government Astronomer, who still has charge of the rainfall returns from all except meteorological stations, refuses to accept those made at stations furnished with untested rain-gauges.

We have often been surprised that there is no meteorological observatory at Ootacamund, for we cannot but think that observations made there would be of great value both for scientific and for purely practical purposes. The want of accurate meteorological information is so strongly felt by Professor Lawson that he is urging upon the Government the necessity of having an observatory erected in or near the Gardens at the earliest possible date.

There is another subject which we should like to see taken up by the Meteorological Reporter, namely the temperature of the ground at different depths as indicated by earth thermometers. Such observations seem to us to be most valuable as a means of integrating the effects of solar heat during long periods; and we know of few places where they could be so well carried on as in Madras where they would be made by an observer trained in that most accurate of all schools, an astronomical observatory. We fear however that the Government of India is not likely to spend on Madras the money required to do this well, and unless it is done well it is far better to leave it alone. A change which has been made at a number of the stations during the year is a decided improvement:—

"The thermometers previously exposed on an open board were placed in a wire gauze cage, protecting them more effectually from breakage and also securing two other important advantages. The proximity of the dry and wet bulb thermometers as hitherto generally arranged, encased in a box and barely three inches apart, must have prevented the free escape of vapour from the wet bulb water glass, thereby causing the dry bulb to read too low and giving a resulting excessive humidity, which is effectually obviated when they are widely separated, besides preventing birds, lizards and frogs from quenching their thirst at the expense of the two wet bulb thermometers. . . . . The bulbs of the dry and wet thermometers in the cages are about four feet from the ground and eighteen inches apart."

VEDANTISM; *A Lecture by* BABU DVIJADAS DATTA, M.A.; *Edited by* D. C. GHOSH. *Calcutta: S. K. Lahiri & Co.*, 1883.

This short lecture is both an exposition and an apology. The author is evidently a sincere and well read Vedántist, who, feeling the difficulties and logical contradictions that beset all cosmology, finds the only consistent theory to be that which makes Brahma 'the only real.' That a thorough-going pantheism escapes many of the difficulties that beset other systems of philosophy may readily be granted, and that a modification of the theories of Vyása—a pantheism to the extent at least of making the universe the realization of the Divine thought—needs more than anything else to be asserted at

the present day is undoubtedly true; but that Vedántism, even in its purest form, is a satisfying solution of the great problems of creation and life, that it presents no difficulties and involves no contradictions, even our author would hardly assert. The one great obstacle which it has to overcome is human consciousness, which it contradicts more directly and flatly than any other system has ever done. Its disciples are driven in hopeless despair to take refuge in a doctrine of *maya*, and so in effect it solves the problem of existence by denying it.

It is well, however, that the various Hindu systems should be studied and expounded by those who hold them. That such efforts as the one made in the lecture before us are needed is manifested by the almost hopeless ignorance of Hindu Philosophy that exists amongst the vast majority of Hindus themselves, as shown by the utterances of their press. Mr. Dvijadás Datta is evidently a man of considerable culture and power, as well as of logical acumen, and yet there are passages in his lecture which it would be easy for even a tyro in philosophy to pull to pieces. Here is one—the first paragraph under the heading "God the first First Cause":—

"Water heated is the cause of steam. If the heat and the water are abstracted from steam, steam as a substance ceases to be. Thus the substance of the effect is not different from that of its cause. God is universally admitted to be the sole cause of things, nor therefore are things different from God. Again, if all interfering causes are removed, whenever water is given, and the necessary degree of heat applied, steam will follow. Steam has an effect therefore exists in an undeveloped state in heated water, its cause. Since no interfering causes are known in respect of God, the universe, with all its sins and miseries, must have existed latent in Him. On the other hand steam will not be produced from heating an iron ball; nothing then can come in the effect that does not exist latent in the cause, so that there is nothing in life that was not previously in God."

This is how he makes free will—the greatest difficulty the Vedántist has to encounter—bear witness to 'Unism':—

"A full discussion here of the subject of Free Will, would give the lecture an improper length. But it will be well here to sum up the argument in favour of Unism from Free Will. (I) We have the consciousness that we ourselves, and nothing outside us, determine our wills, and what we are conscious of we must beleive to be true. (II) The constitution of the Ego, the law of Universal Causation, the control of the motives and ideas of acts over the will, and Divine Fore-knowledge and Perfection, all establish that our wills are determined by God. How to reconcile these contradictory truths? The dualist can only do it either by becoming a necessitarian and calling the consciousness 'an illusion' with Spencer; or with the extreme free-willists cloaking the contradiction under the name of mystery; or by taking shelter under Kant's "antinomies of cosmology", and laughing at the inconsistences of Pure Reason. But with the Unist, admit that the Divine Soul is also the human soul,—that one soul embraces all being—and all difficulties are at an end. Man or beast we feel voluntary, because we are no other than God Himself, divided by a sense of self. For each *ego*, the agent, or He who determines, is also the sufferer or He who is determined. *Free will* merges itself into *determination*, and *determination* into *free will*. It is alike true (I) that we ourselves, and nothing outside us, determine our wills, and (II) that our wills are determined by God."

The conclusion of the whole argument is that the Dualist "exceeds the very limits of blasphemy" by denying first the power, then the perfection and lastly the justice and goodness of God! A strange conclusion truly for one who also teaches—and must teach that the very perfection of perfections is power to be

imperfect. And still stranger is it that such a conclusion should be arrived at by one who in his preface could write the following true and beautiful words—words which involve dualism if any could:—

"All true knowledge of God must be by direct consciousness or Revelation. All who speak of God only negatively as the Unknown and Unknowable, transcend the just limits of philosophizing, and, as it were, shut up the doors and windows of their houses to prove that the sun is never seen.....
But when God manifests Himself in the soul, and sends voices that bear their own evidence of a Divine genesis, He is seen and heard,—seen till the joyous Presence overflows the small vessel of our hearts,—till even we can wish to see and hear no more."

THE DISADVANTAGES OF DEBATING SOCIETIES. *By the Rev.* W. MILLER, M.A., *Madras: Memorial Press.* 1883.

From the announcement of this pamphlet we gather that it was an Inaugural Lecture to the Madras Debating Society, but there is nothing whatever to show this either on the cover or elsewhere. The lecture is published without preface or heading of any kind. We presume, however, that it is issued by the Society before which it was delivered, and, as it is perhaps a first attempt at publication, such omissions may be pardoned. The proof reader too has evidently grown a little weary of his task before he got to the end of it, for while the first few pages present no more than the average allowance of typographical errors, the concluding paragraphs are full of them. The Secretary of the Society—if he is the responsible person—needs to learn that it is not safe to leave either spelling or punctuation to compositors.

Those who object to Debating Societies and turn to this lecture to have their objections increased or confirmed will be disappointed. So far from disapproving of Debating Societies amongst students Mr. Miller holds that they constitute one of the most important auxiliaries of College work, and that those who discourage them would deprive students of "an essential part of a true liberal education." Four objections to such Societies are indeed dwelt upon, but it is for the purpose of showing how little weight is to be attached to them, and how enormously the good done outweighs the evil. College Debating Societies have been charged (1) with leading students to make use of the thoughts of others rather to think for themselves; (2) with begetting overweening self-esteem in their members; (3) with inducing the evil habit of "forming opinions and sticking to them on absurdly insufficient grounds"; and (4) with drawing away the attention of students from their regular college work. Of these four objections the only one of any moment is the third. It points out a real danger, but a danger, says the lecturer, "that it is absolutely necessary to run."

"The Debating Society does much for you if it teaches you to form opinions and to stick to them at all. To form them on right grounds and in a right spirit, is a further lesson that it may teach; but to form opinions that you are ready to stand up for is a lesson that it can hardly but teach.....

"Many of you, Gentlemen, had occasion not long ago to think of the excellent maxim which Bacon has built on the foundation of Aristotle—*oportet docentem credere, oportet edoctum judicare.* "It is the duty of the learner to believe, but of him who is learned to judge." You Gentlemen, or most of you, are in the condition of learners still. But I think that attention is directed

too exclusively to that fact by those who bring forward the objection I am dealing with. Since you are still expressly learners they think that it is premature to call on you to judge. Now it is true that being learners you have the believing, the receiving, what is taught you, as your main duty still. But you will have to judge some day. You cannot live a useful, a noble or an honoured life without having opinions of you own which you dare to hold, and dare to act on, whatever be the weight of authority against you. There is no dispute as to that among those who deserve respect from us at all. Now those who object on the present ground to Debating Societies appear to think that you can pass at a leap from the position of believing learners to the position of those who are learned and can judge. Apparently they would have you believe and receive unquestioningly up to the time when you take your degree, or enter on employment, or up to some other definite fixed point, and would have you then begin to judge, that is to form your own opinions. Such a theory may suit worlds of which we know nothing; but it does not suit the plan of this world as it has been fashioned by its great Creator. Definite fixed points, definite lines of demarcation do not exist in any sphere—physical, mental or moral. Men are always craving for them, but God does not choose that they should have them. Light is light and darkness darkness; but in actual fact the one always merges in the other. No one can draw a sharp fixed line between them as they are actually found in nature. Your tropic night comes sharply down. Compared with the evening twilight that "broods above the fallen sun and dwells in heaven half the night" of my far northern clime, it seems as if day passed into night with dreadful suddenness. Some of you perhaps can call to mind how the poet of Scotland says of the sun of India that

> "No pale gradations quench his ray
> No twilight dews his wrath allay:
> With disc like battle target red,
> He rushes to his burning bed,
> Dyes the wide wave with bloody light
> Then sinks at once—and all is night."

But however fitting this may be in poetry it is not literally true in fact. Here as elsewhere day melts by insensible gradation into night. Slowly, though faster perhaps than elsewhere, the garish glare diminishes. Slowly the splendours fade upon the west. There is no moment when any one can say "here day has ended and night begun." And so too the light returns. It is with slow and stately step that the "morn, in russet mantle clad, walks over the dew of the eastward hills." So too it is in all transitions that we know of. Their beginnings are hidden. Their progress is obscure. It is only when many an essential step has been quietly taken that the true meaning of what is going on grows clear. Most true it is of all spheres, what has been said so tersely of the highest sphere:—"The Kingdom of God cometh not with observation." So it is in this matter of the transition from the state of being a learner to the state of having learned—from the mental attitude of believing to the mental attitude of judging. If really made at all it must be made slowly, gradually, imperceptibly. The child when he enters school may have nothing to do but to believe; but if the young man at college has not at least begun to judge his case is well nigh hopeless. Now our modern western forms of education give no tangible opportunity for formulating and defending his own views to one who however advanced is still avowedly a student. In the Debating Society alone he has encouragement to form any views of his own and a chance of standing up for them. He must have begun to do that before he passes into the sphere of action else he is attempting what is as unnatural, as much opposed to the whole general principles of divine government in this world, as we should all feel it to be if day began by the noonday sun blazing from the midst of blank darkness, or if night came on with the suddenness of the turning off of a gas lamp. There is danger then—real danger—of men being led at Debating Societies to judge prematurely and to judge erroneously but it is a danger that may be largely shunned, and it is a danger that must be run if men are ever to learn to judge at all."

THE MIRROR, *A Discourse in Verse addressed to Indian Reformers and the educated Natives of India generally. In four parts. By* DIOGENES. *Madras: Foster and Co.* 1883.

This 'discourse,' which consists of about 1200 lines of blank verse, is intended, so the author tells us, to give the public "a true and panoramic view of the progress of Religious and Social Reforms, among the Hindoos, with their various efforts as they are at the present day, to Reform themselves." Who this new Cynic may be we have no idea, but from internal evidence he seems to be a Native Christian. We therefore regret the more that he has wasted his time in writing and publishing what is neither poetry nor English, for surely there is better work than this for the small Christian community of India to do, and especially for those who like 'Diogenes' have their eyes wide open to the evils rampant around them. As a specimen of his verse—quite up to the average of the 'poem,' if not above it,—we may quote the following:—

"You've got some wrongs redress'd, you all can now,
Display your talents in that Government,
Though but a local soon will test your strength,
If you with Justice can such powers wield.
You've long been trusted with important posts
And hourly watched by eyes distrustful still,
In Presidency towns; self-government you've got,
And now extended jurisdiction claim,
Throughout the length and breadth of India's plains;
While inch by inch, you still determined are
To fight for pow'r, until you've e'en attained,
Perhaps the Viceroyship too, of your conquered land."

The author tells us that he has adopted this method of expressing his thoughts "with the view that the mind will be enabled to grasp at the main facts, without producing a weariness while perusing the work." We fear this hope will hardly be realized.

In the introduction Diogenes tell us that "education with a view to improve the Natives of India, is all a delusion; because, they are an intellectual people, and have a literature of their own." On Theosophy he is very severe:—

"Every reflecting mind, will thus at a glance note, that in all the blustering for true reforms, no bright prospects loom at all for India, in the future, under existing circumstances, which will raise the Indians to a better state of life; but the greatest of Reforms, that will tend permanently to retard the progress of India, is the doctrine of Theosophy; lately introduced, and revived, by those learned Foreigners; Colonel Olcott, and Madame Blavatsky;—they not only preach Theosophy, in combination with the Universal Brotherhood; but preach a movement in religion, quite retrogressive in its nature; which, if followed out, will bind the Hindoos for ever to the same degraded condition, they have existed in for ages gone; this consists in flattering their conceits, by stating, that the ancient religious institutions of the world, with such the Hindoos too, are the most truthful, and Scientific; consequently far superior to Christianity; in which there is no foundation at all for Scientific truths."

We are sorry that there is no single passage in the book that we can quote with unqualified approval. Here and there are no doubt shrewd and perhaps even wise remarks, but these are overlaid with such an amount of rubbish that they are not worth searching for. Part II is perhaps by this time ready for the press. We advise the author to withhold it. His aim we are sure is to do good, but he has chosen an unfortunate way of attempting it. Such publications, altogether apart from the literary demerits which are the most conspicuous feature of the one before us, are not likely to be read by those for whom they are intended, and if read any amount of good they might do would be utterly out of proportion to the labour and expense of their production. The author would therefore do well to turn his attention to some less ambitious method of reaching and influencing his fellow countrymen.

THE ASYLUM PRESS ALMANAC, 1884.

THE ASYLUM PRESS POCKET ALMANAC AND GENERAL DIRECTORY, 1884.

THE ASYLUM PRESS SHEET ALMANAC, 1884.

We have to acknowledge the receipt of these very useful publications. The large Almanac begins with a well-written retrospect of the past year, 61 closely printed pages in length. Then comes the Almanac proper extending to 924 pp., and appendices and indices follow of 54 pp. The whole thus forms a massive volume of 1039 pp., and contains an amount of information that could hardly have been compressed into less compass. The matter is judiciously chosen and well arranged, and the printing and general get-up are excellent. The whole reflects the greatest credit on Mr. Moore, the compiler, and the staff of the Asylum Press.

The Pocket Almanac contains a Calendar, pages for engagements, cash account and memoranda ruled for five days to a page, and printed in different colours to facilitate reference. Then follow 246 pp. of useful information including postal, money order and telegraph rules; the various Government Departments; exchange, interest and wage tables, and a very complete list of residents in Madras. It is substantially bound in a leather pocketed case.

The Sheet Almanac is intended for the office wall and presents just those items of information which are most frequently wanted in office work.

NOTES AND EXTRACTS.

The anniversary of the Theosophical Society in Pacheappa's Hall on the 28th December was an imposing assembly. An enthusiastic crowd filled the Hall, around which were ranged the shields of the various branches. The platform presented a most picturesque appearance, being crowded with delegates from all parts of India, each dressed in the costume of his race. Colonel Olcott and Madame Blavatski occupied the place of honour in the centre, and were supported by distinguished members of the Society, both Native and European. As the delegates one by one answered to their names, and delivered their greeting to the Theosophists assembled, one could not help being struck with the vast dimensions which the organization has assumed. While men have been too busy to heed such matters, India has been covered over with a network of enthusiastic societies, all professing to have found in Theosophy what they were looking for, and what they could find nowhere else. This is a phenomenon well worth study, to say the very least.

We have never joined in the furious denunciations of Colonel Olcott and all his works which have been common in certain circles, and although we have been subjected to some misunderstanding by our refusal to do so, we do not intend to begin now. At the same time we embrace the present opportunity of stating our real attitude towards this movement, and offering a few temperate criticisms of the words and deeds of its promoters. In so far as the Theosophists are moving for a deeper and more earnest study of Hindu religion and philosophy, we wish them God-speed. The founding and, above all, the sustaining permanently of Sanskrit schools, is a good and noble work, which Hindu gentlemen ought to have attended to long ago. Anything that tends to spread an intelligent knowledge of Hinduism should be welcomed by the Christian advocate. Such an extension of knowledge is certain to produce the most wholesome results, though it may be doubted if they are likely to be such as Colonel Olcott expects. In the present state of knowledge regarding Hinduism, that system cannot be attacked, for not one in a hundred of our educated men have any notion of what it is. Whatever tends to make the attachment of Hindus to their religion intelligent, admirably serves the purpose of those who desire to displace Hinduism by another faith.

The belief of the Theosophists that ancient Hindu philosophy had penetrated the mystery of existence, and disclosed the secret of man's perfect mastery over nature, is one that is not likely to stand the test of experience. This is our opinion because we believe that the path of humanity has been a path of progress, and that the knowledge of the present, imperfect as it will be seen to be in the light of the future, is still very much superior on the whole to that of the past. Colonel Olcott may gain a cheap and temporary success by following the obscurantist *rôle* and exalting the past at the expense of the present, but there is a sure, and by no means distant day of reckoning for all such successes. After all the human race loves righteous judgment, and tries the tree by its fruits. Neither the past achievements, nor the present position of those systems to which Theosophy looks with hope are encouraging. An ardent faith like that of the President-founder can make the things that are not as though they were, but the ordinary run of mortals have little confidence in a bridge of air. But by all means let it be tried.

Theosophy however is more than a movement for the resuscitation of Sanskrit study and a return to ancient science. It claims to be the grand solvent of differences in race and religion, the unifying force that is destined to bind the nations together in brotherly love. No more testing field for its energies in this respect could possibly be found than the India of to-day. It is a country, but not a nation. Language and religion, and the physical barriers to intercourse between province and province divide its inhabitants among themselves more completely than the English channel cuts off England from France. The great religious system which enmeshes nearly 200 millions of its population, is not more a bond of union than a source of disintegration. Modern Hinduism, by its system of caste, sets class against class by creating fictitious class interests under the sanction of religion. The Brahman, supreme in intellectual power as in priestly sanctity, is regarded with as much jealousy by other Hindus as the foreigner. The various castes and sects of Sudras, without any intelligible principle of division, are nevertheless cut off from each

other almost as completely as they are from the Brahmans. Innumerable divisions and sub-divisions of the Hindu people maintain a separate existence side by side, in what is nothing short of an armed neutrality. If ever there was a country that needed a healer, it is India. Is Theosophy likely to be that healer? The speakers in Pacheappa's Hall seemed scarcely to be aware of the breaches. A very young gentleman from Glasgow, whose inexperience may perhaps excuse his words, referred to caste as a blessing of which Hindus were being deprived, but which Theosophy intends to secure for them. Those who know India best, know how insurmountable an obstacle caste has ever been to progress and enlightenment, how fruitful a source of class hatred and injustice, and how utterly futile any attempt at promoting union must be which panders to this hateful superstition. No man can abolish caste. Missionaries have tried, and too often tried in vain, to eradicate it from the little flocks of Hindu Christians that they have been able to gather around them. But it is vain for any body of men to call themselves reformers and promoters of universal brotherhood, while lending their countenance to a system which is founded on a direct denial of brotherhood. There are passages in Colonel Olcott's lectures which are utterly irreconcileable with this cardinal tenet in Theosophy. When he speaks with approval of the care with which holy men have to guard against the impure emanations that are continually being given forth by men of lower caste, he makes universal brotherhood a mockery.

Universal Brotherhood, the ennobling doctrines of ancient philosophy and so forth, are splendid generalities, and a skilful orator like Col. Olcott can keep the public amused with them for a time. Sir Madhava Row strikes the weak point in Theosophy when he hints that these generalities have to be reduced to practice, and that details will test the power of the movement. The formation of branches, and the delivery of lectures are much, but they are not everything. Colonel Olcott is in danger of over estimating their importance. Ardent youths stand up on a platform and tell us that they have been ennobled and elevated, that they have found the grand desideratum of the age, and that Colonel Olcott is the saviour of Hindu Society. But the proof of all this is yet to come, and words in such matters go for little. The forces have fallen into line, and a goodly company they are; the commander has given the word, but so far as we can see, the whole body is as yet engaged in the healthy, but otherwise profitless exercise of 'marking time'. No matter whether that exercise is performed by one or by twenty millions, the result is the same as far as real progress is concerned.

Colonel Olcott is astonished that Christians should regard the Theosophical Society with such disapproval. We also are astonished at the weak and unchristian ways in which some of our friends express their disapproval, but we are not astonished at the thing itself. We should be quite as much opposed to Colonel Olcott as we are now, if he and his friends really did what they profess to do, viz., treated Christianity as they do any of the other great religions of the world. But they do not, and they must be perfectly aware of the fact. Our Hindu readers know very well that if the Theosophists did so, half their charm would be gone for them. One powerful attraction towards Theosophy is undoubtedly that it has ranged itself as the opponent of Christianity, and that Colonel Olcott has distinguished himself on many occasions

by the vehemence and bitterness of his attacks upon it. Doubtless the Colonel has his reasons for this, and perhaps the unchristian way in which he himself has been attacked may have something to do with it. But his mode of retaliation is not very wise. At Pacheappa's the other evening, one young delegate from the far North declared that he and his friends had been saved by Colonel Olcott and Theosophy from the depths of Western Materialism. It gladdened us much to hear it, but why should the Theosophists destroy the work of their own hands by becoming a propaganda for the diffusion of Western Materialism in its most profoundly anti-religious phase? The Free-thought publications for which Madame Blavatski, as Editor of the *Theosophist* stands sponsor are most of them grossly materialistic, and deny the truths of Christianity on principles subversive of all religion whatsoever and even of common morality. Any stick will do to beat a dog, and it certainly seems as though Madame Blavatski were more anxious to damage Christianity than to promote Theosophy. For highly spiritual, religious-minded persons, devoutly seeking the divine mystery underlying all things, our Theosophical friends keep very undevout and unspiritual company.

In the course of his oration Colonel Olcott made allusion to the University authorities in a manner that was anything but complimentary. It seems that the Madras Branch of the Theosophical Society had applied to the Syndicate for the use of the Senate House, to be the scene of their great festival, and that the Syndicate had refused. At this refusal Colonel Olcott, in the name of the Hindu public, waxed very indignant, claiming to be the heir of the Tirupatty temple, from the funds of which, he says, the Senate House was built. If Colonel Olcott be a Hindu, he should say so, and Hindu Society will consider whether he is its representative or not. If he be a Buddhist, as one would seem to be justified in believing, then what right has he to speak on behalf of that Brahmanical Hinduism which, in bygone times, extirpated Buddhism from the Indian continent? There is no reason to doubt that Brahmanism is equal to the same task now, and would make short work of Colonel Olcott and Theosophy, if they were found, like ancient Buddhism, to effect real changes and reforms.

The letters addressed to the Theosophical Society of India by the London and Paris Branches, as published in the *Theosophist* for January, would seem to show that there are others besides ourselves to whom Theosophical habits of controversy are distasteful. The anti-Christian virus of which we complain is detected by Theosophists themselves, so that Colonel Olcott must now begin to see that after all there is something very objectionable in his way of putting things. The fact is that what is generally known as good taste has not much influence over the Colonel, and the flashy claptrap of the secularistic lecture-room has too many echoes in his utterances. Madame Blavatski ought to take to heart the earnest words of Dr. A. Kingsford regarding the literary company which she keeps. This lady professes thorough-going adherence to Theosophy. She wages war to the knife with orthodox Christianity, and therefore with ourselves. But she is a genuine anti-materialist, and does not

approve of rescuing men from the 'depths of Western Materialism' by the dissemination of Tom Paine's *Age of Reason* and Colonel Ingersoll's orations. Therefore she says.

"It is because I earnestly desire to rescue the divine and lovely teachings of Christianity from the abyss of authropomorphism, idolatry and contempt, that I have deprecated with fervour the apparent endorsement given by the *Theosophist* to the coarse and ignorant ribaldry with which these teachings are befouled by such writers as the authors of certain anti-Christian literature. [Surely this is an emendation of the editor, and not the exact form of expression used by Dr. Kingsford. One who is so admirable a mistress of style is not likely to be guilty of such a lame sentence. Could tenderness to certain susceptibilities have suggested severe editing?] These men are materialists of the grossest type, and their indecent onslaught on Christian faith and doctrine are wholly devoid of intelligence and learning. * * * * But it is inconsistent with the whole end and aim of Theosophy—the science of the Divine—that it should lend its countenance to the desecration of Divine things, and to the dissemination of shallow witticisms and flippant suggestions bordering on the obscene. Many of the men who perpetrate these attacks on the Christian mysteries are upholders of the worst cruelties of materialism; the special organ of their school advocates vivisection and Malthusianism, and pleads the lowest utilities and the most sensual enjoyments as a sufficient vindication of practices, alike repugnant to justice, to morality, and to the highest interests of the race. Surely our Society would wish its fair fame cleared of the suspicion of approving such views of man's destiny and place in Nature as these teachings imply."

These are true words, and we invite the Theosophists to note them. But we do not think that it will be possible for the Theosophists of Madras to comply with Dr. Kingsford's request. To the vast majority of the Indian public, violent attacks upon Christianity are *the* attractive feature in Theosophy. Colonel Olcott is known to them not as 'the interpreter of all religions,' but as the 'Christian convert to Hinduism.' We are well aware that such a view of the Colonel's mission and work is erroneous, but we know also, what he himself does not seem to be aware of, how great a portion of his apparent power comes from the prevalence of such erroneous views.

Baboo Keshub Chunder Sen is dead, and his death is nothing short of a national calamity. Yet it is difficult to estimate correctly the real value of the man and his work. No other occupied so large a place in the hearts of the enlightened Hindu public, and yet his immediate following was but small. In South India he has thousands of admirers who regard him as the greatest Indian of the present generation, but the Brahmos of the south may be counted by scores. The fact is that the man was far greater than the system, and that the power of his splendid personality was of that subtle and spiritual sort which does not readily transform itself into organization. There is always something more or less coarse in the grain of the great organizer, and spirits like the late Mr. Sen shrink from such work. The atmosphere of compromise and expedient in which the organizer lives is deadly to the soul that nourishes itself on great ideas, and if ever there was an Idealist in this sense, Keshub Chunder Sen was one. No Hindu of the present day had so strong a sense of Divine realities, and none laboured more earnestly to realize them. A mystic of the mystics, he lived in a region apart alike from Christianity and all other historical religions, content to appropriate the results of religious pro-

cesses without entangling himself with details of fact and history. Hence both his power and his weakness. Mystics of all creeds were drawn to him, but mysticism has never been able to form an independent society. It manifests itself in every great religion and attracts some of the noblest and most powerful minds of all races, but the mystics have generally been content to remain an *ecclesia in ecclesiâ*. The masses of mankind require something more substantial, around which they may gather themselves in religious societies—a dogma or a person. Now that he is dead, it is quite possible that Keshub Chunder Sen may himself afford the necessary centre, around which a society may gather. But there seems no sufficient reason why it should be so. His doctrines are common to religious mystics of all times, and do not seem to have that in them which can now give coherence to a community. The coarser and readier methods of the Theosophical Society appeal more successfully to Hindu feeling in its present phase, and are untrammeled by that intense moral earnestness which is at once the glory and the hindrance of Brahmoism. What concerns us now is the fact that one of the most eloquent of the sons of men has spoken his last word to us, and that the voice which, with all its eccentricities, was ever raised on behalf of what commends itself to the universal conscience as good and true, is hushed for ever. Christians may well pray that the Divine Spirit whose operations Keshub Chunder Sen so fully recognized, may rest upon the Brahmo communities, and lead them graciously into fuller light. To all the inhabitants of India, whatever their creed or colour, the departed leader has left a noble example. Keshub Chunder Sen was not what we can call a Christian, but it is poor Christianity which cannot recognize the working of the Christian spirit outside the pale of the sects of Christendom.

It seems beyond doubt that some of the candidates at the recent University examinations obtained full information about the papers, if not actual copies of them, before they were given out at the different centres of examination. Such an occurrence is of course greatly to be regretted, and should be felt as a disgrace by every one connected in any way with the University. We are assured that no pains will be spared to detect the guilty parties, and that when detected, their punishment will be exemplary. That goes without saying. The authorities of the University have however, a further duty to perform. They have not yet announced, and probably not yet determined on, the course to be followed with regard to the examination as a whole. Should it be satisfactorily established that only a few of the candidates have had any concern in the plot, or reaped any advantage from it, it may be sufficient that the young men implicated should be expelled from all the advantages of the University for life. If it appear, however, as seems to be more probably the case, that a large number have directly or indirectly had an unfair advantage, some way must be discovered of making all suffer. It may perhaps be going too far to cancel the entire examination and keep all students back a year, but even this would be preferable to accepting results that are open to a suspicion of radical unfairness. The ends of justice may possibly be secured, and an important lesson taught by some less severe mode of action, such as the facts when ascertained will naturally suggest. But if the Undergraduates will not exert

themselves to bring home conviction to those who have disgraced the entire body of young men, it seems inevitable that innocent and guilty should suffer together in some way. There is need to have the lesson taught effectually that it is the interest as well as the duty of candidates as much as of the officers of the University to secure fairness and honesty in conducting the examinations on which the whole advanced education of the country at present hinges.

A curious and interesting case in law has recently come up at Glasgow. Dr. Caird, Professor of Moral Philosophy in the Glasgow University, has applied for and obtained from the Sheriff's court an interim injunction suspending the sale of a volume of notes on moral philosophy announced as a compilation from the shorthand notes of his lectures taken in class by one of the students. And yet the student seems to have the law on his side inasmuch as the statutes of England (as the *Academy* has pointed out) admit no copyright in *university* lectures. It is a curious fact that while every other species of lecture is protected, and the lecturer may if he chooses prohibit the appearance in print even of the most meagre *résumé*, a university professor is not recognised as having any proprietary right in what he utters within college halls. And yet probably no lectures are more valuable to their author. They are delivered as a rule, with slight alterations, from year to year to different sets of students, and it would often be a serious personal loss to a popular professor if any student who could scribble shorthand was at liberty to publish the utterances of his teacher for his own emolument. Hitherto it has been a very common—indeed almost universal—notion that university lectures were protected equally with all others. Dr. Caird and the Sheriff of Glasgow were both evidently under that impression. The bringing to light of this curious exception to the general rule will doubtless lead to its erasure from the Statute Book. Meanwhile however Dr. Caird will probably have to suffer.

Despite its price the new edition of the Encyclopœdia Britanica is having a circulation which no other Encyclopœdia British or foreign has ever had. Of the last volume published—the 16th, which brings us down to "Mosquito"—no fewer than 60,000 copies have had to be printed. America alone takes 30,000—a special edition printed from stereotyped plates sent over for the purpose. Great Britain and Ireland take only 10,000. About 5,000 are sold in the Colonies and India, 1,000 on the continent of Europe and the remainder are required for reserve. The last edition of this great work—the 8th—was in point of literary merit a comparative failure, and the 7th edition always commanded a higher price in the market. This cannot be said of the present issue which is incomparably superior to anything that has gone before it. Almost every article has been entirely re-written so that the Encyclopœdia as it now stands is rather a new work than a new edition.

Christmas is the great publishing season both in England and America. The steady activity which throughout the year produces in each country an average of about 240 new works per month is enormously intensified as the festive season draws near, and publishers vie with each other in the variety

and attractiveness of their announcements. For the season of 1883-4 there were issued in England 984 new books, and in America 966—a number we believe in each case enormously in excess of that of any past year. A comparison of the two lists, as given the one in the London *Bookseller* and the other on the New York *Publisher's Weekly*, is instructive and interesting. The largest item in the American list is children's books of which no fewer than 200 were published against only 66 in England. Similarly also of illustrated books for presentation, *ouvrages de luxe* &c., America had 93, England only 63. In religion and philosophy and also in fiction these proportions are inverted. Of the former America issued 120 against England's 192, and of the latter 74 against 144. The most marvellous difference however is in medical works of which America produced 84 and England only 9! Probably however Messrs. Churchell & Co., and other English firms with whom medicine is a speciality shrank from damping the merriment of the season by any unnecessary suggestions of decay. Our American cousins are evidently superior to such sentiment. In other branches of science, as well as in biography, history law, politics and commerce, England is largely ahead of America. So also is she in games and sports where we would hardly have expected it. But America evidently prefers her fun to be of the arm chair type for when we come to the class "*facetiæ*" we find American publishers produced nine new works while their English brethren are content with one.

Professor Max Muller's Hibbert Lectures "on The origin and growth of Religion as illustrated by the Religions of India" has been translated into several European languages. Guzerati and Marathi translations have also recently been published and Bengali and Sanskrit translations are in course of preparation.

SCIENCE JOTTINGS.

Amongst the many forms of electric railways perhaps the most interesting is that invented by Professor Fleeming Jenkin and called by him 'Telpherage.' It differs from all other systems in this, that the carriages instead of running on rails laid on the ground are hung from a metal rod or rope carried on poles. This elevated rail is divided into sections which are alternately insulated and connected with earth. The train, which consists of a number of light carriages, is long enough to be always partly on an insulated and partly on an uninsulated section, so that an electric current which is generated by an engine at the terminus and led to the insulated sections, can pass from an insulated section through the train to an uninsulated section and thus drive the electric locomotive on the train. The carriage which is used for goods is a sort of bucket like those used on wire tramways and weighs with its load 3 cwts. The locomotive is also of about the same weight. Professor Jenkin has joined his system with that of Professors Ayrton and Perry, and a Company has been formed to work the joint patents. At present the Company only contemplates the erection of comparatively short lines to carry goods and act as feeders to railways; but owing to the low cost at which these Telpher lines can be erected, the system seems to promise well for many districts where there is an abundance of light traffic. At present the Company is confining itself to carrying out a large series of practical experiments on a working scale, with the object of determining the best form for the various parts, and other details which must be fixed before the system can be offered to the public.

A series of very fine sunsets which have been seen over a great part of Europe and elsewhere have recalled attention to the green sun seen in India in September last, and an attempt has been made by Lockyer and others to connect both with the eruption in Java. The suggestion that our green sun was due to this cause was first made by the Assistant Government Astronomer at Madras, Miss Pogson and was very generally accepted but we have all along had difficulty in believing that this explanation was the full one. Mr. Lockyer, in a long letter to the *Times*, tries to trace the propagation of the dust from Java in two lines, one running from East to West through Mauritius, the Seychelles, Brazil, Venezuela and Trinidad, the other from South to North through Ceylon and India. The evidence on which this last line is based is hardly satisfactory inasmuch as the dates given for the appearance of the phenomenon do not agree with the information which we have received from very trustworthy sources, dates which, as far as we can see, leave almost no appreciable time for the propagation of the dust over Ceylon and India. This objection can be met by assuming a very high velocity of propagation, but decided proof is admittedly wanting. On the other hand we have the facts which have already been partly brought forward in this Magazine, One thing that was absolutely proved by the Madras observations was that there was a great excess of aqueous vapour in the upper regions of the atmosphere—vapour which afterwards produced the abnormally heavy monsoon rainfall which we have had. Then again the green sun was not seen in Rangoon nor in the Andaman Islands. At Rangoon the weather was cloudy so that the effect might not have been observed but this was not the case, we believe, at the Andamans. The observations on atmospheric electricity made at Madras point to an electrical condition which was very abnormal, and we would not be surprised to find that the effect of the Javan eruption was chiefly an electrical one, and that this effect propagated through the upper regions of the air, *possibly* by means of dust particles, produced the observed effects. If the presence of dust can be proved it will greatly simplify the explanation of the phenomenon, for, as has been shown by Aitken, dust particles tend to condense moisture from the air. The dust in the higher regions of the atmosphere would then condense moisture round them forming a thin nearly transparent cloud, which if electrified would probably produce the spectrum observed. The recent rosy sunsets in Madras seem due to the very opposite cause to that to which we were indebted for the green sun. After the rains were over the atmosphere became abnormally dry, and so the sunlight was able to pass unabsorbed through an excessive thickness of the atmosphere. This explanation has also been given by Prof. Piazzi Smyth of the sunsets appearing in England.

In an interesting letter in *Nature* Mr. E. Whymper states that in 1880 he witnessed an eruption of Cotopaxi in South America, from a camp on Chimborazo at an elevation of 15,800 feet: when the dust cloud came over head and intervened between his party and the sun. "We saw" he writes "a green sun, and such a green as we have never, either before or since, seen in the heavens. We saw patches or smears of something like verdigris-green in the sky and they changed to equally extreme blood-reds, or to coarse brick-dust reds and they in an instant passed to the colour of tarnished copper or shining brass. Had we not known that these effects were due to the passage of the ash, we might well have been filled with dread instead of amazement; for no words can convey the faintest idea of the impressive appearance of these strange colours in the sky, seen one minute and gone the next, resembling nothing to which they can properly be compared, and surpassing in vivid intensity the wildest effects of the most gorgeous sunsets."

Prof. Chrystal and Mr. John Murray, of Challenger fame, paid a visit at Christmas to Mr. Omond on the top of Ben Nevis. Favoured with fine weather they made the ascent without much difficulty and found the observers well and in high spirits. On the top snow was lying to a depth varying from 6 to 10 feet and the only parts of the Observatory that could be seen were the tops of the chimney and ventilator. The observations are being carried on with regularity and accuracy such as is to be expected from the character of the observers, but many difficulties have arisen which it has required all their energy to overcome. Amongst other things the visitors carried down with them a quantity of dust collected by melting fresh fallen snow with the object of testing whether or not it showed any sign of volcanic origin.

Professor Owen on his retirement from his post in the British Museum has has been made a Knight Commander of the Bath, "as an acknowledgment of his eminent services for sixty years to science and the public interest."

C. M. S.

QUERIES.

16. T. P. S. NAGARUTHNUM.—(1) *A reverend gentleman asserted that all the evils done by the followers of Christ were not the outgrowths of Christianity, and in the next breath added that the many benefits which the world is now enjoying resulted from Christianity. How is this?*

The reverend gentleman referred to is probably incorrectly quoted, but even as they stand there is no inconsistency between the two statements. If however we omit the little word *all*, and for *the many* read *many of the* we shall probably be nearer what really was said. Thus amended the statements are undoubtedly true. We can compare Christian and non-Christian societies and find that there are evils common to both. More than that, we can compare the state of a society or nation after its adoption of Christianity with the state of the same nation or society prior to its adoption of Christianity.

The evils common to both Christian and non-Christian societies, and those that existed in a Christian society prior to its adoption of Christianity, cannot certainly be called out-growths of Christianity. It will be found that the sins of which so-called Christian nations are most guilty are sins to which they exhibited still greater proneness in the pre-Christian state. Take for example drunkenness, which is, according to many, the peculiarly English vice. History tells us that both the Anglo-Saxon and Scandinavian forefathers of our people were mighty drinkers. Observe now the relation of Christianity to this great national vice. It is a relation of steady and increasing antagonism. The great temperance movement of the present day is energised by the spirit of Christianity. It is in the name of their Christianity that people in England are demanding the reform of the Licensing Laws, and the abolition of the Opium Traffic, just as it was in the name of Christianity, that Wilberforce demanded and at last obtained the abolition of the slave Trade.

Are there any evils specially arising from Christianity? Christianity is more a spiritual influence than an object which we can handle, but like all other spiritual influences it seeks to embody itself in concrete forms and organizations. These must partake of the limited, imperfect, and often corrupt nature of the individuals who compose them, and thus the external manifestations of the Christian spirit are sometimes to be found on the wrong side. For example, the Church has sometimes opposed the progress of liberty, because it feared that the human spirit might, if thus freed, rush into evil. As the storm-clouds of controversy clear away, it is seen that true Christianity is a friend of liberty and that where Christianity is most prevalent liberty is most unrestained. Thus it ever is. The selfishness and class interests of certain Christians may move *them* to be on the opposite side from the real good of the human race, but it is always found that in ranging themselves thus, these Christians have really taken the side opposed to their Christianity.

(2.) *Religionists affirm that morality cannot exist without religion. Then is an irreligious life an immoral life?*

The answer to this question depends as usual upon definitions. If by morality we mean conduct that will pass muster according to an ordinary and worldly standard, then morality is quite possible apart from any very vivid sense of God and Divine things. If however morality means the complete and harmonious development of the whole man exhibited in conduct, then an irreligious morality is an impossibility. Man without religion is like a bird with but one wing. We hold that human nature is essentially religious, that is, that man *as he ought to be* according to the terms of his own constitution, naturally requires the religious sentiment, and that without it, one side of his nature is left undeveloped. An imperfectly developed nature must be imperfect in the region of conduct, that is, must be immoral. To say so is not necessarily to accuse the irreligious man of immorality in the gross sense of the word. It may mean no more than that he has made a serious blunder in his estimate of himself and what he is fit for.

There can be no doubt whatever, that the sanctions of such a religion as Christianity, which preaches a pure morality, whatever its professors may practice, are a great moral boon to any community that, however inadequately,

feels their force. Herbert Spencer acknowledges that in the past religion has been a mighty moral safe-guard, and as an unbeliever he is greatly concerned to find out an efficient substitute. Wherever there is a human society, there must be some kind of morality, or men could not live in association. It is the preservation of the delicate higher moral virtues amid the pressure of circumstances that forms the difficulty—those virtues the loss of which would imply the destruction of the grace of life. For this, the moral ideal of the Christian life and the moral dynamic of Christian love seem to us by far the most powerful influences that have yet appeared.

There is another sentence in this query, the force of which we do not understand. Most probably however it has been answered in the foregoing remarks.

17. MIR SHUJAAT ALI KHAN—*What position does a Unitarian Christian (not a Unitarian philosopher) hold towards Christianity in the estimation of the recognized Protestant Churches ?*

The answer to this question must be regarded as only the opinion of the Editor. To get the opinion of the 'recognized' Protestant Churches, or even to determine what Churches are 'recognized' would be a matter of some difficulty. Assuming however that there is such a thing as a general consensus of opinion among Trinitarian Christians, we would formulate it thus. The vast majority of modern Unitarians scarcely care to call themselves Christians at all. Carlyle told Emerson that he regarded the general run of them as men who would be professed unbelievers if they dared. It does not require much daring to be an unbeliever now, and accordingly very many of them are Theists or Panthiests, whose church organizations sit loosely not only to the creed but to the Sacraments of Christendom. Here and there you find one who clings, as the late Miss Carpenter did, to the traditions of the old and comparatively orthodox Unitarianism of Dr. Channing, reverencing the Scripture, and acknowledging the unique position and claims of Jesus. But the word 'Christian' seems a misnomer as applied to such men as Mr. Charles Beard the successor of Dr. James Martineau. The later utterances of Dr. Martineau himself show that he has been carried gradually away from Christianity, into a region the precise religious geography of which is yet to be written.

The same correspondent points out what he considers a weak point in the view of the relation of the Bible to science which we advocated in a recent issue. He says "If I remember aright, you seem to think that the teachings of the Bible in respect to science and history were also inspired, and known to the writers to be such as in the subsequent light of science one could have no occasion to unlearn."

We should be inclined to put our position somewhat differently. What we were pointing out was the *fact* that the teachings of the Bible regarding the origins of things do not, when properly understood, need to be unlearned, that, on the contrary, the Bible really gives us the proper stand-point from which to approach the phenomena of nature in a scientific spirit, and that *therefore* the writings which contain such teachings must be inspired. Nothing but the guiding spirit of God could, we hold, have led men in so rude an age to views of nature so fundamentally correct.

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A FRIENDLY CONVERSATION BETWEEN

Dásóham, a Vasishtádvaiti.
Máyamúrti, an Advaiti.
Christian, a Christian Hindu.
Bhimarow, a member of the Brahma Samaj.
Tammaya, a Hindu of no particular creed.

Among the many results of the spread of European literature and science throughout India, one of the most important is the spirit of enquiry now prevalent on the subject of religion. Who, or what is God ? What is our relation to Him ? How does he regard us ? How shall we serve Him ? are without doubt the most vitally important questions that can occupy the attention of mankind. The design of the following conversation is to bring as much as possible into one view the tenets of some of the leading sects of India ; and so to ascertain whether they acknowledge any common first principles, on which when compared with the doctrines of Christianity an honest Hindu and an honest Christian can meet, and thence proceed together in the search after truth. The occasion of the conversation is the arrival of a noted lecturer, in the little town of Vedántapuram, in the quiet neighbourhood of which the restoration of the world from the dark abyss is still celebrated as the mighty Chakrapati is supposed to have ordained. Bhimarow was on his way home from the

lecture hall, musing deeply on the visions of reform presented in the stirring address to which he had that evening listened, when he met his friend Mr. Dásóham, and the following conversation ensued.

Bhimarow.—Good evening, brother. I am sorry you did not hear Keshavarow's lecture this evening. Why did you not come?

Dásóham.—I? Why should I go to hear him? What was it all about?

Bh.—His description of Brahma, the Supreme, was very grand; and he talked much of the character of the Christians' Lord, Jesus Christ, to whom he said we are all indebted for many blessings.

D.—Why then does he not himself embrace Christianity, and let those alone who worship God, as their fathers for a thousand generations have done? The sacred Veda is surely enough for us, as well as for them. We do not need, and we do not want their new fangled notions.

Bh.—Some new things are not bad, and some old things are not good. Our rite of *Sati*, was not good, and it has been abolished. Self-immolation as an act of homage was once applauded among us; and it is now regarded as murder. Those who harness the fire to their chariots, and make water surrender the force that binds its elements together, that it may, like the lightning flash speed their messages round the world, manifestly have sources of knowledge which the wise will not despise or disregard. Besides, as you know far better than I do, the Puranic hero worship, now prevalent among our people, is not the pure and holy religion of our fathers, who were satisfied with the forms of prayer and praise provided for them in the sacred Veda.

D.—The Holy Sages, who wrote the six Darsanas, Muni Kapila, Jaimini, Gotama, Kanadé, Patánjali, Rámánuja, Sankara Acharya, Mádaváchárya, and many others, were inspired to expound the holy Veda, and make it known to their disciples.

Bh.—Admitted; but all those systems were new when they were first promulgated; and all met with much opposition. All I mean to say is, that we should always be ready to examine what wise men propound to us; and hold fast whatever is good. But here comes my old friend, Mr. Máyamúrti. Let us hear what he has to say. Good evening, brother; where have you been?

Máyamúrti.—Brahmáji, who, as you know, has joined the Brahma Samáj, asked me to go with him to hear Keshavarow's lecture. So I went, and now I am going home.

Bh.—How did you like the lecture?

M.—O, very well. I saw some Christians there, and I was told they thought it remarkably good. Here is one of them sitting at his door; let us go and ask him what he thought of it.

(Christian was sitting on his pyal talking to Tammaya, a Hindu of no particular creed. Seeing the three friends approaching, Christian rose and saluted them respectfully, and invited them to sit down.)

Christian.—I was glad to see so many people assemble to hear Mr. Keshavarow's lecture to-day. I suppose you were all there?

D.—I was not there. But why should you be glad? You Christians do not believe in Brahma.

Ch.—No more do we believe in God as probably most people understand that much abused word; but we are not disposed to quarrel about a name. If *Brahma* signify, as Mr. Keshavarow seemed to say, the one supreme and incomprehensible Being, who is the creator and preserver of all worlds, we can offer no objection to the use of it. THAT which is, who can explain or define? our word *Jehovah*, derived from the Hebrew Scriptures, simply denotes THE BEING, and the English word *God*, is the *Good One*.

M.—Then why do you not say *Brahma* instead of *Deva* when you speak to the people of this country? The *Devatas* are not supreme; and some of them are far enough apart from the pure supreme.

Ch.—I cannot answer that question. In some parts of India, *Iswara*, Lord, is the word used; and here it might have been well to adopt that or *Bhagaván* the Good One. The word *Dév*, however, is found, in one form or another, in all countries where any dialect of the great Aryan race is spoken. Some objection too, might be taken to the use of *Brahma* on the ground that as now popularly understood, it denotes not the mere creator of the universe, but the essence of all things. If I rightly understood your *Brahma jnána*, it involves the belief that all worlds are produced from the substance of Brahma, as vapour, clouds and rain from the ocean, curds from milk, or sparks from a furnace; or, in other words that God is the universe, and the universe is God.

Tammaya.—That's true, God is in everything. What difference can it make what we worship? Every thing is but an emanation from the great Brahma, whether we call him Vishnu or Siva. The sum of all things is *Brahma*.

Ch.—That idea, in one form or another, seems to permeate almost every Hindu system of philosophy and theology that recognises the existence of one supreme Being.

D.—No doubt it does; but it does not follow that we may indifferently worship any, or every created thing. We ought to worship those glorious Beings whom we call Gods, and in whom the magnificence of the supreme Brahma, whom we call *Narayana*, is most fully made manifest. For that reason also we worship the incarnations of the Gods, after the example of many saints and rishis, who by them obtained merit and eternal deliverance; or rose to the enjoyment of ineffable bliss in the haven of eternal rest.

T.—But is all that true? How can we know?

Bh.—It would not be an easy task to prove the historical accuracy of all that is written in our Puránas, or even the Veda. That Krishna and Rama were great politicians all will probably admit; but of their divine power and holiness we have no evidence beyond the unsupported assertions of those books.

Ch.—Here I agree with Mr. Bhimarow. But I have other objections to receiving as true, the puranic history of the alleged incarnations; 1st, they are said by some to have been the consequence of bad behaviour on the part of Vishnu himself; 2nd, there is no good reason apparent or alleged for them; 3rd, the conduct they ascribe to Vishnu is only what one might expect of a mighty hero, and very different from what we should expect of incarnate Deity; 4th, Vishnu, as such, is only one of the gods, and not the supreme and eternal Brahma.

T.—God is Almighty, and may surely do what he likes for his own pleasure or amusement. What if he did bring upon himself the curse of an angry saint, was it not a good thing to become incarnate in order to destroy sinners and impious giants?

Bh.—It might be so; but I have read that some good people, such as King Bali, were unrighteously dethroned and sent to hell by Vishnu, in one of his incarnations; while, for the destruction of the Daityas, he himself taught the false system of the Banddhas.

M.—It is true such things are written in the Puránas; but Narayana did also destroy wicked and impious tyrants; and some monstrous giants.

Bh.—The whole subject of incarnations is mysterious and cannot be accepted without very strong evidence of the fact. Surely the Almighty might destroy the wicked without having to become incarnate. A wise and powerful monarch has no need to disguise himself, or practise any deceitful or crooked methods, in order either to reward the good or to chastise the wicked. Why should the Almighty and Omniscient Brahma have occasion to do so?

Ch.—Here my opinion entirely coincides with yours, Mr. Bhimarow. Such conduct as is imputed to Vishnu the Dwarf, or Vishnu king of Oude, or Krishna Govinda, would be simply disgraceful in any one, and is utterly at variance with all our conceptions of divine power, purity and glory. The Almighty is righteous in all his ways, and holy in all his works. All his works praise him; his saints bless him. All his Angels cry aloud, "Holy, holy, holy is the Lord of hosts; the whole earth is full of His glory."

Bh.—But, Mr. Christian, I thought you Christians also believed in an incarnation of God. Do you not say that Jesus Christ was the Son of God incarnate? If there is no necessity for God to become incarnate, why do you say that Jesus Christ was God?

D.—Well said, Mr. Bhimarow; and if he maintain that we have no reason to believe that what is written in the Puránas about the nine incarnations is true, what better proof can Christians give that what is written in their books about Jesus Christ is true? We have never seen Jesus Christ.

M.—He too might be a God; and if so, those who truly worship him, will assuredly obtain salvation; but why should we forsake the Gods of our fathers, to follow only him?

Ch.—Do not be angry, my brothers, but hear me patiently; and I will tell you *what* we believe about the incarnation of Jesus Christ, and *why* we believe it.

T.—It is all *Máyá*;* nothing but Máya. The world is Máya; we are Máya. This is sin; that is merit. We are born to-day, and die to-morrow. But what is sin? What is merit? What is birth? What is death? All Máya.

Ch.—Well, but why do you say so only when we are talking about God, and truth, and righteousness? When you are hungry, you do not say, It is all *Máya*, and refuse the food that is set before you. When the rain falls, the husbandman does not say, it is all *Máya*, and neglect to plough his field. When you are ill, you do not say it is *Máya*, and refuse the medicine that is brought to you. When one beats you and steals your money, you do not say, it is all *Máya*, and let him off. Why then, when we speak of God, and righteousness, and salvation, do you immediately call out *Máya, Máya, Máya*? It seems as if it were only when the subject of conversation is not to your liking that you dismiss it with the opprobrious epithet *Máya*.

* Illusion.

Bh.—Quite right. If we think at all we should not exclude from our thoughts the Almighty, maker of the heaven and the earth; or disown the relation in which, as his creatures we stand to him.

T.—No one ever saw God: show me God and I will believe in him.

Bh.—You speak thoughtlessly. What you could see would not be God. You never saw the material of light; and yet you could see nothing if there were no light. You do not see the power by which messages are sent round the world in a moment of time; or the message bottled up so that it may, if required be heard fifty years hence, and yet it is there. Our eyes are formed to make us cognisant of the presence and energy of certain material things only. By them we cannot see mind, or spirit, or power, or bliss; or even the *substance* of anything. You do not say show me the sound of a bell, or the smell of a rose, or the joy of the righteous, and then I will believe in them. Why then ask to see the Paramatma—the incomprehensible Brahmo, with an organ framed only to make you in some small degree acquainted with a portion of his work? With the mind and heart that He has given us we can know God, and that is enough. Why seek to limit our knowledge to what we have in common with brute beasts, reptiles and insects?

But Mr. C. was going to tell us what Christians believe about the incarnation of Jesus Christ.

M.—May I ask one question? Is the Christian religion *Dwaita* or *Adwaita*.*

Ch.—In our Veda it is written that there is only one living and true God, who caused the existence of this whole universe, and continually preserves it, by the word of his power. "In the beginning God created the heaven and the earth;" but *how* he did so, we do not enquire, because we cannot know. Time, and space, and power, and mind, the material of the universe *are*, but *what* they are we probably shall never be able fully to comprehend. Nevertheless we may increase in the knowledge of what the Creator has been pleased to reveal to us concerning Himself and His ways, and thus become more intelligent and wise; more loving, pure, holy, and happy.

Bh.—That is just what we believe. By the proper cultivation of our minds, we may so increase in knowledge and wisdom as, with the help of God, to know what is right and good; and thus we may

* That is, do Christians believe in the existence of two, or of only one?

serve him in prayer and praise, and a life of piety and holiness. So it is written in our Bhagavadgita; "I am the generator* of the whole world. All things proceed from me, the wise who think thus are spiritually endowed,† and worship me. Their lives have passed into me. They teach one another. They always rejoice and enjoy themselves."‡ "To those who always and heartily serve me, I give that higher wisdom by which they came to me."‖ Thus may we safely cross the ocean of existence, and enter the haven of eternal rest in bliss.

D.—Very good; but, to understand what Krishna meant by those words, we must remember another verse of the same lecture, "Whoever knows me, without beginning, without birth, the mighty Lord of the world,¶ he among mortals, freed from stupidity, shall be delivered from all sins, the various qualities that beings have, are entirely from me."§

T.—That is just what I said. The whole world is Máya; and blessed is the man that knows it is so; for then he is free from all sin, all care, all everything.

Ch.—For the finite to know the infinite; for us who live and move and have our being among the related, to think of absolute unrelated Being, would seem to be impossible. It is hard to believe that success in the effort to do so, has been made the condition of our well-being. Will you kindly tell us what you mean by calling Brahma *Nirguna*, unlimited by qualities? It seems as if such an epithet reduced our conception of God to—nothing. How can qualities ever originate in what is devoid of qualities?

M.—Since the supreme One is without a second, *Ekamevádvitiya*, no quality or condition, that implies relatedness can belong to THAT; for to whom or to what can THAT be related. THAT is what is, Being—intelligence—bliss, THAT is the aggregate of all existence, knowledge, and bliss; which are not different, one from the other, but one. In THAT consists the eternal thought or will in which the world has its being.

Ch.—Your conception of the Supreme is sublime; and, so far as it goes, beautiful and true. But can we rest in it? Can we think of bliss, or thought, or pure intelligence, devoid of relationship? When we speak of God as a Spirit, Omnipotent, Omniscient, and ever blessed, we are compelled by all the laws of thought, to regard these as attributes of THAT.

* *Prabhava.* † *Bhavasamanvita.* ‡ *Bamanti.* ‖ Bhag. Gita. x, 8-10.
¶ *Lokamahesvara.* § Bhag. Git. x, 8-10.

M.—To what then will you attribute them? Have you any notion of *what* is, apart from omnipotence, thought and bliss?

Ch.—Probably not; no more than we can have of matter, or energy, the phenomena of the universe; omnipotent energy, immeasurable time, boundless space, essential bliss, absolute Being, an eternal self-existent fountain of all that is, may be all we know of the vast Supreme; but we have no right to infer that our conception embraces the whole Being of THAT, which we call God. When we say God is a Spirit, infinite, eternal, and unchangeable in bliss, intelligence and power, we include all that is meant by your *Nirguna Brahma*—and nothing more, save our own inability to comprehend all that a spirit is. Paramátma, Supreme Spirit, is, and our highest conception of it is of absolute thought, omnipotent will which is eternal joy. Do you object to such a statement as that?

D.—We, I mean the followers of Rámánuja, regard the supreme Iswara, or Naráyana, as the fountain of all Being; but we do not regard him as devoid of all qualities. He has in the highest degree the quality of goodness.* When he said, "I will be many," the *Paramatma* was first manifested as ethereal light, and then in all the variety of forms which constitute the created universe—each of which, is pervaded by a portion of his own vitality.† This, as well as the material of the universe, being of the same substance with the supreme Being, is alike without beginning and without end. Thus the universe consists in *chit* or mind, spirit; *achit*, the unspiritual; and *Paramatma* the supreme spirit, or *Iswara*. Our heaven is a condition of pure ecstacy and eternal rapture with *Iswara*.

M.—Our objection to such a representation is that it postulates too much. Omnipotence is of itself adequate to evolve all the phenomena of which the spiritual and material world consists.

Ch.—Granted; and then, if it is also granted that "an effect is not other than its cause," how is it possible that the phenomena of the universe could ever be the effect of Omnipotence, which is one with existent thought, essentially bliss?‡ "That which is possible is made out of that which is competent to the making of it."

M.—Brahma is one without a second; but he does not do that only which is agreeable and beneficial to self. Hair and nails which are insensible, spring from an animal body that is sentient. The same substance may be a diamond, a bit of charcoal, or plumbago.

* *Satnaguna pradhána.* † *Jivátma* ‡ *Ananda maya.*

The spider's web is spun from its own body, and is very unlike itself.

Ch.—Your illustration shews that, a substance may exist in various forms, or states; but, as it seems to me, is not applicable to pure intelligence, absolute bliss endowed with Omnipotence, or, "Omnipotence which is essentially bliss." Contraries are not within the province of Omnipotence. Absolute bliss can never become pain or misery. If it might in part, why not in whole? and then the supreme would be changed, which is impossible.

M.—Allowing, then, that "thought and joy" cannot be non-existent in the self-existent, what more do you insist upon as constitutively essential in THAT, the supreme?

Ch.—A name, be it indicative only of simple existence; yet such as shall not affirm the non-existence of a Being that is essentially omnipotent, omniscient, blessed. Power, intelligence, bliss, may be the aggregate of all we can predicate of THAT, absolute Being; but it is not to God absolute* that we, as creatures are related; not to pure intelligence, an Omnipotent joy-thought; but to THAT, as the creator, whose creatures we are. Creation involves relationships; and hence the manifestation of justice, goodness and truth.

M.—Your reasoning may be admitted, on the supposition that the world is a reality, constituted of existing things; but to us, the whole is purely phenomenal, a mass of appearances, related to reality, only as dreaming is related to it. We are conscious of their existence merely as phenomena. What appears is not what is.

Ch.—Even on the supposition of the world being mere phenomena, it must still, as such, be related to its origin, or source. So it is written, THAT "wished to be many and prolific, and became manifold." Now, though you say, "This universe is indeed Brahma," you here admit that he is by his own will, *icheha*, the cause of the phenomenal world—the omnipotent, omniscient, sentient cause of this universe; indeed the "material as well as the efficient cause." Be it then that the whole is a mere appearance; it seems to be regarded and spoken of as an *effect*, not the pure intelligence of THAT, whatever THAT, may be. In your exposition of the term absolute, although you exclude desire, will, as related to something not yet existent but desirable, you seem obliged to admit thought and will as antecedents of creation, no matter what that creation may

* *Nirguna.*

be. "He willed to be many;" and more than that, part of the phenomena is the universal consciousness that we are in some way related to the creator, so as to be objects of His displeasure or regard.

M.—That consciousness is illusion, and must be got rid of. When we cross the troubled ocean of existence, and reach the haven of true knowledge, we shall lose the delusive notion of self, in the ocean of eternal bliss.

Ch.—What if your doctrine should turn out to be the dream, and the universal consciousness be after all the solemn truth? It is hardly conceivable that when the omnipotent, omniscient cause of the universe, "who is essentially BLISS," willed that the universe should be, the whole product was a vast system of illusion which collapses and disappears the moment the light of pure knowledge is thrown upon it. On the other hand, if the phenomena are to last, surely the safest course is to acknowledge Him of whose thought and will we are the offspring, that we may rest in Him whose bliss is love.

M.—We rest our belief on the authority of the *Vedas*; we need no other proof of our doctrine than what they furnish.

Ch.—The most you can say of them is that they are divine; but so also is the universal consciousness to which you oppose them. One illusion will not dispel another. But, for the present, without admitting or denying the authority of the Vedas, in all Hindu systems of philosophy, the discussion of the main subject, is always preceded by some statement of the laws of evidence applicable to it. In all demonstrations, it is essential that the demonstrator, and those to whom the demonstration is opposed, should have some recognised truths, or axioms, accepted as such by both parties to start from. If two men are sent to repair a tank, the one imagining that he has to purify the water in it, and the other as firmly believing that he has been sent to let the water out, it is not likely they will ever agree, so as to work harmoniously together. So if we have not a clear understanding with regard to the chief end of man, we shall never be able to appreciate the means by which one may seek to attain it. Salvation, eternal rest in blessedness, is what all men need, and the way to attain that is what we seek to ascertain.

M.—Christians call it salvation, but we call it *mukti*, or *maksham*, deliverance from the bondage into which we have been brought by the irresistable might of Brahma. "This, doltish birth is

covered by superhuman illusion";* and complete deliverance from that is *mukti*.

Ch.—There is certainly a vast difference between salvation, which consists in making a man wise, holy and happy for eternity, and that which consists in the loss of self-consciousness; or in other words making him cease to be a man—such a difference as a king would manifest in the treatment of vanquished, starved and dying captives, were he to send the physician with abundance of food to some and the executioner with his sword or halter to the rest.

But are all your doctors in theology and anthropology agreed on that point? I mean, do they all teach that the highest bliss attainable by man is liberation from the illusion of "I and thou," or "me and THAT," involving the entire extinction of all individual consciousness in the absolute unity of the eternal and invariable "THAT."

M.—All *Advaitis* believe that to be the chief and ultimate end of man. Sankara Achárya says, "The knowledge of Brahma is the chief end of man." And again, "He who knows that supreme Brahma, becomes even Brahma." In the Rig Vêda it is written; "There was then neither nonentity nor entity." *Ná 'sad ásít, no sad ásít.* "There was nothing different from THAT or beyond it. Desire first arose in THAT, which was the first germ of mind. This the wise seeking in the heart have discovered by intellect to be the bond between nonentity and entity." In the same Veda it is written that "The waters contained that earliest embryo, in which all the good were beheld." In the *Bhagavadgíta*, it is said, "at the end of a *kalpa*, all beings return to my *prakriti*." "I create them again." "I am the soul that standeth in the bodies of all beings." "I am the beginning, the middle, and the end of all things"; "I am the essence of all qualities." "They who know him as present in all things, and are acquainted with the science of Brahma, are absorbed into Brahma, and are freed from transmigration." Where then will be the Gods?

T.—Well, I never heard the like of that before. No Gods! If they are all to disappear like the rest of us, I do not see what great good is to be got by worshipping them. It is all *Máya, Máya, Máya.*

Ch.—Patience, my friend, patience. If it is all illusion, the sooner it is gone, the better. When we have an unpleasant dream, we are

* Bhag. Gita, vii. 15-25.

glad to make up and have done with it. Only, before we rest in the idea that the world is but the substance of a dream, we should be very sure that it is no more, lest we one day make up and find it is a solemn reality. If it is a dream, whose dream is it? We are but a portion of the dream.

M.—If the world is a dream, it can only be the dream of Brahma, the sole cause and origin of the universe. But why think of the world as a dream?

Ch.—I do not know; and yet there is a sublime conception of such an origin of the phenomenal world, which, in the absence of certain knowledge, poets may have been pleased to describe. All persons, things, and events being present to the mind of supreme intelligence—itself unconditioned and alone,—by the spiritual energy of intense contemplation, the whole scene, or dreamy appearance, became inspired with the illusion of its own existence, and each part acted in accordance with its relation to the whole as contemplated in the dream of THAT. The nonentity is then all the phenomena of the universe, all things that appear; the entity, the causative idea of the whole in the mind of THAT that is. When deeper sleep, too deep for a dream, comes upon THAT, the whole passes away; and again universal darkness and silence prevail.

Now let us hear what Mr. Dásóham has to say about the beginning, the origin of things as they are.

D.—When the supreme spirit alone existed, THAT ONE breathed softly with Svadha, the ideal world, the whole world *in posse*. There was nothing different from THAT, or beyond it. There was no manifestation; time was not, space was not; THAT was pure soul, simple intelligence. That awful silence was first broken by the sound OM, *ahamasmi*, I AM; but how it was produced, no one has ventured to say. In the *Aitereya Aranga*, it is said that *vach*, speech, is the active power of THAT, proceeding therefrom. It speaks of itself as the supreme and universal soul. "I am above this heaven, beyond this earth; and what the Great One is, that am I." "My origin is in the midst of the ocean." The meaning of this probably is that THAT produced the word; the word produced the heavens, and rules supreme over all.

Ch.—That forcibly reminds me of a passage in the Christian Veda. "In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made through that, and without that was not anything made that was made. In that was life, and the life was the light of men. And the light shineth in the darkness."* But proceed with your account. You have told us the efficient cause, the power by which the universe came to exist. The next thing to be determined is the material cause of it. Is it a creation, or is it a mere production or development?

The notion of the world's production in the form of an egg is of great antiquity, and may be traced among the ancient Aryans, Assyrians, Persians and Egyptians. It may have some connection with the Biblical expression. "The spirit of God brooded upon the waters."† Moses, however, seems to speak of a secondary creation, when the water and the earth were already in existence; whereas in the Veda, the period of the egg seems to be the commencement of the elemental creation, the first manifestation of "active intelligence," or, "the operating will of the Supreme."‡

I should like to hear Mr. Dásóham's account of the primary, or elemental creation at the birth of Brahma himself.

T.—Brahma? Was he too born? I thought he was the creator, and great father of all.

M.—Very true; and one would regard him as an elderly person by this time, as his birth dates upwards of 155 millions of millions of years from the present time; only as he has yet about an equal number of years to live, he may now be regarded as in the prime of life.

D.—It is true, Brahma is said to be born; but the meaning evidently is that he was then manifested. He had been manifested before under that or some other name; but having disappeared with all his progeny for some 300 billions of years, he comes into view again in the way I am now going to state.

T.—Govinda! what an awful time to disappear, and yet to turn up again!

D.—Then this universe was in darkness, as one entirely sunk in sleep. Then there was neither day nor night, nor darkness nor light, nor anything else. *Ná 'sad ásít, no sad ásít.* There was neither entity nor nonentity. THAT only was.

M.—In this then we are all agreed. "In the beginning Brahma was 'all this.‖" THAT alone was. The question now is, how came *this*—this world? In the Vishnu Purana, it is said, "the world was produced from Vishnu: it exists in him; he is the cause of its continuance and cessation, he is the world." What then?

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* John i. 1.5. † Gen. i. 3. ‡ Wilson's Vishnu Purana. ‖ *Brahma va idam agres asit.*

Was all this universe of mind and matter produced from the substance of THAT—call it Brahm, or Vishnu ? Was that the essence of all things which, as Manu says, he produced from his own body ? Or, has he only by his almighty power, and for his own amusement, caused the illusion of a world distinct from himself, the whole being but an idea, or a dream.

T.—It is all *Máya*. What else can it be ?

Ch.—Well my friends, we have heard much of what the ancient, as well as the more modern wise men have said regarding our origin and prospects. An impartial view of the whole should, I think, suffice to dissipate the notion that Hinduism is, and has always been one compact and unalterable system of belief. But amid all the varieties of opposition, and admitting, what I think we must admit, that poetical imaginations have added much to fill up and adorn the outlines of divine truth, there is here a large amount of original primitive truth in which we may find a solid basis from which to proceed in our further researches.

1. There is one absolute, eternal, almighty, incomprehensible Being who ever was, and is, and ever shall be.

2. THAT, conscious of self-existence, contemplated the whole of this universe, and willed it should exist. By the word of Jehovah were the heavens made, and all the host of them. In the beginning was the WORD, I AM, AHAMASMI. He said, let it be, and it was.

3. That Being whom we call JEHOVAH, ISHVARA, GOD, is a spirit, eternal, unchangeable in being, wisdom, power, goodness, and love.

4. If we are asked to define the materials of which the worlds are made, we must frankly acknowledge our ignorance. Time and space and motion are alike unfathomable mysteries. Yet they enable us to realise the existence of power, energy, and design. The atomic theory of matter is now generally accepted; but who can tell what atoms are? Perhaps no more than space granulated by the Almighty power of God. He spake and it was done. He commanded and it stood fast.

D.—Your view of *prakriti*, or the material of the universe, may, perhaps, help to elucidate the purport of that ancient, and somewhat mysterious saying, already referred to *Ná 'sad ásít, no sad ásít*. There was neither nonentity, nor entity.

Ch.—I quite think so, the nonentity being this apparently material world; and the entity, the ACTIVITY of divine power and energy to which it owes its origin, and continuance in being. The universe is upheld by the word of God, "Let it be." The

greatest mystery is the extension of space and time. He is verily a fool, who can say there is no God.

5. In the beginning God had made the heavens and the earth; but so it was that the earth was without form, and void, and darkness was over the deep. Then, first, God said, "Let there be light," and there was light. In due order, the waters that surrounded it were gathered together; and then, by the word of God—"Let it be"—it was covered with vegetation, and became a fit habitation for a variety of living creatures, fishes, insects, reptiles, birds, beasts and man.

6. Man was created, male and female, pure and free from sin. God dwelt in their minds, and they had fellowship with him. But,

7. The embodiment of spirit, the production of an intelligent living soul, from the combination of mind and matter in its most subtile form, involves its investment with conditions of activity and limitation, inseparable from self-consciousness and perception. After a time, truth and goodness were overborne, and the restless activity of alluring desires, prevailed and brought forth sin, which so increased that mankind soon became thoroughly ungodly. At present, through the predominance of 'selfism'* we are in bondage and unable fully to realise and appreciate our relation to the Great God who made and daily preserves us. *I* and *mine* are the sum of our thoughts, and hence the prevalence of desire and restless activity; bewilderment and stupidity.

8. The fascinating, besotting power of *this*—the world, must be subdued; and can be subdued only by the true knowledge† of the eternal THAT, our God and Father. Hence,

9. The true salvation must be sought in the union of Being—thought—joy; and, as the world was created, so it must be saved, BY THE WORD OF GOD.

When you assign the origin of sin to the bewilderment caused by the irresistible power of God, mysteriously associated with *prakriti*, whatever that may be, you can look for no termination of it, but in the termination of that influence, which in each case, would be the end of individual personality.

T.—Quite true. It is all *Máya*; all a dream, as in other dreams so in this, there is an order of occurrences, but it is all *Máya*.

Bh.—What you say is true and good; and therefore I wish to

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* *Ahankara.* † *Vijnána.*

hear what more you have to say about the incarnation and death of Jesus Christ. For my own part I really do not see what necessity there can be for anything like what you call atonement, previous to forgiveness. If one man is offended by the conduct of another, but is willing to pass it over, and remain on friendly terms with him, what is there in truth or justice to hinder him?

Ch.—But you would not call that forgiveness without atonement.

Bh.—Why not? Call it anything you like; the two are reconciled without any satisfaction for the offence given.

Ch.—The offender made no atonement; but did not the offended party suffer for it?

Bh.—How so? What do you mean?

Ch.—The offence committed hurt Him, pained Him, grieved Him, and *yet* He forgave it; loved the offender as if it had never been committed.

Bh.—Is that what you call atonement?

Ch.—Without it there could have been no forgiveness. If you lend me ten rupees, and I am unable to pay it back, you cannot forgive it without sustaining loss to that amount.

Bh.—How does that resemble forgiving an insult, or an injury done to me in mind, body, or estate?

Ch.—Simply this, that we do not think of *forgiveness* except in relation to such injuries; or when the man that forgives another is in some respect an injured man.

Bh.—Do you mean, then, to say that our sins, or sinfulness injures the Almighty?

Ch.—Undoubtedly. God is love, and sin is contrary to love. He says most emphatically, "Oh! do not that abominable thing which I hate." On account of all whose well-being is pleasing to Him, He must uphold righteousness and frown upon iniquity. Herein lies the great mystery of the Gospel of Jesus Christ; "God so loved the world," the sinful world, "that He gave His only begotten Son, that whosoever believeth on Him should not perish, but have everlasting life."

M.—How can God have a son?

D.—A Hindu must not ask that question; for our Puránas are full of marriages among gods and goddesses. Brahma, Vishnu, Siva, all have sons and daughters; and some say that the whole world was produced from an egg, that Paramatma laid in the great waters. Let that pass. It is all the fruit of *máya*. If the gods choose

to besport themselves in that fashion, why should we find fault with them. What do you think Mr. Máyamúrti?

M.—Of course all the incarnations took place by birth, Krishna being born of God, might be called the son of God, as he had no real father besides Nárayána. All lives are sparks of divinity, and have more or less of the divine nature in them. We cannot deny that. Is that what you mean, Mr. Christian?

Ch.—Partly so. The humanity of Jesus, differed from other men in those two respects. He was not born in the ordinary way. His mother conceived by the power of God; and then He was pure and holy, altogether sinless, this is all we say or know about the birth of Jesus; and I do not think that any one, least of all a Hindu, should question the possibility of such an event. There is nothing either blasphemous or ridiculous in it.

T.—But is it true? It may be all written as you say in a book; but many wonderful stories are written in books. Why should we believe only this one wonderful event?

Ch.—Have patience, brother. I am now telling you *what* we believe. It is well to know that in the first place; and afterwards you will be better able to judge of the evidence, when it is laid before you. If a man is accused only of theft, and all the time of the trial, the jury, imagine the charge is one of murder, how shall they understand the evidence presented to them?

Bh.—Quite right; but is what you have just said the whole of your reason for calling Jesus the Son of God?

Ch.—It would, I think, be a sufficient reason for such a designation; for He had no father but the Living God. But we do not regard Him as merely a man. We believe that in and through the man Christ Jesus, very God of very God, the Almighty reveals Himself to us. Thus He is "The Word of God." "In Him dwelleth all the fulness of the Godhead bodily." His righteousness, His love, His holiness; His wisdom, His truth, His loving-kindness, were all human; such as may belong to human nature; but in their intensity, their purity, their entire freedom from evil, they were truly divine. GOD was in Christ, He that sees HIM sees the FATHER. To be told that "God is love" is one thing; to see the love of God manifesting itself is far better, infinitely more impressive. In our present state, we cannot know God, unless we know humanity without sinfulness. Whatever we see in the character, and teaching of Jesus, that we know to belong to God. Thus in the highest possible sense, we believe and

affirm that Jesus was Immanuel, God with us, the son of the living God.

Bh.—We acknowledge that Jesus was a good man, the best of teachers; and some of our *Sámaj* go so far as to speak of him as the Redeemer of Mankind. We appeal to history, and say He was a perfect, and perfectly sinless man.

D.—Ah! there you are, again appealing to history, people may write anything in books.

Ch.—There are two sorts of books, some are written by clever, learned men, according to their own knowledge and invention. A foolish man could not compare and write a book full of wisdom. If an ignorant man should write a book, on philosophy, or mathematics, or astronomy, a learned man versed in those sciences would soon find out his ignorance. Trustworthy books may be written by unlearned men, who simply tell what they have seen with their own eyes. If an ignorant man write a good book on astronomy, or navigation we can say at once, he must have copied it. So, if an unlearned man, sinful like other men, and not remarkable for superior truthfulness, write minutely the life and doctrine, and give accurately the very sayings of a man who never uttered a vain or foolish word, but appears uniformly wise, kind, and holy in all his intercourse with others, we unhesitatingly say, he must have seen such a man, for he never could have invented such a history.

T.—He might have left out all the bad things, and written only the good. That I have been told is the difference between your books and ours.

Ch.—If the writer did so, he was a bad man, a deceiver, who could no more separate the good from the bad, than he could invent the whole character. But this belongs to the evidences of the truth of Christianity, and shall, as I hope, be considered in due time. I was going to say to *Mr. Bhimarow*, that, if Jesus Christ was, as he believes him to have been, a good man, we are bound in justice to ourselves and to him, to consider most attentively his own account of his mission and work. He says expressly, "No man knoweth the Father save he to whom the Son shall reveal him." "He that has seen me has seen the Father." "I and the Father are one." "This is life eternal that they should know thee the only true God, and Him whom thou didst send, Jesus Christ." Now if in any way, whether by our own intellectual ability, or by the aid of the spirit of God and the teaching of Jesus, we obtain the true knowledge* of

* *Vijnáma.*

God, and truth, and righteousness and love, then the truthful, loving, holy Jesus cannot fail to win our hearts to himself and bind them to him in gratitude and love. What think ye of Jesus Christ? is a fit question to try the character of every man. The spirit of God rests the evidence of man's sinfulness on their not believing in Jesus, when he is made known to them.—John xvi. 8.

Bh.—We admit all that. "Jesus Christ is the noblest example in all history, of self-consecration to the service of God and man. Before we deny this Christ we must blot out all the nobler nations of history. He laid down his life for millions. Jesus Christ died for all men. Many a nation loves and worships him, He lives amongst us still, to bless us; and we cannot think of Him but with profoundest reverence. We see in Jesus Christ, the grandest ideal of all models of self-sacrifice. Let me imitate the wisdom and true greatness of Jesus Christ, and walk in his spirit now and for ever."*

Ch.—Nobly said! What then was the doctrine of that great teacher? Was it for teaching truth and goodness and love to God and man that he suffered and died? He refused to be accepted merely as a teacher. When the Jewish rabbi Nicodemus came to him by night, and avowed his belief that he was a teacher come from God, without apparently noticing the compliment paid to himself, he solemnly assured him that, in order to enter the kingdom of God, or taste its blessedness, a man must be born again, receive new life; and that he had come into the world, that whosoever believed in him might not perish but have eternal life. "For God sent not his Son into the world to condemn the world, but that the world through him might be saved." He told the poor degraded woman, whom he met at the well in Samaria, the same thing; "Whosoever drinketh of the water that I shall give him, shall never thirst, but the water that I shall give him, shall be in him a well of water, springing up into everlasting life." He never varied in his testimony that he had come to lay down his life for the sheep, that they might have life, and that they might have it more abundantly.

Bh.—It is your doctrine of mediation and atonement by vicarious suffering that we so strongly object to. Our Almighty Father is wise, and just, and good. He loves his children and does not, like Kali, need a mediator or bloody sacrifice to induce him to hear their cry and save them.

* Speech of Babu Keshub Chunder Sen.

Ch.—No one ever had wider or loftier thought of the benevolence and free grace of God than Paul the Apostle had; and yet he taught that "we have redemption through His blood;" and that "There is one God, and one Mediator between God and man, the man Christ Jesus, who gave himself a *ransom for all*." You seem to admit so much when you say that "Jesus Christ laid down His life for millions." Here there was both mediation and sacrifice.

Bh.—Yes; assuredly one man may suffer much, and even die for the salvation of one whom he loves; but that is altogether different from your doctrine that one may bear the punishment which another has merited; and that suffering and death may be so pleasing to God, that for the sake of them, he will pardon the guilty, though otherwise he might not have felt disposed to do so.

Ch.—Suffering and death can under no circumstances be pleasing to him whose essential being is love. The heathen idea universally is that man courts the favour and love of God. The Christian doctrine is that God seeks the love and friendship of man.

Bh.—We often hear of the satisfaction of justice demanded in the treatment of sinners, but not so much of the satisfaction of love. Is this of less importance than that? If justice demand a substitute when the penitent sinner is pardoned, lightened and saved; does not love as imperatively demand some compensation when the wretch is damned to outer darkness? "God is love." Is the manifestation of that love in the government of the universe, less essential to its well-being, than the payment of penalty, the endurance of wrath on the part of transgressors? Why speak of the one as free, and of the other as necessary? Justice accepts no payment. It can tolerate no compromise. It seeks no satisfaction, but the overthrow of all that is out of harmony with it as it rolls on, an irresistible torrent, through every department of the universe of God, proclaiming, "the soul that sins shall die." It can harm no one who is not in sin, nor does it require that any one should remain, or be made to remain in sin.

Ch.—Well said again, Mr. Bhimarow. But we do, I acknowledge, sometimes hear it said that the blood which flowed from the Redeemer's pierced side, was to pacify the fiery wrath of God for our sins, while the water was to cleanse us from its guilt. "God commendeth his love to us, in that while we were yet sinners, Christ died for us." That simple fact brought home to the heart and conscience, has led many a sin-burdened soul to the Saviour, who yet might not be able scientifically to explain the relation of

that mysterious death to his own salvation. But it is a meagre description of the grandeur of redeeming love and can have but little sin-damning power, to say He paid our debt of suffering for sin. Our sinfulness, and not a rod in the hand of an angry Father, or of avenging justice—our sins, and misery in sin, occasioned the heart-breaking agony which He, the holy, righteous, loving Son of God, the effulgence of His Father's glory endured on our account. Sin having once entered into the world, suffering was inevitable—suffering as when the transgressor brings evil upon himself, or inflicts it on others by his evil deeds. But the damnable evil of sinning against God is not most fully demonstrated by the degree of suffering which it entails upon the sinner, or which the Law-giver may attach to it; but most truly and emphatically, by the way in which it affects the Holy One himself, against whom it is committed. A tyrant may torment those who transgress his laws; but the prince who goes into deep mourning and weeps when the transgressor hears the penalty, more fully condemns his crime, and magnifies the broken law. Even in the outer darkness, though the worm die not, and the fire be not quenched, the exceeding sinfulness of sin against God will never be seen damned and branded as it was by the peerless agony of soul it occasioned to the sin-bearing Immanuel in the garden of Gethsemane, and on the cross. Not what the Almighty does to the sinner, but the revelation of what our sinfulness is to God, is the truest and most effective condemnation of it. What it was to Jesus, that it is in its own nature, that it is to God, and that it becomes to all that have the spirit of Jesus,—the abominable thing which they hate. The Holy One hates it with a hatred, with an intensity of revulsion from it, such as human nature could not experience and survive the shock. How has that been made apparent? It broke the heart of the Son of God, the holy, loving, blessed Jesus Immanuel. We need not adopt the language of some, who tell us that for our redemption the Son of God voluntarily took upon himself, and endured a terrible punishment in order that he might appease the offended justice of His Father; and that the overwhelming sorrow, the amazing agony that bound him to the earth, were due to the wrath of an angry God, exacting from Him, on behalf of offended justice, the full amount of penal suffering due by us on account of sin. Of what in God, the loving Father of us all, whose name is Love, would that have been a fitting revelation? God was in Christ, revealing HIMSELF, not another, to mankind. The Godhead of Jesus most satisfactorily accounts for the awful intensity of his

unparalleled sufferings ; and it is when the living God is seen, in the suffering Redeemer, *to be what He is*, in holiness, goodness and truth, the righteous, sin-hating God and loving Saviour, that the believer confidently rests his whole hope of salvation on his atoning death—not because that death was the payment of our debt of suffering ; but because we see in it our God and Father's brightest revelation and assurance of his own eternal and unchangeable righteousness, holiness and love. For such an atonement, it was manifestly indispensable that the Holy sufferer, the sin-bearing Son of Man, should be the true and only Son of God. It is not too much to say that if Jesus, THE WORD, the Holy One's revelation of Himself had not been such a man of sorrows, such a peerless sufferer among men, His whole life would have been a denial of all that had been deemed most holy, most winning, most comforting in the revelations that had inspired the faith and hope of patriarchs, prophets, and saints of old. As Immanuel, God with us, revealing Himself to us, his human life must represent, in the only way that human life can represent Him, the loving, pitying, compassionate, merciful SIN-HATING Jehovah. He must desire our reverence, gratitude and love ; and when distrusted, despised and rejected of men, He could not be otherwise than a suffering man ; and so suffering, His sufferings could not be otherwise than the strongest possible condemnation of the sin that occasioned them. They are consistent who, while denying the true divinity of our Lord Jesus Christ, reject also the doctrine of atonement through his blood ; but to be out and out consistent, they ought also to repudiate the whole Bible, which is full of both—the God-Man suffering for us, by our sin, damning it by the agony of his soul in bearing it, the true and only substitute for our suffering *for* it, as well as by it. When the light of life, the bright effulgence of the Father's glory, the light of the knowledge of the glory of God, shines in the believer's heart, that is its salvation. Nothing, nothing in man, nothing in God, nothing in truth and righteousness, nothing in heaven, nothing on earth, nothing in hell, can deprive that heart of its bliss into which the pure love of God flows freely, as he fixes his gaze, on Jesus the crucified Redeemer. From the God and Father of our Lord and Saviour Jesus Christ, well comes the appeal, " Why will ye die."

Here the conversation terminated, and the friends separated, ruminating, let us hope, on the theme of their evening's conversation.

JOHN HAY.

*MILTON'S SONNETS.**

Scorn not the Sonnet ; Critic, you have frowned
Mindless of its just honours ; with this key
Shakespeare unlocked his heart ; the melody
Of this small lute gave ease to Petrarch's wound ;
A thousand times this pipe did Tasso sound ;
With it Camöens soothed an exile's grief ;
The Sonnet glittered a gay myrtle leaf
Amid the cypress with which Dante crowned
His visionary brow ; a glowworm lamp
It cheered mild Spenser, called from Fairyland
To struggle through dark ways ; and when a damp
Fell round the path of Milton, in his hand
The thing became a trumpet, whence he blew
Soul-animating strains—alas too few !

WORDSWORTH.

I

The Sonnets of Milton in English are eighteen in number. Some of them are trifles. In all indeed there is the same ease, the same perfect mastery. But in quality they vary with their themes, or the occasion that called them forth. What of them belongs to the highest class of poetry comprises from one hundred and fifty to two hundred lines. But it may be said with confidence that these lines, alas that they are so few ! this tiny tribute from the pure fount of the muses, has been one of the mightiest influences in the stream of English literature. " Soul-animating " were the strains to Wordsworth after a century and a half ; and to-day they are more fresh and full of inspiration than ever before, wielding an influence which no equal portion of our earlier literature is still able to exercise.

These sonnets were gathered from twenty-eight years of the poet's life. Five, along with other five written in Italian, were printed in 1645, in a Volume of *Poems of Mr. John Milton, both English and Latin, Composed at several times.* Other nine were added in the edition of 1673 issued in the year before the author's death. Four, steeped in the feeling of politics, awaited a happier day. Before the close of the century the works of Milton were secure.

The sonnets of Milton mark a distinct turning point in the history of English sonnet literature They were the last of the old, the

* The Sonnets of John Milton ; Edited by Mark Pattison. London : Kegan, Paul, Trench & Co., 1883.

first of the new. Yet a century had to elapse before the new began its continuous course. Prior to Milton's time the sonnet was a love poem. Not indeed exclusively so. For the great heart of Shakespeare had found therein utterance for various moods; and many of the sonnets of Spenser and Drummond were of a graver kind. It may be that naturally the former phase—of passionless love and petty conceits—was played out; that there was an unconscious realising of the fact that this form in English was more suited to worthier themes. In Milton this thought became conscious. "He caught the sonnet from the dainty hands of Love . . . ., and gave the notes to Glory." Or, more correctly, Milton showed that every high thought or true emotion could be enshrined in this form. But while he widened the range he lessened the freedom of the sonneteer by the dignity with which he invested the poem.

Yet the recognition of the Miltonic sonnet was slow. In every age there were some who could appreciate the greatness of Paradise Lost. After three quarters of a century or more we are able to trace in the sonnet of Gray, the sonnets of Stillingfleet and Mason, the clear influence of Milton. But all through the eighteenth century the appreciators of these compositions were few. The judgments passed by the sovereign critic are notorious. Yet we may repeat one circumstance in the words of a recent poet. "It is an awful fact that sun, moon or candlelight once looked down on the human portent of Dr. Johnson and Mrs. Hannah More convened in solemn conclave above the outspread sonnets of Milton with a meritorious and considerate resolve of finding out for him why they were so bad." And the response was given "why, madam, Milton's was a genius that could hew a Colossus out of a rock but could not carve heads on cherry stones." But already Cowper and others had restored the Miltonic sonnet, and at the end of the century Wordsworth arose. We have his express testimony that his first sonnets owed their origin to those of Milton, and indeed not in the sonnets only of this illustrious poet is the presence of Milton seen, is the soul-animating voice of Milton heard. Soon followed Coleridge, Shelley, Keats. And all through this century the sonnet literature has accumulated. Every year adds its volumes, every week its specimens. The two greatest poets of our time have indeed done little. But for this we have been amply recompensed by the brother of the one and the wife of the other. Charles (Tennyson) Turner published four volumes of sonnets, containing many that are exquisite; and the sonnets from the Portuguese addressed by Mrs. Browning to her husband are worthy to rank between the sonnets of Milton, and the sonnets addressed to Liberty by Wordsworth. She restored the notes to Love but Love that was Glory too. Of the other poets of our time, the late Mr. G. D. Rosetti has obtained the highest place among sonnet writers, while Mr. Arnold and Mr. Swinburne have in this favourite composition displayed their respective excellences as poets, and a host of minor poets and poetesses have swelled the sonnet literature of our age.

It is natural that such a movement of the poets should be attended with a corresponding investigation of the critics, and accordingly in recent years many studies have appeared both of the sonnet structure and of the work of the highest masters. Mr. Mark Pattison, the accomplished rector of Lincoln, who had already done valuable work on Milton, has now given us in a perfect little volume, a complete study of these immortal utterances. The notes are adequate; and the introduction on the sonnet and on Milton's use of it is a valuable essay. The only thing further to be desired is a cheap edition for the sake of students and for every day use.

The sonnet is often regarded as the most artificial and elaborate of poetical compositions. It may with equal truth be said that it is of all the least so. To the imitator or unsympathetic reader, dazzled by lines and rimes, seeing only from the outside and wondering what it means, the structure may seem difficult or capricious. But the poem takes its shape naturally from an inner necessity of the mind. It is the crystal of a noble thought or lofty emotion, thus formed, made visible and beautiful for ever. There are only two absolute rules; as to matter, that it contain, developed or amplified, a single thought or idea, or thoughtful feeling, and as to form that it consist of fourteen rimed lines of ten syllables or five beats each. The former rule is of evident necessity and distinguishes the sonnet from the ode and other compositions. The authority of the second rule is doubtless prescriptive. The number of lines seems arbitrary. One might condense into twelve, what another would more naturally express in sixteen lines. Yet the number fourteen remains as a "survival of the fittest." No form based on another number has been brought into serious competition. But we sacrifice no true freedom when we cordially accept the principle thus laid down by Mr. Pattison.

"The critic should remember, if the poet does not, that rhythmic effects depend jointly on the sounds uttered and on the expectation of the ear. If there are to be no recognised rules of Sonnet composition, the hearer will be defrauded of the satisfaction which comes from the recognition of prescribed

form. The composer has rescued his one spontaneity; he has forfeited the advantage of addressing a disciplined ear. To indite a Sonnet, and at the same time to refuse obedience to the laws of the Sonnet is, as a thoughtful critic has said, to commit the absurdity of trying to have at the same time the pleasure derived from a sense of prescribed form, and the pleasure derived from a sense of freedom from prescribed form."

Doubtless Mr. Pattison means this to apply to other rules than that which fixes the number of lines and the choice of rime. But we remark that this first rule is recognised alike by those who have sought to naturalise the Italian, and those who have sought to invent an English form; by those who would place the pause after the eighth line or after the twelfth, or who would seek a unity without any pause at all. And the fact that poets so great and so diverse as Spenser, Shakespeare and Milton, Wordsworth, Keats and Rosetti should have chosen the sonnet to enshrine therein the deepest thoughts of their hearts is surely a proof that the general form is not artificial, but eminently natural and stamped with permanence.

Mr. Pattison recognises only one form, the Petrarchan or Italian, adopted by Milton, and this he hems in by nineteen rules. Accordingly he denies the name to the splendid series of Shakespeare. Those which, as he says, "mock at criticism" form a "continuous poem or poems written in fourteen line stanzas," and have "exercised a misleading effect on our Sonnettists." It is perhaps a slight defect of Mr. Pattison's style that when he makes, as he rarely does, a very questionable or erroneous statement (as here, and again when he condemns the first line of Milton's first sonnet) he does so from a superior platform, and with a supreme unconsciousness of the immediate protest of criticism. He imagines that Shakespeare knew no form, but the form adopted by Daniel and Drayton, that is to say, that he was ignorant of the work of Spenser and of a century of sonneteers, and also that in penning his immortal 154, he did not discover the defects that are so obvious to some critics. But this is scarcely credible. And it must be remembered that many of the best modern sonnets, *e g.* the admirable sonnets of Julian Fane and many of Keats, C. T. Turner and others, are in this form. A distinguished poetess (the Hon'ble Mrs. Norton) pronounced it "a better English model than that adopted by Milton." It must therefore be acknowledged that in the Shakespearian sonnet we have a distinct and unquestionable type. As a work of art, as a thing of beauty, the Petrarchan sonnet is probably superior. Its complex structure and perfect sphere we admire. But each has its own glory and excellence. A skilled critic* has remarked that the quest of the Miltonic

* Athenæum, Sept. 1, 1883.

sonnet is sonority and metrical counterpoint; the quest of the Shakespearian, sweetness; and that each form is adapted to its aim. There is more grandeur in the art and music of Milton;

> But none the less our Shakespeare knew
> Another way; by full discourse
> To show his picture as it grew,
> Worked out in many sided force.
> Then when the heart can wish no more,
> With a strong couplet bars the door.

Nor is it proper to say that only two forms are possible. Many poets have been dissatisfied with both. Spenser attempted a new form by linking the rimes together on till the twelfth. And among modern poets Keats after attaining an unsurpassed excellence in at least one form of the Italian sonnet made a notable but unsuccessful effort to invent another type. It may however be said with confidence that had that spirit lived through manhood there would have been attached to a third great name a third group of sonnets as valuable as those that bear the names of Shakespeare and Milton.

We shall now proceed to consider the sonnets of Milton. We shall first consider the structure of the Italian sonnet generally, and then we shall glance at some of the compositions individually.

II.

The Petrarchan or Italian or Miltonic Sonnet.

The distinguishing mark of this sonnet is that it is divided into two parts of eight and six lines respectively,—an octave and a sestet. It is commonly said, not quite correctly we think, that each of these consists of two quatrains and two tercets. With regard to the octave, or two quatrains, there is pretty general agreement. Theoretically, the eight lines may contain two rimes four times repeated; or four rimes twice repeated; or three rimes, one four times repeated and two twice. The first is the common. And the usual form is the *rima chiusa;* that is to say, the 1st, 4th, 5th, and 8th lines rime, and again the 2nd, 3rd, 6th and 7th. And indeed Mr. Pattison regards this as the only form; recognises no other. But even with the two rimes it is possible to have them alternating; as in the sonnet of Gray where the stanza, which in the elegy he has made peculiarly his own, is preserved. The method of four rimes, that is, of separate rimes for the two quatrains, is alien to the spirit of this sonnet. But the division into three rimes—one rime for lines 1, 4, 5, 8, and separate rimes for 2, 3 and for 6, 7—is legitimate. Indeed it may be questioned if any poetic advantage is gained from having the same rime in the middle lines of the two quatrains, anything except the beauty of rounded form and the trained pleasure of expectancy.

And we find that the third rime is occasionally introduced by such poets as Hartley Coleridge and Matthew Arnold. Still the first form adopted and uniformly used by Milton has ever since exercised an almost supreme sway.

On the sestet there is more to be said. Six is twice three or thrice two or four *plus* two. Accordingly we must have either two or three rimes. Many forms are possible, but two are pre-eminent in authority.

(1.) Thrice two or three pairs. The rimes may be in the form represented by *a b, a b, a b* ; that is to say the 9th, 11th and 13th lines may rime together, and the 10th 12th, and 14th ; or, the rimes alternate. Forms however are legitimate which may be regarded as modifications of this ; in any one of the pairs the rimes may be transposed. We may have *b a, a b, a b* ; or *a b, b a, a b* ; or *a b, a b, b a*. Of Milton's sonnets seven (1, 8, 13, 15, 19, 23, 24) are of the perfect form ; two (12 and 16) are of the form *b a, a b, a b*.

One advantage of this form is that it introduces only two rimes. It is the form adopted by Gray, approved by Byron, used in the best sonnets of Keats, and in the sonnets from the Portuguese and most of the others of Mrs. Browning.

(2.) Twice three ; two balancing tercets ; of the form *a b c, a b c* where the ninth and the twelfth, the tenth and the thirteenth, the eleventh and the fourteenth are made to rime. This too is subject to variation, especially of the form *a b c, b a c* frequent in Petrarch. Milton has five of the perfect form (9, 10, 18, 20 22) ; and two (2, 14, with also two of the sonnets in Italian, *viz.* 3 and 7) in this modified form.

This method contests with the former the claim to be the more approved.

In the comparison of these methods the first thing to be deprecated is the opinion that only one is legitimate. To say that there must be only two rimes is pedantry or folly. We must seek some reason in the movement of thought or the structure of organism for any preference. And we think it is easy to find when the one should be chosen and when the other. If there is to be a pause in the middle : if there are to be really two tercets, if we desire counterpoint, thought balancing thought, or the ebb and flow of a second wave, then not the first but the second form is to be preferred To have a two-fold division of thought and yet three pairs of alternating rimes ; to have a semi-colon or full stop after the eleventh line and yet the tenth riming with the twelfth is in our opinion the

divorce of fact and form ; the loss to the ear of poetic effect, the gain only of confusion. Similarly we say that where there is no pause at or near the close of the eleventh line, where there is no balance or counter-point this second form is scarcely admissible ; where there is a semicolon, as sometimes happens, at the close of the tenth and of the twelfth line its employment is utterly inappropriate. The first form is used most naturally when there is unity without division or when there are not one but two slight pauses ; when, it may be, a single thought is expressed and two or more illustrative touches are added.*

No rule is absolute. It is perhaps a law of formal laws that they should be occasionally broken. For nothing destroys the spirit of a law so much as a slavish adherence to its outward requirements. An occasional transference of rimes, or change in the position of a pause may therefore be desirable. But the poet in such cases must be guided by his inner sense of what is best. Every change must justify itself by propriety or pleasing. The arrangement of form must correspond with the arrangement of thought. Rimes must not be used by haphazard or external necessity. Rime has a purpose, without the fulfilment of which it is worse than useless. Sound must not puzzle or confuse. The ear if trained, should know what to expect and should not be disappointed. When the first three lines of the sestet are heard it should be able to construct for itself the form and music of the three that are to follow.

(3.) Many forms, we said, are possible, and many poets, *e. g.* Wordsworth, have freely used variety of form. The only sonnets of Milton not included in the above classification are the 17th and 21st. In the latter the form seems to us not justifiable ; in the former it is open to considerable discussion. Mr. Pattison lays down the rules that not only must a rime of the octave not be repeated in the sestet ; but that the same disposition of rimes must not be repeated. By this rule we cannot have such an arrangement as *a b, b a, a b* since either in the first or the last four lines we have the form already given in the quatrains. This is part of the theory, that with

* Critics are in the habit of saying that owing to the fewness of rimes in our language the use of three rimes in the sestet is permitted as a relaxation—a ridiculous statement seeing that rimes are without difficulty repeated four times in the octave. The poets' reasons are different. The *terza rima* of the Italian has scarcely been naturalised. It has not commended itself. And in the first tercet of a sonnet the poet may desire unfettered freedom in the statement of a full condensed thought. Milton's practice will be found to accord with our distinction. Of his nine sonnets with two rimes in not one is the sestet divided into two equal parts. Usually the pause is at the end of the twelfth line. On the other hand, when the second method is employed the pause is in or near the middle.

the sestet there should be a change or new departure in the thought. Form should answer to substance. But the rule is a sweeping one, condemning as it does many excellent sonnets. Yet it is worth considering. If the sonnet really consists of two parts a highly trained sense expects a new form as well as varied thought; and in our groping towards the ideal we may come to recognise the validity of this principle.

There is, however, one other form of three rimes, which is not a modification of the above mentioned, and which from its correspondence with the division into tercets, and its natural simplicity seems to us well suited to the sonnet. The form is *a a c, b b c*. We give an example from Rosetti in words which were an early foreboding of his fated life.

O love, my love! if I no more should see
Thyself, nor on the earth the shadow of thee
Nor image of thine eyes in any spring.
How then should sound upon Life's darkening slope
The ground-whirl of the perished leaves of Hope,
The wind of Death's imperishable wing?

(4.) One other question of form we put before we pass to a larger and concluding question. Can the sonnet end with a riming couplet? The last of Mr. Pattison's rules of form says no. And with this agrees the general verdict of critics. Yet before Milton every English sonnet ended with a couplet and many good modern sonnets (the one at the head of this paper is an example) end so. Milton rejected this form: or he used it only in three sonnets written in Italian in his youth and in the sonnet on Cromwell, which is capable of a different analysis.* But critics show more annoyance from this single supposed use of it than gratitude that he practically displaced it from our literature. With this we may connect the question whether a sonnet should move towards a climax or not, whether it should end quietly or "kindle into a flame as it expires." We agree with Mr. Pattison that there should be no climax or abrupt termination, but at the close an "even subsidence." This does not necessarily imply that there should be a loss of strength at the end, and we think it desirable that the last line should be pre-eminently a line of beauty. But no riming couplet could close a poem so beautifully as this:

Even like the passage of an angel's tear
That falls through the clear ether silently.

The riming couplet, thanks to the still enduring influence of Pope, is associated with epigrammatic brilliance or sparkling wit,

* This Sonnet may be arranged thus, *a b b a, c c*, or in two tercets, *a b b, a c c*.

not with calm thought or lofty sentiment. We do not say that this is its necessary character, yet it is alien to the type of sonnet through whose two parts there is a pervading unity and which seeks in its close, not condensed thought or sudden surprise but quiet dignity. There is, however, another question that may be raised. Is the division into two parts the only legitimate one? Wordsworth once expressed the opinion that the sonnet should "have a beginning, a middle and an end," should "consist of three parts like the three propositions of a syllogism, if such an illustration may be used." We believe that this view is legitimate and if so that an octave, an ordinary stanza, and a riming couplet should be the corresponding form. But such a form has had no maker. To employ the riming couplet in the Italian sonnet is to keep up multiplicity of form such as perplexes the ear without bringing the slightest poetical advantage. Until a sonnet with the threefold division has been established, or until in some other form the sanction of high authority and unquestioned success has been obtained, the riming couplet must be confined to the Shakespearian sonnet.

The concluding question to which this leads us, concerns the division or sub-division of the poem. According to Mr. Pattison there should be a lesser pause at the end of the first quatrain; and a greater pause and turn over at the close of the octave. Then the opening of the sestet should "turn back upon the thought or sentiment, take it up and carry it forward to the conclusion." The justice of this remark can scarcely be doubted. We see it well illustrated in a sonnet of Keats when the first line "The poetry of earth is never dead" is repeated in the ninth line in the form, "The poetry of earth is ceasing never;" or in a sonnet of Matthew Arnold when the half of the first line is thus repeated, "Even in a palace"! But this rule Milton is supposed not to have observed. Mr. Pattison calculates that in at least six the larger pause is kept but that in the "great majority of the sonnets the rule is wholly neglected." He is at a loss to decide whether "this neglect is intentional or to be ascribed to imperfect mastery of the form." Mr. Hall Caine, a distinguished critic, argues that in this neglect Milton invented a new form which is English in impetus though half-Italian in structure; while another critic already referred to believes that "by blending octave with sestet Milton missed the very object and end of the Petrarchan scheme." With this consent of criticism we cannot entirely agree. First as to the facts. Our figures are nearly the reverse of Mr. Pattison's. We find that not in one-third, but in two-

thirds the full pause at the end of the octave exists. In all the sonnets up to the sixteenth (except the sonnet on his *Tetrachordon*, where the pause is at the end of the ninth line, and where the materials were somewhat intractable) we find the main division preserved, and generally speaking the sub-divisions also. In two the full pause is not so apparent; in the first where the octave is not well closed, but where the sestet is a perfect example of the first kind mentioned above; and in the twelfth where the eighth line may go either with what precedes or what follows. When we come to the sixteenth, written some years later and when the poet was now in his forty-fourth year we find for the first time the pause carried over to the third beat of the ninth line. This is exactly repeated in the next, the sonnet on Vane. In the two that follow, the 18th and 19th written, one at least, in 1655, another method seems to be attempted. There is not so much a distinct pause, as an intermediate sentence dividing the two main parts from each other. In the next two, written about the same time, there is a return to the original form. In the twenty-second the pause is in the ninth line in the middle of the second beat. In the twenty-third or last, the pause is grammatically at the close of the ninth line, but in fact the turn of thought may be regarded as having taken place in the middle of the line as in the sonnets on Cromwell and Vane.* What we find then is that in the sonnets written by Milton, before the completion of his fortieth year the regular pause is aimed at; but of the eight later sonnets written between 1652 and 1658, this rule is strictly observed in only two, and in two that differ from the others in being of the light and playful kind, and addressed to personal friends. But the six in which he deliberately departs from the recognised form, are the great sonnets of Milton. They are the sonnets on the Massacre in Piedmont, on the Death of his Wife, the two on his Blindness, and the sonnets addressed to Cromwell and Vane. Only one or two of the others can be classed with them; and when we think of the sonnets of Milton, these are foremost in our minds. How then are we to explain this fact? Wordsworth was of opinion "That this was not done merely to gratify the ear by variety and freedom of sound, but also to aid in giving that pervading sense of intense unity in which the excellence of the sonnet mainly consists." It does not occur to the poet, as to the critic, that Milton in his better work made a mistake. But a sufficient explanation can easily be given. Milton, as a poet, abounds not in thought but in imagery. His sentences naturally expand. And he lived before the age when short clear sentences were coined in prose or verse. Thus as the sonnet, Avenge O Lord! has been called a single collect, so in the address to Cromwell, he heaps up description, and only in the closing lines gives utterance to his thought. Again the pause in the second or third beat of the line is surely what we should expect; it is a distinctive mark of the grand style, imperfectly formed in the *Comus*, but perfect and familiar to us in Paradise Lost and Paradise Regained. The river displays its strength and grandeur by overflowing its banks. We see the evolution of his thought; we are in the folds of his splendid robe. But yet another distinction can be given. Some sonnets consist of thought borne on in gentle feeling; others give utterance to passion deeply charged with thought. Of this latter kind are the six that refuse to be regular. It is feeling, not thought, that predominates. Such feeling requires and assures unity. Minute regularities are impossible and unnecessary. A great sonnet of this kind is its own justification. It is the breath of inspiration. It does not transgress, it transcends the rules of the most perfect art.

* The criticism of the minor pauses is similar. But in some even of the first publication the turn in the middle of the sestet is not at the close of the line; *e.g.* in the ninth sonnet it is in the middle of the eleventh line.

But while we thus recognise the unquestionable authority and right of the supreme masters, we are not to become their copyists, or to frame our standard from their individuality. Poets of feeling will naturally attend more to the unity than the harmony of the parts; they may ignore the minor pauses, and even blend octave with sestet. But not in these so much as in the poets that are at once artistic and predominantly intellectual must we seek the ideal form. We shall close our consideration of the structure of the Miltonic sonnet by quoting an example which, though not faultless in expression is, we think, perfect in form, and, though printed for the first time the other day, was written ten years before Mr. Theodore Watts formulated and poetically uttered his wave-theory. The student will observe the subdivisions of each part, quatrain answering to quatrain, tercet balancing tercet. The author is Mr. Browning: the modern Helen is the famous beauty the late Countess of Dufferin.

Who hears of Helen's tower may dream perchance
How the Greek beauty from the Scaean gate
Gazed on old friends unanimous in hate
Death-doomed because of her fair countenance.
Hearts would leap otherwise at thy advance
Lady to whom this tower is consecrate;
Like hers, thy face once made all eyes elate,
Yet unlike hers was blessed by every glance.

The Tower of Hate is outworn, far and strange:
A transitory shame of long ago
It dies into the sand from which it sprang.
But thine, Love's rock-built Tower, shall fear no change:
God's self laid stable earth's foundations so,
When all the morning stars together sang.

When we proceed to examine these sonnets individually we assign, in accordance with the unanimous judgment of critics, the first place to the sonnet on the Massacre at Piedmont. It contains indeed no original suggestion, no profound thought. Mr. Pattison finds in it "a familiar quotation for its only thought" and "diction almost below ordinary" and learns from it that the "poetry of a poem is lodged somewhere else than in its matter, or its thoughts or its imagery, or its words." And he adds finely "the poet hath breathed on us and we have received his inspiration." Yet the explanation is not difficult. The poem is a sustained imprecation. Its excellence is entirely due to the feeling it gives utterance to. Now the distinguishing excellence of poetry is not the intellectual element. Many there are who still in secret sympathise with the Johnsonian criticism. They look for thought and find little. We are all indeed in the habit of over-estimating intellectual merit, not realizing how little it enters into the higher merit of character; and similarly we deprecate feeling, as in some of its manifestations it seems akin to folly. But feeling rightly understood is the true test of the soul's worth. The moral sense, the sense of beauty in nature or art, the realisation of poetry, the possession of religion are all more truly states of feeling than of thought. Both elements, it is true, are fused in every higher exercise of the soul. The spirit of reason and of love—not of reason alone or of love alone, is said to be the essence of religion. And so of poetry But when the thought is deep and difficult the higher feeling cannot be present. "Simple, sensuous, passionate"—these are words by which Milton himself with perfect insight defined the essence of poetry. The thought and the imagery may be familiar, but the passion is in the depths of a mighty soul.

Thus we understand the solitary grandeur of this sonnet. Wrath, resentment, indignation—these are seldom justified as they are felt. Only once in a generation or in a century can one nation righteously appeal to heaven for vengeance on another. But as the instances are rare, so the emotions called forth are singularly noble. To this hour Englishmen of every party, cavalier as well as democrat, look with pride on the page of their national story which tells how the voice of England that found utterance in the Miltonic muse and in the

despatches from the same pen that carried the thoughts of the great Lord Protector, thrilled the Continent of Europe, compelling tyrants to repress their cruelty and ruthless potentates to turn their wrath upon their own. It is a period that has but one historic parallel when in our own day one worthy to be named with Milton through the ages, in response to the same tale of outrage and slaughtered babes and mothers hurled from his retirement, by voice and by pen, words of winged wrath that echoed through every vale of Europe, prophetic of a new dawn of liberty and hope, "amid the overcharged emotion of a shuddering world."

Of the others it may be said that they all either give expression to a personal mood or are addressed to individuals, personal friends or public characters. This is true of the first and eighth which embody a conceit, in the one of love, in the other of poetic art, as well as in the others to which it more directly applies. A single meditation then, or an utterance of friendship and admiration—these are the purposes for which Milton employs the sonnet. It had already been used for friendship, as by Shakespeare. A sublime egoism belonged to the character of Milton, and for his self-studies he found or made the sonnet a fitting vehicle. Its calm dignity is suited to lofty personal feeling and the use is one which will be made by poets of certain types in all ages.

We give the preference to those sonnets of which the distinguishing quality is pathos. Two are in memory of the dead and two on his personal affliction—the loss of sight. And in several of the others this quality is more or less present. The sonnet which we regard as second, that on the Death of his wife, though in reality the description of a dream, yet owes its singular power to the combination of the two causes we have mentioned, or to the fact that he had never seen her whom he had loved and lost. Everything that can bring us into sympathy with his sorrow seems gathered up in the too real imagery of the concluding line,

I waked: she fled, and day brought back my night.

The two devoted to his blindness are totally diverse but equally excellent. The one (the nineteenth) is full of thought and contains the lesson he had learned of patience, and the peace of triumph in his soul. For "tribulation worketh patience, and patience experience, and experience hope, and hope maketh not ashamed." No finer sentiments are to be found in Milton than these. "Who best bear his mild yoke they serve him best. His state is kingly; thousands at his bidding speed: They also serve who only stand and wait."

The other (the twenty-second) is an example of word painting and word music, formally addressed to a friend and ending with the noble and sustaining pride that he had sacrificed his sight not in vain, but in the noble defence of liberty.

From this we pass to the other sonnets in which political is blended with personal feeling. Of the eight addressed to individuals, the three to Cromwell, Fairfax and Vane are, and in descending order of merit, perhaps the best. Milton was emphatically a public-spirited man. And his lot was cast in terrible times. In every department of thought and life he was the foremost defender of liberty. Of all the worshippers of that "eternal Spirit of the chainless mind" he was the truest and most fearless. But the freedom he sought was to be attained through truth, was to be founded on wisdom and goodness. Cromwell was the one public man of the time who shared with him a wise love of liberty, and to him, even before the days of the Protectorate "chief of men," the man perhaps whose "large fair front and eye sublime" declared his fitness to rule, he made this noble appeal for the saving of "free conscience." Both in this and the one addressed to Fairfax the lesson beautifully taught is the nobler task of peace—the deliverance and triumph of truth and right. Equally admirable, in its lighter mood, is the description of Harry Vane; and in these three we mark an appreciation of types of character that were very various, of a width of sympathy that was scarcely possessed by our greatest student of that age.

One word in conclusion. Of these sonnets four are addressed to woman; two in memory of the dead, one to a "virgin wise and pure," and one to a lady of high rank with whose friendship he was honoured. Each is a delightful portraiture by the sure and delicate skill of a master. It has been the lot of Milton's memory, although he has given us in Eve what Mr. Bagehot called "one of the most wonderful efforts of the human imagination," that in this relation of life he has been misunderstood and misrepresented. The difficulties of his first marriage, and the lofty severity of his character may have given occasion for the formation of an opinion which has been fostered by an eighteenth century legend of harshness to his daughters. We cannot here enter into the matter, and it is in any case impossible to bring the popular mind, too ready at all times to think with pleasure of the infirmities of the great, into intelligent sympathy with a highly intellectual and poetic life, with the life of one "dowered" as Milton was "with the the love of love." Within the last three years we have seen the same falsehood renewed of another scarcely less great—perhaps the only other man in our literature who devoted himself to his life's work with the same sense of the sacred dignity or divinity of his calling. But we may ask where in literature are to be found words of more tender grace than those in which Milton tells how she whom with the eye of sense he had never seen—

> Such as yet once more I trust to have
> Full sight of her in Heaven without restraint,
> Came vested all in white, pure as her mind.
> Her face was veiled; yet to my fancied sight
> Love, sweetness, goodness in her person shined
> So clear as in no face with more delight.

R. SCOTT.

ON ATMOSPHERIC ELECTRICITY, THUNDERSTORMS AND LIGHTNING CONDUCTORS.
PART II.

Although the general phenomena of thunderstorms are too familiar to need anything like a detailed description, there are some considerations respecting them which are not only interesting, but may probably be new to some of my readers.

Lightning has been divided into three distinct forms, namely, forked, sheet, and globular, of which the second is by far the most common, and the last the most rare.

Sheet lightning is, as a general rule, ascribed to the illumination of a cloud by a flash of lightning which is hidden by the cloud. Thus it frequently happens that only the outlines of a cloud are illuminated. Of globular lightning, which seems of a different order from the first two, and has never been properly explained, we shall speak further on.

Wheatstone has shown that the duration of a flash of lightning is less than the millionth part of a second. Coupling with this the estimate of Professor Swan that it takes, at least, one-tenth of a second for light to produce its full effect on the eye, it follows that, bright as appears the illumination of the landscape by a flash of lightning, the effect on the eye, and therefore the apparent illumination, is less than the one hundred thousandth part of what it would be were the illumination of the landscape permanent.

When lightning strikes a sandy soil it bores a hole in it, fre-

quently many feet in length, lined throughout with vitrified sand. The old notion was that the sand was pierced by an exceedingly hot body, which forced the sand on one side during its passage, and melted that with which it came in contact; hence the name thunderbolt, which we sometimes hear used even now.

The sparks from a small induction coil are able to pierce holes in paper, and holes have been pierced through three inches of glass by sparks from large coils, so that it is not at all necessary to imagine that the passage of any solid body is required to produce these tubes in the sand, or fulgurites as they are called. They have been in fact imitated exactly by passing sparks through pounded glass.

There is no doubt a prevalent idea that when we see a flash of lightning we see electricity. Whatever electricity may be, we certainly do not see it in the lightning flash, nor is it at all likely that it is ever seen as an object at all. What we really see are the effects of electricity on matter. Thus, in a flash of lightning, the path it takes is intensely illuminated, but this illumination is due to the enormously high temperature to which the air in that path has been raised. It is in fact rendered incandescent in the same way as the carbon filament in an incandescent lamp, but in a very much greater degree. This sudden rise in the temperature of the air in the path of the flash causes as sudden an expansion in its volume, and to this sudden expansion is due the noise which is heard in the thunder.

The rolling of thunder is due to two causes combined, the one of which is familiar to us all, namely echo or the reflection of sound, but the other cause is the more interesting of the two.

We may take it for granted that the sound is actually produced at the same moment at every point in the path of the flash, but these points are not all the same distance from the ear, and as sound takes time to travel, it does not reach the ear simultaneously. The path moreover is not at all regular, so that for a considerable distance it may be nearly equidistant from the ear, and as we receive at one moment the whole of the sound from that part of the flash, the sound coming from that part will be very intense; but on the other hand, the path may be almost in a line directly from or to the ear, and in that case a continuous sound would be heard of greatly diminished intensity. Between these two extremes the path of the flash is continually changing and to this cause is due the rumbling and crashing of the thunder.

We have now to speak of globular or ball-lightning, and we may say at once that we are perfectly ignorant as to its cause and nature.

I have never seen lightning of this form myself, and I think I cannot do better than quote Profressor Tait on the subject.

"We now come to an exceedingly strange and somewhat rare phenomenon, to which the name of fire-ball or globe-lightning has been given. As we are as yet unable to produce anything of this kind by means of our electrical machines, some philosophers have tried to cut the Gordian knot of the difficulty by denying that any such thing can exist. But, as Arago says, "Oú en serions nous, si nous nous mettions á nier tout ce qu'on ne sait pas expliquer?" The amount of trustworthy and independent evidence which we possess as to the occurrence of this phenomenon is such as must convince every reasonable man who chooses to pay due attention to the subject. No doubt there is a great deal of exaggeration, as well as much imperfect and even erroneous observation, in almost all of these records. But the existence of the main feature (the fire-ball) seems to be proved beyond all doubt."

"The most marked peculiarities of this species of lightning discharge are its comparatively long duration and its comparatively slow motion. While a spark, or lightning-flash does not last longer than about a millionth part of a second, if so long, globe-lightning lasts from one to ten seconds, sometimes even longer, so that a sufficiently self-possessed spectator has time carefully to watch its behaviour. The general appearance is that of a luminous ball, which must be approximately spherical, because it always appears circular in outline, slowly and steadily descending from a thunder cloud to the ground. It bursts with a loud explosion, sometimes before reaching the ground, sometimes as it impinges, and sometimes after actually rebounding. Its size varies from that of a child's head to a sphere of little less than a yard in diameter. On some occasions veritable flashes of lightning were seen to proceed from large fireballs as they burst. It is difficult to imagine what these balls can be if they be not a species of natural Leyden jar very highly charged. If it be so, no ordinary lightning-rod can possibly prevent danger from it; and we may thus be able to explain the very few cases in which damage has been done by lightning to thoroughly protected buildings. To guard against this form, nothing short of a pretty close net-work of stout copper wires would suffice. Meanwhile I gave a brief sketch of two out of the long series of descriptions of such phenomena which Arago has patiently collected. The first is given on the authority of Babinet, who was deputed by the Academy of sciences to make inquiries into the case."

"Shortly, but not immediately, after a loud peal of thunder, a tailor who was sitting at his dinner saw the paper ornament which covered his fire-place blown down as if by a gentle breeze, and a globe of fire, about the size of a child's head, came gently out and moved slowly about at a slight elevation above the floor. It appeared bright rather than hot, and he felt no sensation of warmth. It approached him like a little kitten which desired to rub itself in play against his legs; but he drew his feet away, and by slow and cautious movements avoided contact with it. It remained several seconds near his feet, while he leaned forward and carefully examined it. At last, it rose vertically to about the level of his head, so he threw himself back in his chair and continued to watch it. It then became slightly elongated, and moved obliquely towards a hole pierced to the chimney about a yard above the mantel-piece. This hole had been made for the chimney of a stove which was used in winter. 'But,' as the tailor said, 'the globe could not see the hole, for paper had been pasted over it.' The globe went straight for the hole, tore off the paper, and went up the chimney. After the lapse of time which, at the rate at which he had seen it moving, it would have required to get to the top of the chimney, a terrific explosion was heard, and a great deal of damage was done to the chimney and the roofs around it."

"The next is even more striking: In June, 1849, in the evening of one of the days when cholera was raging most formidably in Paris, the heat was suffocating, the sky appeared calm, but summer lightning was visible on all sides. Madame Espert saw from her window something like a large red globe, exactly resembling the moon when it is seen through mist. It was descending slowly towards a tree. She at first thought it was a balloon, but its colour undeceived her; and while she was trying to make out what it was, she saw the lower part of it take fire ("*Je vis le feu prendre au bas de ce globe,*") while it was still some yards above the tree. The flames were like those of paper burning slowly, with sparks and jets of fire. When the opening became twice or thrice the size of one's hand, a sudden and terrific explosion took place. The infernal machine was torn to pieces, and a dozen flashes of zig-zag lightning escaped from it in all directions. The débris of the globe burned with a brilliant white light and revolved like a catherine-wheel. The whole affair lasted for at least a minute. A hole was bored in the wall of a house, three men were knocked down in the street, and a governess was wounded in a neighbouring school, besides a good deal of other damage."

We now come to the practical and really the most important part of our subject, namely, the best means of protecting our buildings from the effects of lightning.

The Lightning Conductor, like vaccination, has had its opponents, but it is believed that, in the present day, every one to whose opinion any weight can be given is in favour of its use. In every authenticated case of damage to a protected building it has been shown that the failure of the conductor was due to its faulty construction. It may I think be laid down as an axiom that a faulty conductor is worse than none at all, but it is quite as true that a well-made conductor is an efficient protector of the building to which it is attached, and it is therefore most important that a knowledge of the salient features of its construction should be as widely known as possible.

A conference was appointed in England in 1882, to consider the whole subject of lightning rods as they are now called.

The members of this conference have given their final decision on many points on which there had been a difference of opinion, and they have made one important suggestion which we hope to see adopted in all lightning rods of the future, and, as far as possible, applied to those at present existing.

A lightning rod, properly constructed, should fulfil two functions, the first and more important being to prevent disruptive discharge in the neighbourhood of the protected building, by silently neutralizing those conditions which tend to determine such discharge; the second function a well-made rod is probably seldom called upon to perform, but it is most important that it should be properly qualified to do so. This duty is to carry off harmlessly any discharge that may pass between it and a cloud.

It has been a favourite argument with the opponents of lightning rods that they attract lightning, and it is necessary that we should understand how far this is true. A lightning rod by being a better conductor than the surrounding bodies, necessarily within certain limits, causes the path from the cloud to the earth, through itself, to be a line of least resistance, and therefore, should the conditions be such as to determine a discharge in the immediate neighbourhood of the conductor, that discharge, choosing the path of least resistance, would pass through the conductor, rather than through the less conducting bodies in its neighbourhood. It thus, as Faraday said, virtually attracts a discharge, but it is on this very ground that the value of a lightning conductor depends, when one only of its functions is taken into consideration; for if it did not determine on itself

the flash, and so prevent its falling on any other part of the area it protects, it would not be performing its second function properly, and the building would be only protected by the power of the conductor to avert the flash, by breaking down the conditions necessary to its production.

As to the actual space protected by a conductor, we have very little to guide us, and the opinion of the conference on this subject must be taken for what it is worth. This opinion is that the space protected is that included within a cone, the radius of whose base is equal to the height of the conductor above the ground. Emile Locoine believes that the space protected varies with the height of the cloud, and the elevation of the ground, and this is probably true.

In the construction of a conductor the two most important points to be attended to are the metallic continuity of the rod from the top to the bottom, and the perfection of its contact with the earth. It is not sufficient that these should be tested and found perfect after the erection of the conductor, but they should be periodically tested, say once every year, in order to be sure that no damage has been done to any part of the rod and that the joints are sound.

The upper part of the rod is called the upper terminal, and the decision of the conference on this part of the conductor is the most valuable result of their deliberations. They recommend that the rod itself should have its upper end merely bevelled off, and not pointed; so that it would not be melted in the event of a disruptive discharge falling upon it; at the same time, having regard to the importance of silent discharge from fine points, they suggest that, at one foot below the extreme top of the upper terminal, there should be firmly attached, by screws and solder, a copper ring bearing three or four copper needles, each six inches long, and tapering from $\frac{1}{4}$ inch diameter to as fine a point as could be made; and with the object of rendering the sharpness of the points as permanent as possible, they advise that they be platinized, gilded, or nickel-plated. All fineals or other metal work on the top, and indeed in any part of the building should be in perfect metallic connection with the conductor.

Iron and copper have been the only materials used for lightning rods. Iron has the advantage of greater strength, and should in all cases be used for that portion of the rod projecting above the building, except the extreme top, which had better be of copper. As regards the rod itself, leading from the upper terminal to the earth plate, I have generally used iron which should weigh not less than 35 oz. to the foot. The members of the conference recommend

round rod $\frac{5}{16}$ inch in diameter, but copper tape weighing 6 oz. to the foot, and about $\frac{3}{4}'' \times \frac{1}{8}''$ in section is more easily applied, and is now made in sufficiently long continuous lengths, so that joints may be avoided. If this tape can be protected from theft it is probably the most suitable for general use. All joints must be well soldered so as to complete the metallic continuity throughout. The rod should be attached to the building by fastenings of the same metal as the rod itself. The earth plate is the most important part of the whole, and we cannot close this article better than by quoting the report of the conference on the subject.

"As a general rule we advise the soldering of a plate of metal, copper to copper, iron to iron, to the lower end of the conductor. The earth plate should always be of the same metal as the rod, otherwise destructive galvanic action sets in. This plate, which may be flat or cylindrical, must not have less surface than 18 square feet, *i.e.*, 9 square feet on each face; there is no advantage in notching or pointing it. A hole must be dug, or a well sunk, to receive this plate, and the hole must be so deep that the earth surrounding the plate shall never be dry. Any available drain or other water should be allowed to soak into the earth near the site of the plate. After the hole has been dug, and the plate lowered into position, it should be filled with cinders, or coke. In extremely dry rocky localities, it is sometimes impossible to fulfil these conditions: then the best thing to do is to bury three or four hundred weight of iron at the foot of the conductor, still using the earth plate and the coke, and taking especial care that the rain-water and sink pipes discharge over it.

All drains, water-courses, in fact everything which will assist in distributing the charge over a large extent of moist earth should be utilized by leading branches from the earth plate to them, or a long length of the rod may be laid in a drain, if it be one which will be constantly wet."

I have only to add to this that the part of the conductor which is underground should be turned away from the building, the pit in which the earth plate is placed being six or eight feet from the walls. The rod throughout its length should be protected by paint or tar and if copper be used it should be protected from theft by being run through an iron gas pipe, say for ten feet above the ground, and in any other accessible positions.

G. K. WINTER.

THE STUDENT'S TWILIGHT ON THE SHORE.

Oft he loves alone to ponder
When the sun has sunk to rest,
By the Ocean's brink to wander
Gazing on his darkening breast,
Musing on the ancient story
Of the world, its blame, its praise,
Questioning the billows hoary
What they know of ancient days.
For there comes a weary sighing
On the laden wings of Time
From souls that swan-like sang though dying
Many a song sublime;—
Weary, weary, with their asking
What the hidden truth might be
That should aid them in unmasking
This world's painful mystery:—
How it was that evil enter'd
On a world so bright and fair
And how all that evil center'd
In the world's triumphant heir.

So they sought and questioned vainly;
Never answer reached their ears;
Nature whisper'd, but not plainly,
"There may yet be brighter years.
Yet a time the earth may gladden
When this darkness shall be bright,
When the thoughts your hearts that sadden
Shall be chased away in light."
Tell me then thou ancient Ocean
What deep truth the ages bear
That can still the heart's commotion
And make strong to do and dare.
Thou the lasting! thou the glorious!
Truth there must be hid with thee
That can make the soul victorious
O'er this sad earth's mystery.
But the billows answer only:

"We are what we used to be,
We are still as wild and lonely,
We are still as bright and free,
As when these stout hearts were straining
For the good they ne'er should see."

Mute the waves to his complaining,
Thus his thoughts pursueth he.—
Men, they know not whence come hither,
Call their offspring by their name,
Then depart, they know not whither,
While the waves are still the same.
Many an age unknown in story,
Many a cycle, by has past
Since the Day its boundless glory
First on those broad waters cast;
And they shall remain for ever
Cruel, tameless in their range;
Time in all his course can never
Bring them any touch of change.
What to them is man's lamenting?
What to them his outcries vain?—
He departs though not consenting
Never to return again.
Dreamer, thou too like all must go,
Though treading now this dark'ning shore
As if thy years' incessant flow
Could feel no change for evermore.

See how now the west is shrouded—
All its radiance died away;
'Twill be darker yet beclouded,—
Deeper night before the day:
So have boyhood's joys departed,
Manhood's trials now are come
That will leave thee weary-hearted
Glad to creep into thy tomb.
But the quench'd orb we soon shall view
Bounding from the eastern wave:—
Could man but thus his strength renew!
Can nought avail against the grave?
Is death not fuller life's imparting?

Like the old Titanic birth
Is there for man a stronger starting
From the cold embrace of earth?

So he muses wandering lonely,
Wrapt in ocean's solemn sound,
While the waves still answer only,—
"Not in us can help be found."
Is there stronger help than Nature
To truth-seekers can afford?
Can a voice from her Creator
Anywhere be plainly heard?
Did the One that moulds creation
Speak with human lips to men?
Ages long of preparation
Were they not all wasted then?
Is earth's hope and explanation
He who died and rose again?

L. L.

LITERARY NOTICES.

THE HISTORIC FAITH: *Short Lectures on the Apostles' Creed by* BROOKE FOSS WESTCOTT, D.D., D.C.L. *Macmillan and Co.*, 1883.

Few scholars of the English Church have within recent years more undeniably established their claim to be regarded as leaders of thought and ornaments of their community than has Dr. Westcott. His critical studies on the text and canon of the New Testament call for grateful recognition, and his thoughtful essays on some of the outstanding facts or features of Christianity show that he possesses qualities of mind and heart that are of higher value than erudition alone. In this his latest volume—a series of addresses on the Apostles' Creed, with notes that make up about two-fifths of the volume—every sentence breathes the spirit of a scholar and a Christian. There is perhaps, to one familiar with the author's other works and the best writings of the age, nothing new in the text, or even in the notes, which from the point of view of scholarship are the most valuable part of the book. But the conception of Christianity that prevails in the best minds is here put forth with wealth and grace of language and with the wisdom of true piety. His title is the Historic Faith. In the opening lectures he discusses the nature of Faith and the significance of Creeds. It is true, as he says, that every one has a faith or a creed, high or low, by which he shapes his conduct; just as we may say that every one has some ideal towards which, less or more blindly, he is striving. This creed may or may not be religious, may or may not be ennobling. It at least expresses the

mind and the efforts of its possessor. Faith is not to be thought of as merely intellectual, as not essentially pertaining to life. It is rather, as Dr. Westcott strongly puts it, "the absolute condition of all life, of all action, of all thought which goes beyond the limitations of our minds." The importance then of our creed, or estimate of this universe and our relation to it, and of our possession of this principle of faith in its highest and purest activity is to us great and practically infinite. By these our destinies are moulded.

Dr. Westcott finds in the (incorrectly called) Apostles' Creed "the spontaneous expression of the life, of the feeling, of the experience of the Christian Society;" and he emphasizes the fact that it is both personal and historical; personal not merely as accepted by each believer, but as centred in a person; and historical not only as handed down through so many centuries, but as founded on events and a life that are of history. In this creed, he finds, maintained through eighteen centuries and gathered up in its simplicity, the essential elements of the faith. By it he would still interpret Christianity to the world. It does not follow from this that the mode of conceiving Christian truth has always been the same, or that there have not been important differences among Christians, especially on the subjective side of their religion. And undoubtedly not until our own day has the correct exegesis to which this work bears witness been clearly attained to. Every generation gains something, though perhaps it also loses. Dr. Westcott gives us what we recognise as the faith once delivered to the saints, not indeed in all its fulness, but without some excrescences of bye-gone centuries, and as it is apprehended by a devout and cultured spirit of our own time.

In the fifth lecture, where his subject is the Incarnate life, he dwells on the humanity and the sufferings of Christ, from the first of which he learns the "brotherhood of men whereby all, in due measure, through sorrow and effort, through failure and success, contribute to the fulfilment of the idea of creation;" and from the second "the true nature and inevitable consequences of sin, whereby the glorious light and glad hymn of the Nativity were followed by the great darkness of the Passion." The final cause of the Incarnation is a great subject for theology. On the old question whether, but for the Fall, Christ would have lived, Dr. Westcott believes, that the Incarnation would have been necessary for the fulfilment of man's destiny even though man had lived in innocence. The Passion on the other hand was necessary for the redemption of *fallen* man.

"The idea of Christ's sufferings, the idea of redemption, presupposes the idea of a Fall. Such an idea is, I will venture to say, a necessary condition of human hope. No view of life can be so inexpressibly sad as that which denies the Fall. If evil belongs to man as man there appears to be no prospect of relief here or hereafter. Sin, as old poets say, will have an endless progeny of sins. Misery will be as the shadow which we cast when the sun is brightest. There can be nothing in us to drive out that which is part of ourselves. Strict retribution is the only teaching of that invariable sequence which we call law."

Our part, however, is not to comprehend the full meaning of all this suffering of Christ, but to recognise the triumph of victorious love, and to realise the practical lessons. In "these long years of silent waiting, these long nights of secret prayer" we are to find the infinite depth and solemnity and preciousness of life, the duty for us, too, of sacrifice and the perfect offering of ourselves to God.

In the exposition of the clause which speaks of Christ's second coming in Judgment are some very thoughtful remarks. In this truth Dr. Westcott finds an ever new significance. First, Christ came at the close of the Apostolic age. "The fall of Jerusalem was for the religious history of the world an end as complete as death; the establishment of a spiritual Church was a beginning as glorious as the Resurrection." Again, "at the foundation of the Byzantine Empire in the fourth century, at the conversion of the northern nations in the eighth century, at the birth of modern Europe in the thirteenth century, at the re-birth of the old civilisation in the sixteenth century, Christ came as King and Judge." And "when new truths are spreading widely as to the methods of God's working, as to our connections one with another and with the past and with the future, Christ is coming to us, coming to judge us, and His coming must bring with it trials and (as we think) losses. Every revelation of Christ is through fire, the fire which refines by consuming all that is perishable." Thus in every great movement of thought and life, Christ is present; in all such there are divine powers, a divine purpose and a divine judgment. This judgment is not (he thinks) some conclusion or verdict, but a manifestation of truth, of the general truth that there are in all things a purpose and will to be accomplished, and of particular truth for each when our lives with their opportunities and errors and consequences are made clear in the perfect light of Christ's presence. The punishment of God—according to Dr. Westcott "is the necessary action of the awakened conscience. The judgment is pronounced by the sinner himself, and he inflicts inexorably his own sentence."

The notes, as we have already said, are valuable. Some are excellent expositions, as the notes on the Divine Fatherhood and the use of the term *Blood* in the New Testament. Some are brief essays. We give the closing sentences of the note on the Communion of Saints.

"Most of those who hear me will remember the magnificent myth in the Phædrus by which Plato seeks to explain the origin of the highest forces in our earthly being. On stated days he says, human souls follow in the train of the gods and rising above the world gaze on the eternal and the absolute....So they recognise about them during their earthly sojourn the images of higher things and again strive upwards. For us the revelation of Christ has made this dream a truth. In Him, we see perfect sacrifice, perfect truth, perfect wisdom, perfect love, and having seen it we can discern signs of His Presence in them who show His gifts. He gives unity, and they reveal to us His fulness.. ...We grow stronger by the devotion of loyal discipleship. We "see the light and whence it flows," the light which is life eternal; and the Communion of Saints, with its manifold supplies of strength, with its boundless wealth of promise, becomes a fact of immediate experience."

EVOLUTION EXPLAINED AND COMPARED WITH THE BIBLE; *by* WILLIAM WOODS SMITH. *Second Edition. London: Elliot Stock*, 1883.

The theory of evolution is just now passing through an ordeal much the same as that which geology passed through fifty years ago. When the revelations of the earth's crust were first brought to light and science began to estimate the age of the world by hundreds of thousand of years, theologians of all schools set themselves stoutly to oppose the new doctrine and to stand by the accepted chronology and the traditional interpretation of the six days of

creation. St. Augustine and Bishop Patrick had long before suggested that these days were immense periods, but to their voice the ear of theology was closed. The Mosaic record and geology were to the divines of the day manifestly and openly antagonistic, and at all costs the written word must be supported. Geology for a while became almost a synonym for unbelief, and such of the facts which it revealed as could not be gainsaid or denied were explained on hypothesis the most absurd and insufficient. The deluge was the great fortress of orthodoxy, and men who were both antiquarians and scientists openly taught that that great cataclysm was a sufficient explanation of the existence of fossil remains and of all the facts of stratification. But this did not last long. It was not possible for the living word, 'quick and powerful' to be held for ever in the bonds of death which tradition had woven for it. One by one theologians woke up to the fact that there was no necessary antagonism between geology and the Mosaic record. Dr. Buckland, Dr. Chalmers and Hugh Miller led the way, and now one of the most orthodox of modern reviews can say "They who are content with saying that all that the [Mosaic] record really teaches is the origin of all things from God, . . . surely overlook the remarkable parallelism between the lines of geological discovery and the Mosaic story. That a chaotic fluidity was a primordial condition of matter; that light is independent of sun, moon and stars; that there was an advance from the simplest vegetation, terrestrial and marine, and from the lower forms of animal life; to the more perfect flora and fauna; and that extended periods have been specially marked, now by enormous vegetation, and then by reptilian, and again by mammalian, life; while man was the last of the creatures to appear on the scene; are features of both records which manifestly agree."

Whether the theory of evolution will ever be in like manner generally accepted by theologians remains to be seen. In the form in which it is cast by Haeckel and his followers it is quite certain that it will not, for even 'unbelieving' scientists are beginning to see that Haeckelianism destroys too much—destroys in fact the very factors which evolution needs. But in a modified form—a form which discards the futile attempts that have been made to bridge the organic and inorganic, and which recognises the human spirit as the 'breath of God'—we may safely predict that it will become the accepted cosmogony of the future. Facts are becoming too strong for prejudice. Year by year there are fresh accumulations of evidence which steadily set in the same direction. Geology reveals beyond all question a *serial* relationship of organic forms, and suggests in the plainest terms an evolutionary relationship also. Upon the hypothesis of such a relationship alone can any satisfactory explanation be given of many of the more recent discoveries of geologists, such for example as the remarkable series of fossil horses discovered in the American tertiaries. Concerning such discoveries it is not too much to say that science would be utterly at sea if the evolution doctrine were given up. Embryology tends in the same direction, and indeed its witness is held by some to be even stronger and more definite than that of geology; while the well attested facts of variation, adaptation and heredity all range themselves on the same side and with one voice assert that evolution is the law of life. The evidence is thus essentially cumulative, and while it cannot yet be said that evolution has been

demonstrated, the degree of probability to which it has attained is so high as fully to justify the evolutionist in using the usual formula of his school—'it must have been.'

And yet evolution is regarded on many hands with suspicion. Theology in some quarters looks askance at it, and is much more ready to attack it as an enemy than to welcome it as a friend. Nor is theology wholly to blame for this. If scientists can taunt theologians with the crudity of their science, much more truly might theologians taunt scientists with the superficial flimsiness of their philosophy and biblical exegesis. If evolution is regarded on many hands as an enemy of religion it is because evolutionists themselves have too often put it forward in that light, and so have forced those who could not fully accept their conclusions into a position of antagonism to their whole work—a position as lamentable as untenable. It has been the misfortune of "the New Biology" to find some of its chief advocates amongst those who incline towards a materialistic philosophy, and so from its very birth the Christian apologist has treated it with doubt and distrust. This is however, now passing away, and thoughtful men of all shades of religious opinion are assuming a more generous and hopeful attitude. The advance which the doctrine of evolution has made during the last ten years, the unhesitating support which biologists of all countries have given to it, and the ready way in which the educated mind of Europe and America has accepted it, are not more remarkable than the change which has come over the mutual relations of evolution and religion. This change has been accomplished silently, without the appearance of any great teacher or reconciler, but it is for this very reason all the more true and real. It is seen, on the one hand, in the very general disavowal on the part of thoughtful evolutionists of the philosophy of Haeckel and the assertion of his school that the doctrine of evolution must sweep away for ever the crude myths of the infantile past; and on the other hand it is seen in the unavowed, but obvious, change which has come over the attitude assumed by the great reviews which lead religious thought. Theology has always been conservative and always must be so. New truths are accepted slowly. Its first impulse is, and must be, to reject every fresh candidate for popular belief. But it has never shown itself unable to accept and homologate any new truth. Nor will it now. No discovery of science has ever yet shaken the strong foundations of that word of God 'which liveth and abideth for ever.' Should the evolution theory ever be so confirmed as to be able to *demand* acceptance by every reasonable man, then when the mists of controversy have cleared away it will be seen that it does but supplement the Divine record, and make more manifest than ever its marvellous truth and beauty.

Believing this, we welcome most heartily the little book before us, though we cannot go the whole length that our author would take us. Mr. Smyth is a physician by profession and evidently a man of very considerable culture and mental power. His chosen work however is that of an evangelist and in this he professes to have been greatly helped by Herbert Spencer's philosophy. Speaking of his first perusal of the writings of this great thinker, he remarks "their manifold, and to me manifest, testimony to the truth of the Scriptures greatly interested and delighted me." But he does not accept Mr. Spencer's teaching in its entirety. He is an evolutionist—an enthusiastic

evolutionist—but he is not a materialist. Mr. Spencer's philosophy—strange as it may appear—leads him ultimately to the Athanasian Creed.

"The natural selection of past geologic eras has become the governmental election of the present historic times; the natural Exclusion and Destruction of the past has become the Governmental Reprobation and Destruction of body and soul in hell, of the present. It is now the creed of Science, as well as the creed of the Church, that 'Whosoever will be saved: before all things it is necessary that he hold the *Christian* faith. Which faith except every one do keep whole and undefiled, without doubt he shall perish everlastingly.'"

It is impossible for us to trace here the line of argument by which he arrives at this conclusion. We can only very briefly indicate the contents of the book.

Beginning with 'the great cosmic cloud' which he accepts as the primal condition of our system, he sees in it the first and only created substance. Every molecule of matter which exists now, existed then, for, (quoting Clerk Maxwell) "None of the processes of nature, since the time when nature began, have produced the slightest difference in the properties of any molecule. We are therefore unable to ascribe either the existence of the molecules or the identity of their properties to any of the causes which we call natural. On the other hand the exact quality of each molecule to all others of the same kind gives it, as Sir John Herschell has well said, the essential character of a manufactured article, and precludes the idea of its being eternal and self-existent. In tracing back the history of matter, science is arrested when she assures herself, on the one hand that the molecule has been made, and, on the other, that it has not been made by any of the processes we call natural." This first difficulty having been got over—as alone it can be got over—by accepting the biblical teaching of the free exercise of creative power, the course is clear until the appearance of life. By the operation of the great 'principles' of *segregation* and *differentiation* and under the influence of a constant loss of heat, the matter of the globe condensed and the earth "took on definiteness and order as varied and multiform as the many elementary substances in its condition determined." "Manifestly no one would think of supposing that God interfered miraculously at any stage in this great process. It is sufficient to acknowledge that His was the energy which continually wrought, and that this process was the law of His operations."

When he comes to the origin of life our author again parts company with the materialists. "The origin of life, like that of matter is beyond the realm of science. By faith in revealed truth we know, touching the origin of matter, that 'In the beginning God created the heavens and the earth,' and touching the origin of life that 'The Spirit of God brooded over the face of the waters." With living matter in an "unformed, structureless, liquid state" he has all that he requires to account for the gradual evolution of the highest plant and animal life. But when he comes to the spiritual nature of man he again introduces direct Divine influences.

"With the dawn of true mind and of considerable powers of the imagination, there came to man the consciousness of the Inscrutable Being, God, the enjoyment of life, and the longing for *immortality*. To meet these states of mind *natural* evolution had nothing to offer. Consequently a crisis in the "Descent of man" was reached. . . . From a mind trembling with awe at the stupendous array of scenic magnificence in his environment; from a mind in fear

at the resistless might and relentless comportment of the natural forces, which play around him; in sorrow, in suffering, in bereavement, and in death, in all lands and among all peoples, kindreds, tongues, the universal response of man has been his cry to a PERSONAL GOD. . . . With this, the highest, loftiest response of the Child of the Universe, the time had come in the genesis of man, if there were a living God who could hear and answer, for Him to come to the help of His creature and at once solve the mystery of his further evolution and complete equilibration, by ministering to him that guidance, protection and help which we have seen to be rigidly demanded, thus enabling him to adjust himself rightly and efficiently to the infinite states and changes of Eternity . . . When this great crisis arrived . . . the ultimate cause of the universe manifested himself as a Personal Being and came to the aid of His creature by putting him in direct obedience to Himself." Thus "when evolution had brought forth an intelligent creature . . . a true moral agent susceptible of moral government, then, and not till then, came the revelation of the Moral Governor of the Universe."

In all this we cannot agree with Mr. Smyth. Whatever may be said in favour of the earlier portions of this cosmogony, the development of a true moral agent capable of moral government from "liquid protoplasm" by the ordinary laws of natural evolution is in the present state of science a pure assumption, and to us an utterly incredible one. Mr. Smyth would have done well to make the third direct intervention of the Divine Creative power that which raised man above the level of the beasts that perish. However long the Divine processes may have been in elaborating the highly-wrought frame of man, he was surely made man,—made in the image of God, made a moral agent—when God "breathed into his nostrils the breath of life and man became a living soul."

Mr. Smyth goes much further than this, but as it is upon the lines of vague speculation and fanciful analogy we do not care to follow him further than by giving a single quotation which will sufficiently indicate the extent to which he would carry his doctrines.

"The fallen race of man was not to perish, but to be saved by a marvellous dispensation, which none but the thorough-going Evolutionist can fully appreciate as regards its philosophy. From being under Direct Equilibration they were thrust back under Indirect Equilibration. He was sent forth from the garden, to till the ground from whence he was taken. He had now *to 'struggle for the means of subsistence,'* the conception of the woman was multiplied and it was declared that of her seed would come the salvation of the lapsed race. This, in every point, is just as perfect as it could be,

THE MULTIPLIED OFFSPRING,

THE STRUGGLE FOR THE MEANS OF SUBSISTENCE,

THE REIGN OF DEATH,

THE COMING EQUILIBRATED SEED,

which would overcome the evil influence by which they had fallen and again equilibrate the race, exhibit as plainly as possible that man was again put under the great Process of Indirect Equilibration."

All this we are compelled to say is in our opinion sheer nonsense. If it is impossible to see the philosophy of redemption without expressing it in terms like these we prefer to let the philosophy go, and to content ourselves with the plain and practical faith that "God was in Christ reconciling the world into Himself, not imputing unto them their trespasses." The fact is Mr. Smyth is *too* thorough-going in his evolutionism. Everything in heaven and earth must bow down before this Theory—which after all is *but* a theory and cannot yet be considered proven in any one department of life. By this excess he mars much otherwise good work. Still on the whole we thank him for his book. It contains not a little original thought and much vivid writing, and is well worth careful perusal. He has shown—what however is not difficult to show—that the materialistic dreams of Haeckel are vain; he has pointed out where evolution alone fails; and he inculates throughout his book the only true view of evolution—viz., as the *method* of the Divine activity. And if he carries his theorizing further than either science or reason warrants, this is perhaps only the natural outcome of, and an appropriate antidote to, the teaching of those who persistently refuse to see in evolution anything more than an empty dream.

INDIAN LYRICS *by* W. TREGO WEBB, *Calcutta: Thacker, Spink & Co., London: W. Thacker & Co.* 1884.

This volume cannot fail to be interesting to Anglo-Indian readers. Mr. Trego Webb has aimed at doing in verse what Mr. Phil Robinson and the gifted 'Sir Ali Baba' have done for us in prose. Like them he has taken his themes from among the familiar figures, the sights and sounds, which environ the daily pathway of our Eastern life. Choosing for his motto the discerning remark of Mr. Edwin Arnold that "None but Anglo-Indians know what a treasure-mine of art, literature and picturesque description lies unworked in the common experiences of our life in India," he has delineated for us in a series of sonnets. Our Servants, giving perhaps an undue share of attention to the delinquent punkah-wallah. But revenge is sweet and evidently Mr. Trego Webb has suffered. These sonnets, written as it were to order, are of unequal merit but all are healthy in tone and characterised by insight and good feeling. From the second set of sonnets dealing with Ourselves and Others we select the following by way of specimen:—

THE MISSIONARY.

Sure he had need of Heavenly might to come
To this far Orient, dulled by languor's charm
And custom's frost, to lift his puny arm
Against the force inert of heathendom.
His heart, at starting, with despair is numb;
But learning soon to still his first alarm,
His half-dead hopes he seeks to nurse and warm
With Schools and Lectures, till his fears grow dumb.
And so, the old enthusiasm and the chill
Alike of early disappointment fled,
His sober days he passes, hoping still
Of the vast harvest here before him spread
To reap some ears, though few. Hath he not read
What Faith, the mountain-mover, can fulfil?

Not a few of the 'Lyrical Pieces' will touch tender chords in Anglo-Indian hearts, such as 'The Memorial Well, Cawnpore' and 'The Baby's Grave.' As a fine example of Mr. Trego Webb's powers we give the following from 'Rhymes of the P & O':—

RETURN TO INDIA.

She sits upon the deck at even,
As fades the sun's autumnal ray;

She thinks not of the purple heaven,
  But of a summer passed away;
When through sweet English woods she went,
  Farewells and partings half forgot,
And with three little children bent
  To pluck the blue forget-me-not.

She seeks her husband o'er the sea:
  He too is dear; the East is bright
With the same Love that, roaming free,
  Hath touched the West with tender light.
Yet by what loss may gains be won!—
  Too hard she deems an Indian lot:
Alone three little children run
  To pluck the blue forget-me-not.

The music strikes; and voices say,
  'Come sing us now a merry strain.'
She thrusts her foolish thoughts away;—
  Why should she live the past again?
She rose, she joined the crowd and sang;
  Yet in her dreams that night, I wot,
Three little children laughing sprang
  To pluck the blue forget-me-not.

We can assure our readers that they will find Mr. Trego Webb's volume a pleasant companion. Its subjects are varied and interesting, its style is correct almost to a fault, and its tone is cheerful and good. It is very daintily got up and reflects credit on the taste of its Indian publishers.

NOTES AND EXTRACTS.

During the last month there has been an unusual amount of excitement amongst the Muhammadan community of Madras. A certain well-known Moulvie propounded some questions of a controversial nature to an agent in the employ of the Church Missionary Society. In due course these questions were answered in the form of a pamphlet dealing with the controverted subjects. The author of the pamphlet having formerly been a Mussalman was able to deal with the matters disputed in a very trenchant manner, and with a vigour which seems to have carried dismay into the hearts of the Moulvies of Madras. Resort has been had however to weapons far more effectual from an orthodox Muslim stand-point than those of logic and reason. A persecution such as has not been known in Madras for many years has been set on foot. The 'lewd fellows of the baser sort' lose no opportunity of maltreating in the streets the author of the pamphlet which the Moulvies cannot answer, and, lest it should lead anyone to reflection, it has been decreed that whoever reads it is a *Káfir*. The Qázi of Madras with a number of other Moulvies, of whom however but a few have any right to the title, if it is to denote, as heretofore,

a man learned in the theology and law of Islám, set forth on Friday the 8th of February, in the principal Mosque of Madras, a *Fatva* declaring that all who read the pamphlet, all who send a relative to a Mission School, all who teach a Padri the Quran *or any other book whatever* should be treated as *Mustadds* (apostates) and as *Káfirs* (infidels); all religious privileges should be denied to such an one and to his relatives. Petty persecution of every kind is now meritorious in those who make it. According to Muhammadan law a Mustadd, if a man, should be put to death. This, of course, cannot be done in British India; but to call respectable Mussalman gentlemen who have instructed Padris in Urdu and Persian for years past *Káfirs* and *Mustadds*, and to put under the ban of excommunication, some of the best families in Triplicane whose boys have for years attended Mission Schools, is an act so strong that it shows more clearly than anything else could how utterly at their wits' end the so-called learned Moulvies of Madras must be, and how dire would be their vengeance if they only had power. The *Fatva* itself bears all the marks of having been drawn up in great haste and in great anger, for its decision cannot be borne out by Muhammadan law, and of being the work of some one who has lived only in the past and is utterly ignorant of the forces now at work in the world, one in whose eyes progress would be a positive evil. It is the most striking sign of the decadence of Islám that has been seen in Madras for many a day. We are surprised that such an officer as the Qázi of Madras who ought to know Muhammadan law, should have given his *imprimatur* to such a document. Instead of acting in a manner worthy of the high position he holds, he has merely exposed himself and his office to ridicule. We hope to recur to this subject next month.

On Tuesday the 12th February His Excellency the Viceroy and Staff, accompanied by His Excellency the Governor and Staff, paid a visit to the Christian College. The College was tastefully decorated by the students for the occasion. Their Excellencies were received at the entrance by the Principal and Professors of the College and conducted to the upper hall where about 250 of the senior students were assembled to receive them. Here the following address was presented to His Excellency the Viceroy.

May it Please Your Excellency,—We, the Senatus, Teachers and alumni of the Madras Christian College desire to offer our respectful thanks for Your Excellency's presence within our walls. We recognise in this visit a fresh proof of the interest which Your Excellency takes in the education of the entire community. We are aware that it is to the development of primary instruction that the attention of Government is in the meantime mainly given, and we recognise that this is the direction in which effort is at present most urgently required. But we are equally aware that as lower education spreads, the demand for education of an advanced description must steadily and rapidly increase. In this visit to the oldest institution for liberal culture in Southern India there is proof, which though not required, is yet extremely welcome, that efforts for the diffusion of knowledge of every kind, and among every class of the community, have Your Excellency's most cordial sympathy.

This College has a special character and aim, which its very name does not allow to be forgotten, but we present it to Your Excellency now rather as an example of the help which private effort may afford to the earnest endeavours of Government for the enlightenment and training of the many millions that are in this land entrusted to its care. Founded forty-seven years ago this institution was for a time the only one of its kind in Southern India; but it gives us particular pleasure to refer to the vast amount of private enterprise in education

that has long ago grown up around it. In place of a single tree there is now a far extending forest. It is one of the things for which the Managers of this institution are most devoutly thankful that it has been honoured to set an example which has helped to call agencies of the most varied description, and particularly the agency of the natives of Southern India themselves, into the vast field of education. We are confident that under the fostering and impartial care of Your Excellency's Government these various agencies and institutions will more and more feel that they are fellow-workers in a great and noble cause, so that their only rivalry will be a generous emulation in contributing as much as possible to the enlightenment, the social well-being, and above all the moral progress, of the vast population for whose good they labour.

We further rejoice that while the College has thus done much to evoke energies that without it might long have lain dormant, it nevertheless is itself stronger than it ever was before,—stronger in numbers and in staff, stronger in the confidence reposed in it by the mass of the community, and stronger especially in the loyalty and affection of its alumni, alike of the thousands of its former students who are playing their parts in life and of the fourteen hundred, of whom four hundred are under-graduates of the University, who are still being trained within its walls.

Though founded by the Scottish Church, the College is in part supported and managed by others among those benevolent Societies of Britain which are seeking the enlightenment of India; while with many other associations, both native and foreign, which aim by various methods at this common end, its relations are most cordial and close. Your Excellency's visit is thus an encouragement to all private persons and private associations which are labouring for the promotion of education in the Empire.

We cannot but express our deep regret that the deficiencies of our buildings prevent us from giving Your Excellency such a reception as we could wish. We would add that our long-felt want in this respect is at last in course of being supplied. Through the liberal grant promised by the Government of Madras, and through the help that has come or yet will come to us from Native Princes like the Maharajahs of Mysore, Travancore, Cochin and Vizianagram, as well as from other friends of the institution, both Natives and European, alike in this country and in Britain, and lastly though not least appreciated from old students in every district of Southern India, we hope ere this year closes to erect a hall in which —had it but been ready—we might have received Your Excellency more worthily.

Unable to manifest by any scenic display their deep sense of the honour done to them the Managing Council of the College now through us humbly ask leave to commemorate this much valued visit by founding a gold medal to be given annually to the student who takes his Bachelor's Degree with the highest honours in English Literature. In the name of the Council we further respectfully request Your Excellency's permission to designate this reward of merit the Ripon Gold Medal, and to use as its device Your Excellency's family arms.

Finally, in the name of all connected with the College and particularly of its students,—among whom Your Excellency's visit to our Presidency has caused an altogether unparalleled amount of joyful excitement, —we pray that the blessing of God may rest upon Your Excellency's manifold labours for the good of India, so that they may be largely fruitful of intellectual, and particularly of moral, benefit to many generations in the ages that are yet to come.

His Excellency replied as follows—

MR. MILLER AND GENTLEMEN,—It affords me much pleasure to visit this institution on this occasion. No one knows better than my friend Mr. Miller the present state of public education in India, for he has taken a leading and valuable part—which I am very happy to have this opportunity of recognising here in his own College—in the labours of the Education Commission which has just sent in its report. You, therefore, Mr. Miller, are well aware that although, as you have truly said, primary education is the special object of the Government of India, it has all along been the intention and

policy of the Government of India that primary, secondary and higher education should work and proceed forward together. What we have felt is this, that the work of education in India—that which still remains to be done to spread instruction throughout this vast land—is a work of such magnitude that at present, at all events, its complete accomplishment is beyond the power even of the British Government. Nothing would be easier than to spend many millions in the promotion of education if only we had those millions; but we have them not, and could not obtain them without resorting to a system of taxation which would be unpalatable to the people of this country, and unjust to them in their present position. Therefore we look with the greatest confidence to be assisted in this great work by private effort, and a special reason why I rejoice to be here to-day is that I may express my thanks to the managers of this institution, for the valuable work they have done as a private institution in the great cause of education in the Presidency of Madras. The Government will do its part; but, as I have said, that part for many years to come must necessarily be limited, and therefore we do call upon all those who have the interests of education at heart, whether private individuals, or great nobles, or religious societies, or municipalities, throughout the country, we do call upon them to take their share in this great work, for surely there is no work in these days in which a man may be more justly proud to have had a hand than the work of public education. And therefore I rejoice to think that you have so rightly interpreted the purpose of my visit here as to say you look upon it as an encouragement to all private persons and private associations which are labouring for the promotion of education in the Empire. Time presses, and I have still much to do before the evening closes. You will therefore, not think it due on my part to any want of interest in your undertaking if I bring my observations to a close. But before I do so I must thank you very heartily for the proposal you have made in your address to establish a gold medal to be annually given to the student who takes his Bachelor's Degree with the highest honours in English Literature, and I shall be most happy and proud to have my name connected with that medal. I am convinced that the spread of a knowledge of the English language and literature in India is a matter of the first importance. You hold a distinguished place here in Madras in a knowledge of English, which I believe is more widely spread among the people generally of this Presidency than in any other part of India. Nothing tends more to bind together Englishmen and natives than a knowledge of their respective languages. Therefore it seems peculiarly appropriate that in entertaining these sentiments you should connect my name with this medal for proficiency in English I thank you for the kind reception you have given me. I am very glad to be here to-day, and heartily wish every prosperity to this institution.

Their Excellencies were then conducted to the two lower halls of the Institution and to some of the class rooms, where the remainder of the students of the College and the school boys were assembled.

On the following day (February 13th) His Highness the Maharaja of Mysore accompanied by Mr Sheshadry Iyer, his Dewan, and Mr Porter his Private Secretary visited the Institution. An address was presented to His Highness, to which Mr. Porter read His Highness's reply, and the party was then conducted to the other halls of the Institution, where they were received with enthusiastic cheers by the boys assembled to whom Mr. Porter spoke a few appropriate words.

Of the 1,141 candidates who were registered for the First Examination in Arts of the Madras University held in December last, 1,109 were actually examined. Of these exactly 500, or slightly over 45 per cent., have passed. The

following is a list of the number passed from the various Colleges of South India.

Name of College.	First Class.	Second Class.	Total.
Madras Christian College	5	62	67
Kumbakónum College	4	59	63
Maharaja's College, Trevandrum ...	2	34	36
S. P. G. College, Trichinopoly ...	...	30	30
Presidency College	3	26	29
St. Peter's College, Tanjore ...	1	27	28
Rajahmundry College	...	20	20
St. Joseph's College, Trichinopoly ...	2	16	18
Pachappa's College	2	15	17
Government College, Madura ...	...	16	16
Central College, Bangalore ...	1	13	14
Coimbatore College	1	13	14
Maharaja's College, Mysore ...	...	14	14
Government College, Calicut ...	...	14	14
Hindu College, Tinnevelly ...	...	14	14
Kerala Vidyasala, Calicut ...	1	11	12
Government College, Mangalore ...	...	12	12
High School, Ernakulam ...	...	10	10
Maharaja's College, Puducotta ...	...	9	9
Caldwell College, Tuticorin ...	3	5	8
Government College, Cuddalore ...	1	6	7
Maharaja's College, Vizianagrum ...	1	5	6
St. Aloysius' College, Mangalore ...	...	6	6
Government College, Berhampore ...	...	5	5
C. M. S. College, Tinnevelly ...	...	5	5
Government College, Bellary ...	...	4	4
,, ,, Salem ...	...	4	4
Hindu College, Vizagapatam ...	...	4	4
Noble College, Masulipatam ...	...	4	4
High School, Shimoga	...	4	4
Bishop Cotton's College, Bangalore ...	...	3	3
Hyderabad College	...	2	2
Pasumalai College	...	2	2
Doveton Protestant College, Madras ...	...	2	2
Private Study	...	1	1
	...	0	10
Total...	27	473	500

In the February *Theosophist* we are taken to task for assuming that Col. Olcott believes the Fourth Gospel to be the work of Irenæus, and are assured that he never meant or said anything so foolish. If the *Theosophist* had quoted what he did say, its readers would have been in a better position to judge between us. The passage in the Colonel's lecture to which we referred was the following: "Every student of history is aware that when the polite and learned Gnostics of that period were exposing the pious frauds and the chicanery of the early Christian writers, and unriddling their mythical tales of Jesus and the Apostles, Irenæus, that arch-plotter and *forger*, produced the Fourth Gospel according to John" &c. (*Lectures*, p. 6). Our readers will see that our mistake, if mistake it can be called, was amply justified by the text. If you call a man a forger, and in the same breath tell us that he 'produced'

a work which he called by another man's name, what can we think but that the forger is the author of the production in question? We submit that this is the natural explanation of Col. Olcott's words, and that they need an extensive commentary in order to give any other meaning.

All that the circumstances of the case called for was a simple disavowal of the absurd position attributed to the President-Founder. This Magazine had never advocated any theory of the authorship of the Fourth Gospel, and had not therefore laid itself open to attack on the score of its critical opinions. But the *Theosophist* plunges at once into the vexed question of the authorship and date of John's Gospel. The world is given to understand, that however imperfectly Col. Olcott may express himself, there is an ample store of learning at the command of the *Theosophist*, samples of which are given, indicative of a vast reserve waiting to be drawn upon. We are assured that the question regarding the Fourth Gospel is settled, and that all competent authorities have decided against its genuineness and authenticity. The true theory, we are told, is that it was forged by an unknown somebody, some time in the second century, to meet the polemical necessities of Irenæus. For proof we are referred to a list of critics, from Bretschneider to the author of "Supernatural Religion," the authority of the latter being absolute, as is shown by the fact that his book passed through a fabulous number of editions in a short time, and by the additional fact (?) that the Roman Church offered £40,000 to anybody that could refute it!

If this story be true, there can be little doubt that Canon Westcott must speedily become a very rich man. If the *Theosophist* wishes to see how that 'king of scholars' the author of 'Supernatural Religion' becomes a king discrowned, we would refer him to the preface to the fourth edition of Westcott's Essay on the Canon of the New Testament. There he will find that the author of 'Supernatural Religion' is not accused but *convicted* of self-contradiction of the most serious kind, of startling mistranslations both of Latin and Greek, of sweeping misstatements of fact, and what is more humiliating than all the rest, of parading lists of authorities in support of opinions which these authorities actually contradict. Let the *Theosophist* take the trouble of verifying Canon Westcott's assertions, and we feel sure that we shall have heard the last of this 'king of scholars.'

The question about the Fourth Gospel is undoubtedly a difficult one. It does seem strange that the man who wrote the rugged energetic Apocalypse should also be the author of the sweetest of all the Gospels. But criticism is treading on delicate ground when it affirms the impossible in a matter of this kind. Passages turgid and bombastic in style and imperfectly articulated grammatically, might be placed side by side with other passages that reach the boundaries of pure and powerful eloquence, both from the pen of Col. Olcott; and according to the Theosophical canon of criticism, they must be assigned to different authors. What a man writes to-day is never the exact measure of what he may be able to write to-morrow.

But this point need not detain us. There are hundreds of perfectly orthodox Christians who believe that the Gospel and the Apocalypse are from different hands, and yet that both are all that they profess to be. The great question is as to the age, credibility and apostolic authorship of the Gospel. Is it a genuine

life of Christ, written by an eye-witness, or is it the product of non-historical speculation?

The *Theosophist* tells us that it cannot be the former, and for many reasons. If you hold the synoptists you must give up John, because the Jesus of the former is not the Jesus of the latter. The synoptists present us with a Jewish Messiah, the Fourth Gospel with the Incarnation of the Logos. The author of the latter cannot therefore have been a Jew, because he belongs to the sphere of non-Judaic thought. *A fortiori*, then, he cannot have been the apostle John. With the example of Philo before us, we cannot help feeling that the critic lays a weight upon this argument which is greater than it can bear. There is no reason to suppose that the Jew is peculiarly incapable of assimilating alien modes of thought, but the very reverse. From Philo to Disraeli the Jew has shown unique power of assimilating without being assimilated, of perfectly appropriating the moral and intellectual characteristics of his environment, while remaining every inch a Jew. Even the intensely active and practical Paul, immersed in controversy and laden with the care of all the Churches, felt the strain of contemporary thought, and we cannot but think that the deeply reflective author of John's Gospel must have felt it too. The relation between him and the synoptists is not one of discrepancy, but of complement. It is the old story of the two knights and the shield, which one affirmed to be golden and the other to be silver. From his own point of view, each was right, for the one side was of gold and the other of silver. The error consisted in imagining a contradiction. Jesus *is* both the Messiah of the Jews and the Incarnate Word. The delineation of His marvellous life is imperfect until both sides of it have been set forth. The facts and teachings of the synoptists receive not contradiction but complete illumination from the facts and teachings of John.

Passing now to alleged positive contradictions between the Fourth Gospel and the other three, we may dismiss at once the effort to make them contradict each other about the inscription on the cross. But the objection with regard to the date of the Last Supper and Passover is of some weight. According to the Synoptists, the night of the betrayal was also the night of the Paschal feast. But John xviii. 28 says of the Jews, "they themselves went not into the judgment hall, lest they should be defiled: but that they might eat the Passover." How, we are asked, could they be defiled so as to be unable to partake of a feast that was already past? The *Westminster Review* will not be suspected of undue leanings towards orthodox Christianity, and yet in the January number it declares that a satisfactory explanation of this apparent crux has at last been given. We are indebted for this to the Rev. Dr. Edersheim, a Jewish convert to the Christian Church. In a recent work on the life of Christ valuable for its profound knowledge of Jewish usages, Dr. Edersheim points out that the Paschal Supper on the betrayal night was but the opening of the great Paschal feast, and that ceremonial defilement incurred at the trial of Jesus would exclude his accusers from the latter part of the feast, to which the name Passover is equally applied. It may be noted in passing that, in the opinion of the Westminster Reviewer, Dr. Edersheim has gone far to prove that the author of the gospel must have been a Jew, in order to possess such minutely correct knowledge of Jewish manners and life. An inside knowledge such as Dr. Edersheim possesses is on such points of far higher value than mere critical ingenuity of the negative sort.

If the *Theosophist* still points to its list of distinguished critics who reject the Johannine authorship, it would be easy from any German commentary, to quadruple the list of unbelievers, and to place over against it an equally respectable list of believing critics. The appeal to authority is of no value here, for the doctors differ.

Note two points however regarding these critics. (1) They all approach the subject with the case pre-judged. Agreed in little besides, they are at one in rejecting the supernatural. Books dealing with supernatural events may have every merit but that of truth—a position which we regard as unfairly biassed from the beginning. (2) They deny the Johannine authorship on mutually contradictory grounds. Baur upsets Bretschneider, and Schenkel upsets Baur, while Scholten proves that all are in the wrong but himself. Baur, for example, believes that the writer was more than half a Gnostic, while Col. Olcott *seems* to believe that the book was written at the instance of Irenæus *against* those 'polite and learned Gnostics' whom he admires. Bretschneider, whose *Probabilia* may be regarded as the starting point of the modern attacks on John, seems to recant in a later work (*Dogmatik*) when he says that "the doubt raised (in the *Probabilia*) may perhaps be now regarded as removed."

The question of the authorship of the Fourth Gospel is one on which the last word has yet to be said. Certainly the author of 'Supernatural Religion' has not settled it, nor have Colonel Olcott and his commentator in the *Theosophist*. Probably the true state of the case has nowhere been better expressed than by the eminently judicious but by no means very orthodox Meyer: "After having stood the critical tests originated by Bretschneider and Baur, this gospel continues to shine by its own calm inner superiority and undisturbed transparency, issuing forth victorious from never ceasing conflicts; the last star, as it were of evangelic history and teaching, yet beaming with the purest and highest light, which could never have arisen amid the scorching heat of gnosticism, or have emerged from the fermentation of some catholicizing process, but which rose rather on the horizon of the apostolic age from the spirit of the disciple that was most intimate with his Lord, and which is destined never again to set."

SCIENCE JOTTINGS.

A novel river steamer has just been built by Messrs. Yarrow and Co. for the International Congo Association. It is made of galvanized steel and is designed in such a way that it can easily be taken to pieces for transport past the cataracts, of which there are six between the mouth of the river and Stanley Pool. It consists of six rectangular pontoons 18 feet long, 18½ feet wide and 4 feet deep. These sections can float independently and when joined together with a bow-piece and stern-piece form a hull 70 feet long and 18 feet wide. The boilers are placed in the bow division and the engines in the stern division. The propulsion is effected by means of a stern wheel. One of the peculiarities is

the arrangement for transport over land. For this the machinery is removed and the boat is taken into shallow water and the pontoons separated from each other. Under each section steel wheels with broad tires are then placed and the pontoons are hauled on shore, when they can be used as waggons for transporting the lighter parts of the machinery and stores. During its trial trip it had a mean draught of 14 inches and attained a speed of from 9½ to 10 miles an hour.

In our September number we referred to the character of the water in the famous well at Mecca and stated that it undoubtedly contained sewage matter in a very concentrated form. We have now before us an actual analysis of the water made by Mr. C. W. Heaton which fully bears out this statement. We give it in a tabular form side by side with an analysis of the water supplied to London. The absence of albumenoid ammonia is probably due to the circumstance that the oxidation had gone on so far as to destroy it in the time that elapsed between the collection of the water and the analysis of it.

—	Mecca Well. Grains per gallon.	London water. Grains per gallon.
Total solids.	464·400	18·000
Chlorine.	75·500	1·500
Nitrogen as Nitrates	13·750	0·180
Do. Nitrites	0·090	0·000
Ammonia	0·358	0·001
Albumenoid Ammonia	0·000	0·004

If it be true, as reported, that Dr. Koch and his colleagues have detected what they believe to be the cholera germ in the water of a tank at Calcutta, near which an outbreak of cholera took place, a decided step will have been taken towards proving, what was formerly only a very probable hypothesis, that the spread of cholera is largely due to bad water. Of course this has been accepted for long by many authorities as a fair induction from the circumstances accompanying many outbreaks. In Madras, for instance, it has recently been observed that cholera was most fatal in those districts which were not supplied with Red Hills water and that the introduction of this supply to any district was accompanied by a decided improvement in the health of the district. In this connection we are glad to note that the new municipal bill gives the municipality power to close bad wells and we hope that full advantage will be taken of this power.

In an interesting letter to the *Madras Mail*, Captain C. Reeves of the "Umvoti" gives an account of his passage through a field of pumice which seems to owe its existence to the volcanic eruptions at Java. He first met with the pumice in 23° S. latitude and 70° E. longitude. The pumice was accumulated in ridges, the general direction of which was north-east and south-west and in some places so thickly that there was only a space of a few feet between the ridges. "In fact," he writes, "the ocean seemed quite covered with pumice." He lost sight of it in latitude 3½° S. so that he had sailed

through a belt of it covering 1170 geographical miles of latitude. As Captain Reeves well points out much information regarding the currents in that part of the ocean might be obtained by collating the observations made on board ships which have encountered this pumice field, but it will not be possible as he proposes to take the last of August as the day of its departure from Java for we have evidence of the existence of a field of pumice before that date. Thus on July 9th the R. M. S. "Quetta" entered a field of pumice and did not get out of it till the evening of the 12th when in about 94° E. longitude and 6° S. latitude. Again on August 1st when in latitude 6° S. and longitude 89° E. the P. and O. S. S. "Siam" passed for upwards of four hours, through a bed of pumice floating in a succession of lanes from 5 to 10 yards wide and trending in a direction north-west and south-east.

Not the least interesting part of Captain Reeves' letter is his account of the animal life found along with the pumice. "It was curious and interesting," he writes, "to note how it had been utilized by animalculæ and low types of life as habitations and breeding places. There was a fair stock of barnacles on each piece; some extra large pieces had been patronized so extensively that they had lost a great deal of their flotation and it was a question if they would float to reach distant Africa, but rather would sink to the bottom over-weighted and over-colonized. There were creeping things innumerable on each piece, but I am not sufficiently learned to give their names even if they had names. Below each sizeable piece were two, three, or four small fish, who had made it their little world, and fed upon any too venturesome barnacle or zoophyte. There were also legions of crabs skulling from piece to piece, paying visits. Altogether I suppose there has never been such a chance for the animal life of the Indian Ocean to breed, for they must adhere to something for that purpose, and what was a terrible disaster to Java had been a blessing to them." Such observation suggest many ideas respecting the transference of animal life from one part of the globe to another.

C. M. S.

CORRESPONDENCE.

Mr. Krishna Singh's Article on "The Influence of Religion."

To the Editor,
Christian College Magazine.

Sir,

Some of the statements made by Mr. Krishna Singh in his article on "The Influence of Religion" compel me to address you this short letter.

Mr. Singh says that *all* that is noble and admirable in morals is to be found in the system of Indian religion. Will he kindly refer me to a religious book of the Hindus which dwells on what is perhaps the most exalted of all moral sentiments:—"Bless them that curse you, do good to them that hate you, pray for them that despitefully use you and persecute you"?

Again, he says that "the Bible can teach nothing which the Veda has not taught before." I shall be highly obliged to Mr. Singh, if he also refers me

to a passage in the Veda which brings home to us the Divine Love for man, so closely as it is done in the Bible. "God *so loved* the world, &c.' This idea seems to me to run through the whole of the Bible. The keynote is struck even in the Book of Genesis, where the fallen Adam hides himself, but God out of His own Love comes down and asks "Adam, where art thou?"

If the cardinal ideas of the Bible—namely, the brotherhood of man and the Divine Love for man—are not set forth in the Veda, I fail to see how the Bible teaches *nothing* new. . . . .

The enlightened Hindus of the present day who have ever seriously thought of religion are Theists, Deists, Atheists, or the followers of some European school of thought. There are very few indeed whom the Indian system of religion has prevented from embracing Christianity. Therefore the sneer that only a small percentage of enlightened Hindus have embraced Christianity seems to me to be very unwise on the part of a man, like Mr. Singh, who stands up for the Veda and the system of Indian religion.

MASULIPATAM,
11*th February* 1884.

I am, Sir, Yours sincerely,
A NATIVE CHRISTIAN.

CALDWELL COLLEGE, TUTICORIN,
February 14*th*, 1884.

DEAR SIR,

Will you allow me to say that I read with great regret the attack on Christianity under the title of "The Influence of Religion" in this month's issue of the *Christian College Magazine*?

Of course it is well to allow Hindus to express their ideas on religion in the shape of letters, &c., where their objections to Christianity are met by a reply from the Editor: but I must say I was astonished when I found this avowedly Christian Magazine giving its sanction, in one of its chief articles, to the expression, "Christianity.....can teach nothing that the Veda has not taught before." (p. 486.) . . . .

Yours faithfully,
J. A. SHARROCK.

[We would draw our correspondent's attention to the prospectus with which this Magazine was started and to the introductory article in the first number. There he will read (p. 3.)

"If any general and natural tendency of thought is ever to be formed in India, those who are fitted to take the lead in forming it must give shape and utterance to what is at work already in their minds. Therefore the second aim of this Magazine will be to afford to them the means of saying all they think. Contributions will accordingly be welcomed from those who have anything to say upon questions on which the awakening mind of India needs direction. Such contributions need not be in agreement with any views that the conductors of the Magazine may be disposed to hold on any of the subjects that may from time to time be discussed. Their only indispensable qualification will be that they are meant in earnest to serve some useful end."

From this it will be seen that we hold ourselves in no sense responsible for any opinions which may be expressed in an article signed by the writer. To attempt to exclude every opinion which we cannot 'sanction' would be to destroy the whole usefulness of the Magazine as a vehicle of discussion. Those who wish to determine the position taken by the Magazine itself must refer to the *unsigned* matter in its pages, from a study of which we are persuaded they will rise with the assurance that we deserve something better than the dubious epithet "avowedly Christian."—EDITOR.]

THE CHRISTIAN COLLEGE MAGAZINE.

APRIL, 1884.

KESHAB CHANDRA SEN.

It has fallen to the lot of few departed leaders to receive the high and universal tribute that has recently been paid to the memory of Keshab Chandra Sen. All over the world, and in the most diverse circles of religious thought, there has been a generous recognition of the life and work of this good and great reformer. To quote only one testimony—that of an eminent orthodox Christian,—the Rev. Joseph Cook, the Boston Lecturer, who became intimately acquainted with Mr. Sen in Calcutta, says, in the *New York Independent*; —"On no one born in India did I build more expectation than on him. I saw in his soul the oriental type, and was taught much by it, and had hoped to be taught more. The news from the Ganges that Keshab Chandra Sen is dead, overwhelms me with a more profound sense of personal bereavement than I can now remember to have felt before at the departure of any public man."

This universal tribute is the more remarkable when we consider that few public characters have been more misunderstood than the late leader of the Brahma Samáj of India. Mr. Joseph Cook, though himself a staunch defender of orthodox and occidental Christianity, has well expressed the truth when he says that he "saw in his soul

the Oriental type"; and instead of this perplexing him, he adds:—"I was taught much by it."

In thought and in aim Chandra Sen was a thorough Indian; and he has presented to the West a bright specimen of the intellectual and spiritual work of the East; while he has also shown to the East one of the best representatives of character and life formed by the influence of western ideas. Hence the unique character of the memorial meeting held the other day in Calcutta, which was described by the Chairman, the Hon. W. W. Hunter, as "a meeting representing in a special degree the East and the West."

Chandra Sen would, however, never have been the power he was had he not welcomed western thought and scholarship. It was this that gave him that wonderful command over those large audiences which both in this country and in England were charmed by his rare gift of eloquence; and it was these public efforts that established his world-wide fame. Those who ever came under the spell of his oratory, as it was my privilege some years ago to do, are not likely to forget the form, the eye, the voice, the language, of this grave and yet often glowing preacher. In his own deep conviction of the truth of his utterances lay the secret of his power. For in those memorable appearances in the Town Hall of Calcutta, and elsewhere, on the occasions of the anniversary of the Samáj, when some indication of the doctrinal drift of the Brahmo movement was looked for, he always had a message to deliver; which, however defective it might sometimes be, was one which he himself thoroughly believed; and a message penetrated with one aim, *viz.*, the spiritual instruction and elevation of his hearers.

All through his life, and more conspicuously in his later years, he was in the presence of spiritual realities. Life, Soul, God—these were to him centres of infinite truth. He never stopped to prove the existence of God, or the reality of spirit; he saw and felt, and that was enough. The universe to him was full of Deity; something immeasurably more than a vast machine, the abode of inscrutable Force; at the head and helm of all, there was a *Father*; and to that sublime truth he bore a bright, unflickering testimony in a materialistic age.

His appearance was thus manifestly providential. It took place at an opportune time in his country's history; when, under the influence of western education, it was beginning to pass through a stage of transition; when men's minds were becoming unsettled; when questions of social reform were coming up; when

the process of religious fermentation was setting in; when many educated Hindus were learning to scoff at religion, "without," as he says in one of his lectures, "a God to guide them, without an immortality to stimulate their hopes;" and when, "amidst the confusion and perplexity of countless sects, men were speculating about the probable church of the future wherein they hoped to find truth and peace." Through the teaching of Chandra Sen and the influence of the Brahma Samáj, a testimony to God and true religion has thus been borne against the growing spirit of indifference, materialism, and positivism in India; and some souls have unquestionably been arrested on the way from superstition to infidelity, and been turned into the way of truth.

To a devout mind, the genuineness and worth of Chandra Sen's religious life and work become much enhanced by a glance at his early years. The history of his youth, of his spiritual experiences, his struggles and aspirations, is a beautiful picture, full of interest and significance. With his mind emancipated by an English education from the superstitious ideas in which he had been brought up, he was at first in danger of lapsing into a state of worldliness; but gradually the world itself became dark because his "heart was full of darkness." A sense of sin and a longing for salvation were awakened in him. And it is deeply interesting to note, what he repeatedly affirms, that in his spiritual struggles, he was at first aided neither by man nor by book, but by God Himself. "In utter helplessness," he says, "I threw myself at my Father's feet." His heart found relief and peace in prayer; and as long as the Brahma Samáj remains faithful to that spirit of simple and believing prayer which has been such a marked characteristic of the movement—meetings for *Prayer* invariably forming the nucleus of all new Samájes—it cannot fail to be a power for good. It was prayer, Chandra Sen says, that led him on "in enquiries after truth," and placed the necessary resources for spiritual progress at his disposal.

Among these resources, he gives a prominent place to the study of mental philosophy. The scientific study of mind he found to be a fine discipline to the lower nature, while it taught him insight and reflection, and disposed the heart to serious pursuits.

But there was another and a higher study to which he acknowledges his indebtedness; and that was the Bible. The private study of the English Bible, combining with his general education, led him to belief in the Unity of God. The fruit of such study which apparently grew with years, is abundantly visible in all his public utter-

ances. His lectures and writings team with apt quotations from its pages; they are often saturated with the essence, and fragrant with the perfume of the Gospel. "To me," he somewhere says, "the Bible is a blessed home to which I often love to retire, and I read and meditate over the Old Testament and the New. From such perusal I derive much help, much sympathy, much comfort; much profound response to what I cherish as the most sacred treasure of my being. The Bible is the Word of life indeed. It seems as if it was written for me specially."

An appreciation of the Bible so real as this, not unnaturally suggests the question why Chandra Sen was not attracted to the Christian church. Had he been, his career would of course have been very different; but while, on the one hand, his personal influence in the Native church of India would probably have been immense, his country at large, on the other hand, must have lost that wider and most valuable persuasive influence which he quietly but surely exercised in favour of Christianity. But Chandra Sen at no period of his life appears to have come much in contact with Christian missionaries. He preferred to read his Bible, and to commune with the thoughts of pious men through books. That he might have received help from free and friendly intercourse with thoughtful Christians, we cannot doubt, and had his Christian reading been of a wider nature, and not so exclusively of the Parker and Newman schools it might have been to his advantage. But probably, even at a comparatively early age, his preference, as he so often affirmed it, for the simple teaching of Christ, in distinction from the formulated teachings of the Christian sects, and his passionate aversion to sectarianism, may have taken a decided form. Sectarianism was the sworn foe of his soul. Had the Christian church presented outwardly, what it professes to be inwardly, a brotherhood of souls, his attraction to Christ would probably have drawn him to His church. Nevertheless, he always cultivated cordial relations with Bengali christians, and was prepared to co-operate with them. Towards missionaries too, as the servants of Christ, he ever manifested respect and sympathy. This was displayed in the Beadon square preaching case, when several of their number were prosecuted. He was also one of the first to take up the cause of the Salvation Army in Bombay, and to seek to protect its interests. While refusing to identify himself with any sect, he was always one in spirit with every good work.

That he personally accepted Christ as his first and most trusted

religious guide, that Christ was more to him all through his life than all other teachers combined, and that he grew in his spiritual discernment of His nature, and of His unique position in the moral universe, no one can doubt who makes a careful and chronological perusal of his published thoughts. At the same time, what exact value his conception of Christ was to him, it is difficult to say. Failing to apprehend, in common with other Brahmos, the essential element of Christian faith, *viz.*, the vital relation that exists between the Person of Christ and the salvation of every human soul, failing to see in Christ such an utter and all-possessing sense of God as must give Him an absolutely unique authority in the realm of Truth, he could never enter into the same spiritual relations as are held by those who regard Christ as *the* Light and *the* Life of the world.

His noted lecture delivered in Calcutta in 1866, on "Jesus Christ; Europe and Asia," was his first and, in some respects, his fullest and most distinct utterance with regard to Christ and Christianity. It was intended to mitigate the hostility of educated Hindus, and of Brahmos in particular, to Christ; and was virtually a reply to Debendra Náth Tagore, who a little while before had "eloquently declaimed against Christ as the cause of all the evils from which the civilized world was suffering." Such was the Christian tone of this lecture, and so high and unqualified the expression of admiration for Christ, that christians thought Chandra Sen was not far from embracing their religion. He certainly seems to have had at this time—shall we call it the early reached meridian of his power?—a moral grasp of Christ, and of His all-conquering Grace, and especially of His world-wide kingdom, which, from some cause or other, he afterwards relaxed, but which he never lost. There is no trace in this lecture of any qualifying judgment with regard to Christ; no hint of that eclecticism which afterwards became the distinctive feature of his system. Here, as also in his lecture on "Regenerating faith," Christ and His Gospel alone are held up as the means of man's renewal; no mention is made of any other teacher or any other way. It is *Christ* who is "sent by Providence to reform and regenerate mankind." It is the "*Catholic Church of Christ* that is opened wide to all men without distinction." It is "*in Christ* that Europe and Asia are to learn to find harmony and unity."

But in a second lecture delivered within five months of the first, he dealt with the subject of "Great men;" and whether startled by his own out-spokenness, or with a view of conciliating his friends,

or, possibly, as many of his followers maintain, by way of explaining his own mind and system of truth *more* fully, he appears to wish to retreat from his exposed position, by giving Christ a place, though still a unique one, among other great men and benefactors of the race.

These two lectures we are inclined to regard as in the main typical of Chandra Sen's religious position. The first shows us Christ as He found a natural and supreme place in the Brahmo leader's heart; the second as he found a relative place in his system of unsectarian religion. That system became more and more eclectic, or as our Brahmo friends would say, more comprehensive; and it was this feature which, more than anything else, differentiates his theism from that of Rájá Rám Mohan Rai. Still no one can peruse his later lectures without observing that while he occasionally introduces Sakya Muni, Muhammad, Chaitanya, and others, as having contributed valuable treasure to the religious thought of the world, he invariably reverts to Christ as his supreme teacher, and the evident idol of his heart. It is *His* teaching which, in almost every lecture, he more or less expounds. Of no one else does he affirm that "he preached absolute religion;" that he "taught God's universal truth for the benefit of all mankind;" and that "in him and through him we are reconciled to God and to all truth." Of no one else does he say that he was "*in* Sakya Muni," and Moses, and other great men, as the Eternal Word or Logos; of no one else does he speak of a life, a death, an atonement, an ascension, a pre-existence, in the way in which he speaks of these in relation to Christ. Whatever he may have thought of other masters—and we know he reverenced all teachers, all scriptures, and all dispensations—it is evident he aimed first and foremost to make *Christ* acceptable to the people of India, to arouse in his fellow countrymen an enthusiasm for Christ. Often did he declare his desire to see his country accepting, not Christianity, but Christ; and there cannot be a doubt that India's conversion has been facilitated by Chandra Sen. It is easier for the Christian advocate to speak of Christ, boldly and hopefully, in consequence of the testimony he bore. In the face of the national aversion to Christ, so common in India a quarter of a century ago, it was perhaps needed that one should be raised up, who, while not estranged from the nation, might yet earnestly commend Christ to it. And the fact is well worthy of being pondered by every thoughtful Hindu, that one of the best and most illustrious men India has ever seen, certainly the foremost

Hindu of modern times, found *in Christ* the supreme satisfaction of his intellect and heart; and claimed Christ for India, and India for Christ.

Chandra Sen has thus familiarised the people of India with the name of Christ. And in doing this he has also familiarised them with a grand idea—inseparable from the idea of Christ—*viz.*, that of *unity*; and to have accomplished this was well worth living for. The one fascinating idea that took possession of his mind was the unification of all religions; the great problem of his life was to establish a universal harmony; and there is little doubt that when he died he believed his system would yet embrace the world.

This idea and scheme of comprehension is set forth, on its subjective side, in a characteristic lecture we heard him deliver in Calcutta as far back as 1869 on "The Future Church"; and abundantly appears, in its objective aspect, in that latest development of his system, known as the "New Dispensation." The future Church, he said, was to harmonize prevailing systems of worship, and "the purer elements of the leading creeds of the day, developed and shaped under the influence of Christianity."

It was a noble and generous conception to aim at the death of sectarianism, and to seek to knit together in the bonds of love men and women of different races. And this, connected as it was with his commendation of Christ, would appear to have been his appointed mission—to declare in such a caste-bound land as India that it is possible to conceive, at any rate, and seek to realise the unity of man; and while we who call ourselves Christians have been criticising and perhaps condemning him, he has been preaching us the same noble truth; a truth which by reason of our narrowness and wrangling, our religious passion and uncharitableness, we are often powerless to express; but the great truth uttered in the prayer of Christ—"that they *all may be one*." And however far from realisation such union might be on the lines which Chandra Sen laid down, all must admit that his mission and endeavour in the world was one of peace and of good-will.

In the "New Dispensation," with which, rather than with the more familiar name Brahma Samáj, Chandra Sen will henceforth be associated, the effort is made by means of mystic symbolism to realise this unity. The preliminary work was to be done in India as a base for further operations. It aimed at the coalescence of the three great religions of the country—Hinduism, Muhammadism, and Christianity. Others before him, such as Kabir, Nanuk, Akbar,

had striven after union, on the basis of eclecticism, but Chandra Sen's effort was thought out more philosophically, and based on a study of dispensations. "The science of dispensations" was his great discovery—unity in multiplicity—order and continuity, where others see only confusion and anomaly.

To the practical western mind, this "wonderful solvent which fuses all dispensations into a new chemical compound," is scarcely intelligible; and to many of his own followers the practices he thus initiated appeared as a deviation from the great mission on which the Brahmo movement first started, *viz.*, teaching the people of this country the pure and spiritual worship of the Most High. In some quarters they were looked upon as concessions to material worship and Indian ritualism. For our part we are prepared to believe that the adoption of these later practices, while brought about by contact with the *Bhakti* school of thought, as preached by the Vaishnava reformer, Chaitanya, and while giving to the Brahmo movement a much needed popular side, was nevertheless the result of Chandra Sen's independent conviction and personal bent; that his life was the growth of one idea, and that from the day he entered the Samáj to the day he inaugurated the New Dispensation, he was keeping, in the main, to one straight road. Notwithstanding his western education, which befitted him so well, he was, so we have said, a thorough Indian; and we of the cold and unecstatic West may well hesitate to criticise the temper and the methods of a religious nature so different from our own. Most heartily did we admire our departed friend for so wisely setting his face against that denationalising tendency that has gained ground among some of his countrymen, as we also sympathised with him most sincerely in his desire that the future Church of India, while shaped, as he predicted and hoped it would be, "under the influence of Christianity," might not be a reproduction of any of the Churches of the West, but might have a strictly national growth and a national organisation.

But Chandra Sen went much further than this. He seemed to do his best in his later years to divest Christianity in India of its cosmopolitan character, and to find in it a religion dug from the Indian soil; he sought to give Christ and His truth an *Indian* origin. And so we find him presenting Christ in the New Dispensation as an Indian *Yogi*, rather than as universal Humanity. With what we call in England an 'insular' pride, he manifested, in the sphere of religion, an unwillingness to accept any truth that could not be identified with the antique beliefs and customs of his race. This

partiality, while confessedly only giving to Christianity an Indian form, necessarily cramped his view, misguided him in his religious search, and narrowed the basis of his society,—for who but a Hindu could feel at home in the New Dispensation?

Again, the question arises, how far this attempted adaptation, in so extreme a form, of Christianity to Hindu thought and life, is consistent with simple theism; not to mention the difficulty of explaining and harmonising the conflicting doctrines and practices of the several dispensations, which are all held to be equally divine, and which are here reduced to one. The East is, we know, the land of metaphors and spiritual language and efflorescent ceremonial; and mysticism has had attractions for some of the noblest minds; but mystics have not contributed much towards the solution of the practical and pressing problems of our earthly life. And so far as we can see, the ship of the New Dispensation, under the piloting of its leader, seems to have been drifting dangerously near the two rocks on which Hindu religious life has always suffered shipwreck in the past—mysticism and formalism. Both of these tend to divorce religion from life. It is in the sanctity of the ordinary relationships of life where man's true religion lies; and anything that draws him away from these is a danger and a loss both to him and to his fellows. In proportion as Chandra Sen pursued a mystic course, did he apparently depart from the worthy object which he at first proclaimed, which was "to make the teaching of the Samáj identical with the religion of life."

The march of the world is onward not backward; onwards towards a clearer realisation of practical life and active goodness, not backward to mystic shows and obsolete formalism, whether of priest or devotee. It would be retrogression were Christianity to go back to Judaism, and its pure spirituality to be stifled by the forms and symbols of the Mosaic ritual. As Chandra Sen himself once said, "Man cannot rest satisfied with the Old Testament; he wants the New Testament religion for his Salvation." A consistent adherence to that simple faith would have simplified his life and system. For the New Testament is the Gospel of the race. And Jesus Christ, whom Chandra Sen recognised as his first and best of teachers, lived and died to accomplish the very union after which his earnest disciple strove, to open a universal temple where the voices of the past might melt into a perfect harmony; where the religions of nature might unite in one common worship; and where

the needs of each ancient faith being completely satisfied, the claims of all might be eternally reconciled.

And He did this in the only way in which it could possibly be done. He abolished, did not revive, rites and symbols, which can only separate man from man. He broke down national exclusiveness, and laid the foundation of His kingdom in the universal human heart. He regenerated all human life by infusing into it His own Divine principle of Love; and on *that* principle, illustrated and enforced by His own perfect service and sacrifice for the good of men, did He rely for securing a true and common spiritual worship from all mankind; while in the establishment of His Church on earth, He intended to demonstrate the spiritual brotherhood of the race—the unity of man.

Chandra Sen himself, at an early period of his career, recognised this as the only and highest way, of effecting union; for he said in words we have already quoted:—"It is *in Christ* that the East and the West are to learn to find harmony and unity." Had he grasped the full meaning of this conception—which would have meant grasping what so many noble minds before him have failed to grasp, *viz.*, the Divine secret of Christ's Nature—he would of course have been a Christian, in the highest acceptation of the term.

But our last word must not be one of criticism of shortcomings, which is only a synonym for our common human nature, but one of thankfulness to the great Father of men for the gift of so pure and good a spirit which amid dark and perplexing problems, and a blinding opposition, was faithful to the light it saw; and for the example of so noble a life spent in the highest service of his country. Chandra Sen has now passed away into the world of light and of reality, where Truth is seen in all its fulness, and where the soul's infinite longings are at rest. And now that his bereft followers have lost his guidance, and feel it almost a sacrilege to his memory to think of a successor, we fancy we can hear him bid them listen, even more closely than he did, to another voice, and lean with absolute confidence on a higher nature, whose secret he has at last discovered: One to whom, when He was here on earth, His perplexed disciples once came and said:—"Lord, *to whom* shall we go? *Thou* hast the words of Eternal Life."

T. E. SLATER.

THE TWO SAIYIDS AND KÁLICH KHAN.

The disturbances and civil wars which followed the death of Bahadoor Shah, described in my last article, and which culminated in the death of Jehander Shah, the unworthy monarch who had brought the imperial dignity into such contempt, had shaken the stability of the throne of the Emperor of Delhi to its very foundations. On all sides adventurers were trying to obtain for themselves a portion of the crumbling empire. The representatives of the old royal and imperial families were used in some places as mere puppets, and in others were entirely ignored. The most remarkable thing, however, is that with the exception of the Mahrattas, none of the old Hindu races attempted to shake off the Mahomedan yoke. There were risings and rebellions of Hindu rajas and chiefs, but no combined movement with anything like systematic organization. The Hindus over almost all India were still kept in check by the Mahomedan viceroys and their revolts were generally made not so much with the view of gaining independence as to obtain a remission of tribute, or an addition of territory. The Mahomedan governors of provinces, on the other hand, had their attention fixed entirely upon the events in Delhi. The sky was falling and each man hoped to be able to catch some larks. The career of Zulfikar Khan and his father was within the knowledge of all, and each man of any influence or power, endeavoured to emulate these prosperous adventurers, so as if possible to be the moving spirit of an imperial court with an emperor as a tool in his hands. To the Mussalman of pure blood there is no life that has so many attractions as a life of adventure. They know what the end in ninety-nine cases out of a hundred is, but they hold that a man must die once, and it is better to live a stirring and eventful life, with a tragedy as the fifth act, than to stagnate in dull mediocrity. There is probably no nation in the world, in which so many of the men who have attained the greatest eminence, have been men of obscure or mediocre origin; or a race where so many of the most eminent men have come to a tragical end. The period I am now treating is perhaps a better example of this love of adventure than any other, or perhaps it may be that we have better and more extensive materials available. Almost every one at this time looked to Delhi as the place where honour and glory, however brief, was to be won. Amidst all these brave adventurers who were willing to stake all on

a single throw of the dice, there was only one who was far-sighted enough to see that the place to win a position of lasting power, was not Delhi, with all its dangerous intrigues; not the candle, at which every moth was flying with headstrong rashness, but a spot remote from the glaring light of the imperial throne, surrounded by so many dangers. This man was *Kalich Khan afterwards known as Asoph Jah*, the founder of the present Nizam dynasty of Hyderabad, the only Mussalman Prince of any importance who has maintained his independence from among the vast number of Mahomedan dynasties that have flourished in India during the last eight hundred years.

Asoph Jah's career forms a striking contrast to that of the two Saiyids, his contemporaries, and his rivals. For a time the two brothers were far above him in power and influence, but whilst they allowed themselves to be drawn towards the whirlpool, of which Delhi was the centre, and in which they were at last engulphed, he worked on quietly; and whilst their revolts and intrigues attracted to the capital of the empire the armies of every dissatisfied potentate, and eventually the conquering hordes of Nadir Shah and the savage plunderers of Ghoolam Khader, he was quietly establishing his independence in Hyderabad, and when at last the English appeared on the scene, his kingdom was an accomplished fact, which his successors, wisely, never gave us an opportunity of disputing.

The two Saiyids, were, as their name implies, lineal descendants of the Prophet. For a long series of years the members of their family had been distinguished for bravery and martial enterprise, and not unfrequently as many as fifty or sixty members of the clan took arms in support of, and sometimes against the Emperor. The earliest notice I can find of this family is in the reign of Akbar (1573)—whilst the Emperor was besieging Surat a rising was made in his rear in the hope of diverting his forces, and the rebels laid siege to *Pattan* of which Saiyid Ahmad Khan Bárha was the governor. Bárha was the town and district from which the family came, and for at least 150 years from this time the Saiyids of Bárha played an important part in the history of India. On the occasion I allude to Saiyid Ahmad shut himself up in the fort, defended himself bravely, and being relieved, succeeded in beating off the rebels with heavy loss. For his conduct on this occasion the Governor received considerable rewards and was confirmed in his post.* In 981,

* (Nizám-ud-Din Ahmad Tabakát-i. Akbari.)

another of the family, Saiyid Muhammed Khan Bárha was with Akbar when he made his famous march from Fathpar to Ahmadabad a distance of 400 kos (1,000 miles) in 9 days. In the battle which followed, where Akbar, with only 3,000 men, defeated an army said to have numbered 20,000, the Saiyid held an important command and as usual distinguished himself for bravery. In the following year another of the same family Fath Khan Bárha was engaged in rebellion against Akbar on the side of Dáúd Afghan, but was defeated and slain. This man appears to have been the only one of his family who turned traitor, for when Dáúd was defeated and killed two years afterwards, the Saiyids were all fighting under the banners of the Emperor and a garrison under their command was placed in the fort of Wikur.* In the year A.H. 1014 (A.D. 1602) when Akbar died; the Bárha Saiyids embraced the cause of Jehangir and were instrumental in enabling him to succeed to the throne in spite of the opposition of his son Khusru, who had formed a plot to put his father on one side.† Khusru finding that there was no chance of success yielded, but soon afterwards again broke into revolt. Open war ensued between him and his father Jehangir, and again the Saiyids fought on behalf of their rightful master. Jehangir, in his memoirs, speaks of them as the "heroes of the age who were placed in the advance and fought most bravely." Khusru was defeated and taken prisoner (A.H. 1015) as also his two generals, Hussain Beg and Abdul-Aziz. The Prince was given into custody but the fate of the two generals is a good example of the "beneficent institutions of the hoary civilization" which Mr. Seymour Keay is pleased to eulogize. They were sewn up, the one in the lately flayed skin of a cow and the other in that of an ass, and paraded through the streets. This punishment almost invariably ends in death and is carried out in the following manner. The skin is taken warm from the animal and sewn tightly round the body of the victim, the head only being left uncovered. As the skin dries, it contracts and the sufferings of the victim become intense and generally end in death in a few hours. In this case the Emperor says: "As the skin of a cow dries quicker than the skin of an ass, Hoossein Beg lived only to the fourth watch and then died. Abdul-Aziz, who was in the ass's skin, and had moisture conveyed to him, survived." In the Ikbál-náma it is said that the way the latter managed to escape death was "by eating as many cucumbers and anything else which fell into

* Abu-l Fazl. † Asad Beg.

his hands whilst he was being led through the streets. He survived the day and night. Next day the order was given for taking him out. There were many maggots in his skin, but he survived it all." Gladwin in his reign of Jehangir says that the skin was kept moist by water being constantly poured on by his friends and this would seem more likely than that it could have received moisture by the man inside it eating cucumbers.

During the reigns of Shah Jehan and Aurungzebe the family still maintained its high character for bravery, though not always for loyalty to the ruling house. When Prince Shuja contested the throne with his brother (A. D. 1658) the Saiyids took his part and very nearly turned the scale of victory in his favour. Three of them on elephants, each with a ponderous chain weighing three maunds attached to his trunk, broke through the imperial ranks crushing every one who came in their way. One of them charged the elephant on which Aurungzebe was seated, but whilst in the act, the driver was shot and the animal secured.* Enough has been stated to show that the Saiyids of Bárha well deserved the reputation they enjoyed for daring and valour, and I will now proceed to trace the history of the two last and greatest of the race.

When Aurungzebe died (1707) Saiyid Abdoollah and Husain Ali Khan were the two principal members of the family.

In a former article I have described Bahadoor Shah's rapid march from Kabul to Delhi, and after he had taken that city, and its treasure had fallen into his hands, he deemed it advisable to bestow one lac of rupees on the two brothers.† This present must however have been rather to purchase their good-will than to reward any service they had performed, because in the battle which took place shortly afterwards between Bahadoor Shah and his brother Azim Shah before Agra, the two Saiyids were fighting on the side of the latter. When the tide of fortune turned, they, together with the other principal followers dismounted and fought on foot. and Husain Ali Khan was so severely wounded that he was left on the field as dead.‡ Bahadoor Shah, however, could not afford to lose the services of two such distinguished men, and forgiving their opposition to himself appointed one to be governor of Allahabad and the other of Bihar. During Jehander Shah's short but ignoble reign, the Saiyids, like most others, disgusted at the Emperor's behaviour and at the tyranny of Zulfikar Khan, espoused the

* Khafi Khan. † Khafi Khan. ‡ Iradat Khan.

cause of Feroksheré, who was preparing an army in Bengal with which he intended to depose the unworthy Jehander. It was almost entirely owing to the determined gallantry of the two brothers, that Feroksheré, succeeded in defeating Zulfikar Khan, and again Husain Ali Khan was wounded and left for dead on the field of battle. The result of this battle was, as has been already told, the assassination of Jehander Shah and of Zulfikar Khan, and Feroksheré ascended the throne with the two Saiyids as his principal supporters. Abdoollah was appointed Grand Vizier and Husain Ali Commander-in-Chief.

Khafi Khan, although not always favourable to the two brothers, speaks in high terms of their characters, especially in the earlier portion of their career. The younger, Husain Ali, especially is said to have been of a most generous disposition. Later on injustice was often done in their names. As usual with men in high position "they were troubled by fortune-seekers and needy adventurers, whose demands they were unable to satisfy. In liberality and kindness to learned men and the needy and the protection of men of merit, Husain Ali Khan excelled his elder brother. Numbers owed their comfort to the cooked food and raw grain which he gave away. At the time of the scarcity at Aurungabad, he appropriated a large sum of money and a great quantity of grain to supply the wants of the poor and the widows. Saiyid Abdullah was remarkable for his patience, endurance and wide sympathy."* A story is told of Husain Ali Khan that one of the richest natives died at Surat leaving a very large fortune. Although he left heirs, the Governor seized his property on behalf of the Emperor. The heirs went to Delhi to complain and stated their case to the two brothers. They offered to pay fifteen lacs of rupees for the release of the property besides other sums to the Dewans, &c.; next morning Husain Ali Khan sent for the Dewan "and told him that he had gone through a sharp conflict in the night with the covetousness which the wealth had excited in his heart, but that he had prevailed over his temptation and had thrown off all desire for money. The Dewan was therefore to send for the heir, and to remove all claim to the property, and to present him with a robe and a horse without his having to spend a *dám* or a *diram* and without having to apply to any other person."†

One of the first acts of Feroksheré after rewarding the two

* Khafi Khan. † Ibid.

brothers, was to increase the emoluments of Kalich Khan, who afterwards received the title of Asoph Jah. This man appears first of all to have become noticed in the last years of Aurungzebe's reign. Shortly before this emperor died he appointed Kalich Khan as subahdar of the district of Bir-gánw, near the Kistna. Bahadoor Shah appears to have deprived him of his post, but it was restored by Jehander Shah, a large division of whose army he commanded when the battle was fought with Ferokshere. Kalich Khan came to a private understanding with the two brothers and deserted his master and now as a reward he was created Nizam-ul-Mulk Bahadoor Fath Jung, and was appointed subahdar of the Deccan. This post he at once joined and threw himself into the work of restoring order and checking the raids of the Mahrattas, who had over-run the country and who openly levied their *chouth* or quarter tax, side by side with the imperial officials.

The two Saiyids were left in Delhi where they now exercised supreme power. Ferokshere was a weak indolent monarch. "He was young, inexperienced in business and inattentive in affairs of state. He was entirely dependent on the opinions of others, for he had no resolution or discretion." Unlike most of the princes of the house of Timur he appears to have been entirely devoid of any personal courage or energy. He gave himself up to sensuality and left the reins of government entirely in the hands of his two ministers. It may seem a paradox, but it is nevertheless true, and especially so in eastern countries, that good fortune is the greatest misfortune that can happen to a man. Prosperity seems to lead to arrogance and tyranny, and the 'whispering tongues' are quickly set in motion. And so it was with the Saiyids. Some of their old allies, jealous of their influence, began to intrigue against them; and amongst these was the new Nizam, and a rising man who was afterwards to play an important part in Indian history. This was Mir Jumla, who having the ear of the Emperor did his utmost to undermine the influence of the two brothers. Not only, however, did they meet with rivalry and enmity from others but they began to fall out between themselves. These dissensions gave their enemies fresh opportunities which they were not slow to neglect. A plot was laid at the instigation of Mir Jumla to seize the two Saiyids whilst out on a hunting party, but the Queen-mother is said to have conveyed to them secret information, and they managed to elude the designs of Mir Jumla and his party. The immediate effect of these intrigues seems to have been to unite the two brothers in

closer friendship, and the Emperor who was now getting alarmed at their power, endeavoured to separate them. Husain Ali had preferred a claim to the subahdarship of the Deccan, intending to administer it by his deputy Dáúd Khan. The claim was allowed, but he was directed to join in person. This he refused to do and it came to an open breach between the two ministers and the Emperor, the former even going so far as to throw up lines of defence round their private residences. Matters, however, were not yet ripe, and a compromise was effected, under which Mir Jumla departed for his subah of Azimabad, and Husain Ali set off for the Deccan. Before leaving, Husain Ali spoke out very plainly and said to Ferokshere. "If in my absence you recall Mir Jumla to your presence, or if my brother again receives similar treatment, you may rely upon my being here from the Deccan in the course of twenty days."* In the meantime secret instructions had been sent to Dáúd Khan, Husain Ali's deputy to resist his chief, if necessary, with arms. This the deputy did, as he was only too anxious to step into the Saiyid's shoes. From disputes it came to quarrels and at last the two met in open battle. A fierce conflict ensued in which Dáúd Khan was killed and the whole of his treasure and baggage fell into the hands of Husain Ali. "When the result of the battle and the death of Dáúd Khan was reported to Ferokhshere, his countenance seemed clouded with sorrow, and he said to Saiyid Abdoollah that it was a pity such a renowned and noble chief had been killed. The Saiyid replied "If my brother had been slain by the hands of the Afghan, it would have given your Majesty satisfaction;"† and no doubt it would have done so. For three years these intrigues continued. In Delhi Saiyid Abdullah was so powerful that he did not even go to the palace for months together in order to obtain the Emperor's signature. The Emperor had entrusted him with his private signet and he did not therefore trouble himself to consult his master in the matter of appointments. In the Deccan the secret intrigues were continued and were carried so far as to instigate the Mahrattas to rise in rebellion against the Emperor's own viceroy, Husain Ali, in the hope that he might be overthrown. Mir Jumla, too, was still at work, and once came in suddenly, and appeared in court without leave, but Abdullah's influence was strong enough to get him sent back again in disgrace. In the meantime, whenever the Emperor went out on a hunting party a rumour was

* Khafi Khan † Ibid.

spread abroad that in reality he intended to join Mir Jumla and come to an open breach with the two brothers. Matters however could not long go on in this way. Husain Ali, after fighting and beating the Mahrattas, made peace with them on somewhat more favourable terms than he might have demanded. This peace the Emperor refused to ratify. Some appointments to provinces in the Deccan were also made by Farokshere, but Hussain Ali in his turn refused to carry them into effect. The anger of the Emperor against the powerful soldier now rapidly increased, and a strong combination was made, of which the Nizam was one of the principal leaders, to overthrow the Bárha Saiyids. News of this plot soon reached the ears of Husain Ali, and he at once prepared to carry into effect his parting threat to the Emperor, and got ready to proceed with his army to Delhi. In the following year matters came to a crisis. Abdoollah prepared everything in Delhi and enlisted about twenty thousand men, so as to be in readiness to help his brother. Husain Ali was marching on Delhi with his army of veterans and between the two the Emperor was at his wits end. A false peace was patched up between Farokshere and Abdoollah, but secret letters from the latter told Husain Ali not to be deceived but to hurry on to the capital as quickly as possible. This he did, and at last appeared before Delhi and had his drums beaten in defiance, declaring; "I will maintain the honour of my race, and care neither for loss of my mansab nor for royal censure." But the strangest thing was that the heedless Emperor—although he heard the sounds of the hostile drums and trumpets, did not even then come to his senses. "All resolution and prudence was cast aside. Now raging with anger, he rolled up his sleeves, threatening vengeance against the two brothers: now taking a conciliatory turn, he sat behind the curtain of dissimulation, and opened the door of amity upon the face of enmity."* Feeling himself secure, Saiyid Abdoollah demanded that all his enemies should be sent away from court; that the fort of Delhi should be handed over to his brother, and that the palace should be garrisoned by his own adherents. The Emperor could do nothing but submit. Husain Ali marched into the city with great pomp, was received, and presented with a dress of honour. All the posts of responsibility were occupied by his officers and every one obnoxious to his party was turned out. The night passed in "dread and helplessness." Some disturbances occurred and they were taken as a pretext for

* Khafi Khan.

further measures. A party of Afghans led by a younger brother of the two Saiyids broke into the palace and after hunting high and low found Farokshere hiding in a corner of the roof. He was dragged out, and spite of the tears and entreaties of "his mother, wife, sister and other ladies," was carried off to the fort. There an iron was passed through his eyes and he was shut up "in a small narrow room like a grave, which had been used for keeping prisoners destined for the torture. In this corner of sorrow and grief they left him, with nothing but a ewer, a vessel for the necessities of nature and a glass to drink out of."* Scott in his notice of Farokshere says that he was blinded afterwards, but Khafi Khan's version is probably more correct.

Events now succeeded each other with startling rapidity. Two puppet emperors were placed on the throne, the first of whom lived only six and the second only three months. The first of these was Rafi ud Darajat, grandson of Bahadoor Shah. He was hurriedly taken from confinement "and the noise and confusion was so great and general that there was not even time to send him to the bath or change his clothes. In the same garments he was wearing, with only a pearl necklace thrown upon his neck for ornament, he was placed upon the throne."† The first thing of course was to bestow appointments and rewards upon the adherents of the two brothers, and as Asoph Jah, or Nizam-ul-Mulk, by which title he was generally known, was too dangerous a man to have near the court, he was provided with the government of Patna. It will be remembered that at the commencement of Farokshere's reign, Asoph Jah had been appointed viceroy of the Deccan, where in spite of his good service against the Mahrattas, he had only remained for two years, being then replaced by the powerful Saiyid Husain Ali. Asoph Jah appears then to have been appointed to the province of Malwa, and at the end of Farokshere's reign was in Delhi, openly siding with the Saiyids but in reality doing so in a half hearted way only. Scott thinks that he was no party to the extreme measures used against Farokshere, whom he would have retained as Emperor if he could have been induced to guarantee certain concessions. This frequent change from one province to another, no doubt rankled in Asoph Jah's mind, and very soon afterwards he openly broke with the Saiyids and proceeded to establish his own independence. In the meantime the luckless Farokshere had to be got rid of. Scott says that he attempt-

* Khafi Khan † Ibid.

ed to escape by letting himself out of a window, but being detected he dashed his own brains out against the prison wall. Scott however gives another version of his death, which as it is also told by Khafi Khan is probably correct. He endeavoured to bribe over his jailor, who however betrayed him to the Saiyids, who then decided to remove him. "Poison was twice administered without effect, * * unable to control himself he used bitter words (against the two Saiyids). The two brothers were told of this, and they ordered that he should be got rid of quickly by strangling. When the thong was thrown upon his neck, he seized it with both his hands, and struggled violently with hands and feet; but the executioners beat his hands with sticks, and made him leave go his hold." The body was buried in the tomb of Humayun outside the city gates, the scene of many a historical event in the annals of the house of Timur. He appears to have been popular amongst the lower classes and his funeral was followed by thousands "of the vagabonds and mendicants of the city who had partaken of his bounty. They cried and groaned, tore their clothes, threw dust upon their head and scattered their abuse" of the two brothers.* After the death of Feroksbere the two Saiyids helped themselves freely, not only to the treasures in the palace, but also to its inmates. Abdoollah "was very fond of women and the common talk was that he took to himself two or three of the late King's beauties; although for the gratification of his lusts and desires, he had seventy or eighty beautiful women."† Dissensions now again broke out between the two brothers and Abdoollah, the eldest, became jealous of Husain Ali's increasing power, whilst the latter by his profuseness and generosity attracted to his side all the most powerful nobles. Husain Ali's dewan, Ratan Chund, was now a person of great importance, and did not fail to take the opportunity of making as much money as he could get in the bestowal of appointments. He even went so far, as, (although a Hindu) to make appointments of Mahomedan priests, and when his master laughingly alluded to this, it was answered "that having successfully settled his temporal affairs, he had now turned his attention to spiritual ones."‡ Darayat appears to have died of consumption and no suspicion seems to be entertained by any of the historians that either his, or his successor's death was due to violent causes. The probabilities are that owing to long confinement these young princes had become enervated in constitution and

* Khafi Khan. † Ibid. ‡ Scott.

effeminate in their habits. Rafi-ud-Dowlah his elder brother was next elected, but he was allowed no more power than his brother. "He was surrounded by creatures of Husain Ali, and, as to going or staying at home, holding a court, or choosing his food and raiment he was under the direction of Himmat Khan. He was not allowed to go to the mosque on Friday, or to go hunting, or to talk to any of the nobles without the presence of one of the Saiyids or his guardian."* In the meantime disturbances had broken out and a rival prince, Neku Shere, had been proclaimed by Ajit Singh, the father-in-law of the late Ferokshere. Husain Ali marched against this rebel, who had thrown himself into Agra, and conquered him without difficulty, taking the prince prisoner. This capture of Agra was a grand opportunity which Husain Ali was not the man to let slip. There was in the fort a vast accumulation of treasure from the days of Sikander Lodi and Baber, amounting to two or three crores of rupees. In particular there was the sheet of pearls which Shah Jehan had caused to be made for the tomb of Mumtaz Mahal. All these jewels together with many others Husain Ali took for himself and "the elder brother Abdoolah got nothing, until after four months, twenty-one lacs of rupees were grudgingly surrendered to him",† and this apparently only after the mediation of Ratan Chand.

Rafi-ud-Dowlah (known as Shah Jehan the second) was now dying, also of consumption, after a troubled reign of three months and two days. The Saiyids were in despair, since the number of princes suitable for their purposes was becoming limited. A son of the late Jehan Shah and grandson of Aurungzebe was sent for and placed on the throne (September 1719, A. D.) under the title of Mahomed Shah. He was a young man of eighteen, and the Saiyids no doubt thought they would be able to use him as they had done his predecessors. But the new Emperor had fortunately a wise adviser in the shape of his mother "a woman well acquainted with state business and of much intelligence and tact." Her policy was not to arouse the Saiyids' jealousy but to work on quietly until the time should come to throw off their yoke. With this object in view she professed the greatest submission to the two brothers, and even refused to allow any visits of congratulation to be paid to her. Asoph Jah was now again transferred to the province of Malwa and he appears to have quietly gone there without making any protest,

* Khafi Khan. † Ibid.

but there were secret springs at work, and he was wise to make no open show of dissatisfaction. The new Emperor's mother wrote to him, complaining of the tyranny of the two brothers, telling him that they intended to put him out of the way also, and begging him to afford them protection. Soon after this Husain Ali threw off the mask and wrote to Asoph Jah bringing complaints and charges against him. The Nizam answered plainly; but he was told that Husain Ali wanted his province and was offered the choice of Agra, Allahabad, Multan or Burhanpur. Asoph Jah, had, however, been quietly preparing for the struggle which he had seen was inevitable and had collected some seven or eight thousand horses and materials of war. He was secretly informed from Delhi that there was no time to spare, and so he boldly threw down the gauntlet and marched with his army into the Deccan. Here he met with several successes for Husain Ali was busy elsewhere, and not one of his lieutenants had anything like their master's military genius. One large army under Diláwar Ali Khan was signally defeated near Burhanpur and the general killed, and the news of this defeat is said to have greatly disturbed and perplexed the two Saiyids. At one time it was proposed that the two brothers should march into the Deccan, and take the Emperor with them, and at another that Husain Ali should go alone, and Abdullah return with Mahomed Shah to Delhi. "Every week and every month the tents of the Emperor and of the two brothers moved in different directions, and their councils were distracted."* The end was that a near relative, Saiyid Alam Ali Khan was despatched at the head of thirty thousand horse to bring matters to an issue. He succeeded in doing this, but not with the result he had anticipated. A sanguinary battle took place near Burhanpur (1st August 1720, A. D.) and Alam Ali after fighting with all the bravery for which his family was distinguished, was not only defeated but killed, covered with wounds. The star of the Saiyids was now on the wane, and as is usual at such times their old friends and adherents began to fall away. Even "some of the relations and officials of the two brothers often offered up their prayers to God, and said. 'The end of the lives of the two brothers, who have no children, is evident; but woe to all Bárha Saiyids, for we know what evil awaits our children through the misdeeds of these two men!"†

The end was not long in coming. A plot, instigated by the

* Khafi Khan. † Ibid.

Emperor's mother, but of the existence of which even the Emperor was kept in ignorance was concocted. Several of the highest nobles, amongst whom were men who owed all to the open-handed Saiyid, were implicated, and the instrument chosen was an artillery officer one Mir Haider Khan. One day as Husain Ali was coming away from an audience with the Emperor, who was in camp, Haider Khan approached his palankeen with a petition. "The attendants at first would not allow him to come close, but Husain Ali beckoned him nearer and took the petition from him with his own hands. Whilst reading it, Haider Khan suddenly drew a dagger and plunged it into his side; Husain Ali "struck the assassin a blow with his foot at the same time crying out 'Put the Emperor to death.' The shock of his motion overset the palankeen and he fell dead on the ground. A hundred swords were drawn in an instant, and the daring assassin was cut to pieces."* A fight ensued but although his adherents fought bravely, they were overpowered, cut down and the Saiyid's tents given up to plunder. Husain Ali's corpse and those of his near relatives were despatched in great pomp to be buried in the tomb of his ancestors in Ajmere.† Scott gives the reflections of a native historian (without, however, mentioning his name) on this murder. "This world my son, is not eternal therefore expect not constancy from its smiles; even the power of Solomon passed away. Happy is he who leaves behind him the reputation of justice and mercy! These qualities were fully possessed by the Ameer-al-Amra (Husain Ali). His conduct to Feroksheré and his favourites, was from the necessity of self-preservation; and who will not guard his own life and honour at the expense of those who seek to destroy them." The modern reader, however, will scarcely agree that Husain Ali was entirely justified in all that he did.

When this news reached his brother Saiyid Abdoollah, he was only 80 miles from Delhi. Thinking there was nothing to be gained by delay he proceeded on his journey to Delhi. The Emperor was absent and he resolved to take the opportunity and to raise another Prince to the throne. Accordingly (1st October 1720) Sultan Mahomed Ibrahim son of Rafi-us-Shan, (fourth son of Jehander Shah) a great grandson of Aurungzebe, was proclaimed

* Scott.

† Note.—Khafi Khan says that there was a rumour which was also given credence to by his brother Abdullah that no bearers could be found to carry the coffin, that the covers were stolen and the coffins were left lying on the ground and were not buried. The tomb at Ajmere is to the memory of Mia Khan who is said to have been the founder of the family.

Emperor, and after hastily levying a large army Abdoollah marched out with the new monarch to meet Mahomed Shah. The armies met near Shahpur and a determined and bloody battle took place. As a propitious omen, before marching out Mahomed Shah had the head of Ratan Chand the late dewan cut off and thrown at the feet of his elephant, "so that the world might be gladdened by being cleansed from his polluting existence."* In spite of his large army Saiyid Abdoollah, no longer supported by the military talents of his brother, was utterly defeated. Many of the Saiyids were killed and he himself, wounded in two places was taken a prisoner together with many others of his near relatives, and the usurping Emperor, Mahomed Shah appears to have treated Abdoollah with more leniency than was usual in such cases. He probably saw that his power was broken, and as at the same time he was beginning to get alarmed at the increasing influence of Asoph Jah, he thought that he might have occasion for his services hereafter. It is also said that before the battle he made a vow, that in the event of victory, he would not kill or crush the Saiyid, however great his crimes might be. Khafi Khan says that Asoph Jah (Nizam-ul-Mulk), who was now vizier, tried to smooth matters for the Saiyid, praised his excellent character, and expressed his belief in his innocence as regards Feroksheré's death. Saiyid Abdoollah Khan was allowed to go into retirement unmolested and two years afterwards (30th September 1722) he died somewhat suddenly. Before his death Asoph Jah, disgusted at the corruption of the court, had retired to Hyderabad and had instigated the Mahrattas to attack Malwa and the provinces near Delhi, whilst he employed his time in strengthening his own position. So alarmed did the Emperor become at his growing power that he sent a firman to his deputy at Hyderabad commanding him to attack the Nizam and promising him the government of the Deccan if he did so. This order was obeyed, and Mabariz Khan, for such was the deputy's name, attacked the Nizam but was defeated and slain. The Nizam thereupon had the daring to send his head to the Emperor with a letter congratulating him on the death of a rebel. "From this period the imperial authority was only nominal in the Deccan, Nizam-ul-Mulk being in fact the sovereign, though ostensibly the viceroy of Mahomed Shah, who receives no tribute but the offerings at festivals and other particular occasions."† Mahomed Shah is said to have intended to reinstate Saiyid Abdoollah in order to crush this insubordinate viceroy, but just as he was about to do so the Saiyid suddenly died, not without the suspicion of poison administered at the instigation of the Nizam. Khafi Khan in alluding to this rumour says: "God forbid that his counsel should have been given for poison! But God knows!"

* Khafi Khan. † Scott.

Asoph Jah's fortunes need not be followed any further here. Brigg's history of the Nizam shows how he continued to gain strength from each new disturbance, and how a few years afterwards Nadir Shah's invasion left the imperial house so weakened, that his independence was never again disputed. One last scene however, the final one in the history of the gallant Saiyids of Bárha may be mentioned. This occurred in 1739, the same year as Nadir Shah's invasion. After the fall of the two brothers the rest of the family took part in the many uprisings which were constantly occurring, and as usual distinguished themselves by bravery and military talent. At last it was resolved to crush the race for ever and Itimad-ud-Daula was sent against their native place Bárha with 50,000 horse. The advance guard was attacked by the Saiyids numbering only 300 horse and repulsed with great slaughter, but just on the eve of victory they were attacked in the rear by 20,000 Rohillas. The result was an indiscriminate massacre from which scarcely one of the Saiyids escaped with life, and an immense amount of plunder was obtained, laden with which the victorious general went back to Delhi. The Saiyids were crushed for ever, but when soon afterwards Nadir Shah appeared on the scene, the want of this gallant clan was sorely felt "It was the just punishment of this crime of persecuting the Saiyids that soon after the Imperial House suffered the calamities occasioned by Nadir Shah (*Rustam Ali*).

J. D. B. GRIBBLE.

THE TRIPLICANE FATVÁ.

Any hesitation which may be felt about commenting on a professedly legal proceeding by those who claim to be leaders in the Muhammadan community of Madras is removed by the fact that the recent Fatvá, embodying the deliberate opinions of the Sunni Qázi of Madras and a number of Moulavis, has been circulated very extensively and so becomes a public document of some interest. It has not

only very materially affected the education of many Musalmán boys in several of the best schools in Madras, but has subjected a number of quiet orderly Muhammadáns to contumely and reproach. If the authors of the Fatvá had simply stated that in their opinion it was desirable that the Musalmáns of Madras should bestir themselves, and take some interest in educational matters, we should have praised them for their action. Indeed, we are convinced that no great stride can be made in the education of the mass of the Muhammadán people, until elementary education, at least, is undertaken by themselves on better methods than those now prevalent in the comparatively few indigenous schools. But the Fatvá does nothing of the kind. It is destructive not constructive. It places the greatest difficulty in the path of the younger Muhammadáns who desire to qualify for a career of usefulness and *honour*, and suggests no methods of relief whatever. It also deals with a number of other subjects, seriously affecting the civil and religious liberty of a large Musalmán community. The one hopeful feature in the case is that those who are affected by it are deeply annoyed. In some cases, young men very properly estimate it at its true value and treat it with the unconcern it deserves, but in the majority of cases it is obeyed, though most unwillingly. It is looked upon as a piece of pure tyranny, and its legality even from a Muhammadán point of view, is widely, though not openly questioned. There are Moulavis who are quite ready to give a counter Fatvá, if they could only be assured of immunity from insult in the public streets.*

It would be ridiculous to attribute any political importance to the Fatvá, for, as Fatvás are now issued in Madras, they usually represent the passing feeling of a mere clique and nothing more.† A Muhammadán, for instance, in order to elicit a favourable opinion, puts to men who claim to have a knowledge of the law a leading question on some point of faith or practice. A Qázi or a Moulavi writes a reply, and puts it in the judicial form of a Fatvá, which is then passed round to men of similar views who, often without reflection, or through fear of being thought unorthodox, attach their signatures to it. In this particular case, three days before the issue of the Fatvá, a moonshee had been dismissed from the principal school for Musalmáns in South India. In conjunction with this, the fact must be noted, that a controversial pamphlet had been published, which the learned doctors of Islám apparently find some difficulty in answering. It also happened to be the month of the Muhammadán year when preaching is very popular. Usually the orthodox preachers hold up Wahhábis and other Muslim sects to scorn. This year the Wahhábis rest in peace, and the full weight of Moulavi wrath falls upon those unfortunate Sunnis and Shiahs who have been wise enough to seek a good education for their sons, and upon those Musalmán teachers who are doing now, what they have done, in some cases, for the last twenty or thirty years, *viz.*, earning their livelihood as moonshees and instructors of Muhammadán youth in mission schools. There was thus a fortunate combination of circumstances for the display by the Moulavis of some religious zeal and activity, and for the re-assertion of their claim to that power and influence which they know full well is being slowly but surely undermined as western culture spreads amongst their people.

It has been a frequent boast by Madras Musalmáns that no learned Muhammadán becomes a Christian. This boast they can no longer make, for a Christian preacher, formerly a teacher of Muhammadán law, lately arrived in Madras. Here, at last, was a foe to be vanquished, and soon, a Moulavi, famed as a controversialist, sought him out. A controversy arose and in the course of it Moulavi Saiyad Háji Yusuf Hamid Sahib put some of the points in the controversy into the form of questions for his opponent to answer. Before quoting from the pamphlet, we will let the author tell his own tale, as it appeared in the *Madras Mail*.

SIR,—As many mistakes are being made by your Muhammadan correspondents with reference to myself and the letter to Moulavi Nizám-ud-din of Mylapur, I beg you to insert a few lines as to the true facts of the case. My address is at present Harris School. My father's name is Moulavi Saiyad Haji Hasan Shah Muhaddis Bokhari, disciple of Rashid Moulavi Alim Ali Muhaddis of Muradabad, disciple of Moulavi Muhammad Ishaq Haji Muhajvi of Delhi, disciple of Rashid Moulavi Shaik Abdul Aziz of Delhi, son of Moulavi Shah Wali Ullah Muhaddis of Delhi, &c. My birth-place is Rampur. I belong to the family of Saiyad Jalal-ud-din Bokhari. For nine years I have been a Christian. Before embracing Christianity, I resided at Bombay and taught students Muhammadan law. After enquiry, I was convinced of the

* Such a Fatvá was offered to me the other day, but I declined to have anything to do with the printing of it. The Muslims now persecuted must win their own freedom.

† This being the case it may be inconsistent to attach importance to the present Fatvá, but the fact is that this particular clique of Moulavis has just now unusual power in Triplicane, and one of them is the preacher at the principal Mosque in Madras. These preachers are, we believe, appointed by H. H. the Prince of Arcot who, if this is the case, must share with the Qázi of Madras the responsibility of the annoyance given to a large number of loyal Musalmáns who have ever been devoted to his interests. A counter-Fatvá would impugn the learning of the Qázi and his friends, but it would not stop violent preaching in some of the Mosques.

truth of the Christian religion, and entered the Christian Church through the instrumentality of the Bishop of Bombay, and was sent to Indore. The Muhammadans have been thirsting for my blood ever since. Several times by the aid of the British Government, I have escaped from their violence. I came to Madras a few weeks ago, and the Musalmans here also wish to take my life. On the 6th instant they attacked me *en masse* in Triplicane, but I found refuge in the house of a Hindu. The police saved my life, and ever since I have been under their protection. Muhammadans, however, do not cease abusing me, and throwing stones. Because I am a Christian I put up with this. Let me say further: (1) It is untrue that I am "creating opportunities to insult the Muhammadan community." All that I have written in the pamphlet has been written from references in the Koran. Nothing is therein stated contrary to rule, or insulting either to individuals or the community. If I had done so my enemies would never have left me alone without bringing me into Court. I have written only what is true. If the Moulavis wish to "defend" their religion they should write a reply; they will certainly not do so by merely accusing me of disparaging Islám. (2) I am in no way connected with the Harris School, except that I am residing there. I have nothing to do with the teachers, students, or the instruction. (3) Wherever I preach I seek to establish the Christian religion by those reasonable and historical proofs which I have investigated for myself. It is not my intention to preach about the Muhammadan faith. I take this opportunity of reminding my Muhammadan friends that they should compare the discussion between Shiahs and Sunnis with those between Christians and Muhammadans, and mark the difference.

MOULAVI SAIYAD HAJI YUSUF HAMID MASIHI.

The pamphlet referred to, the Plán-i-Zurúri (*i.e.* an important notice) is too long to quote in full; but a few extracts will show the kind of thing the Triplicane Moulavis feel themselves too weak to answer, and too timid to let people read. They have adopted the truly orthodox weapons of ban and excommunication, forgetting that such attempts to stifle discussion usually defeat the object aimed at. The pamphlet will now be read in stealth by hundreds of persons who might otherwise have treated it with contempt. The following are some of the subjects discussed.

(IV.) Muhammad Sahib claimed to be a prophet, and an apostle. What is the proof of this claim? Recently, in Calcutta, a person named Babu Keshub Chandar Sen claimed to be inspired and said that an Angel from God talked to him. His character is that of a good and pious man. He is so eloquent that thousands of persons, forsaking idolatry and foolish customs, have become his followers and imitators. Between the Babu and Muhammad there is this difference, Muhammad spread his religion by war and the sword, the Babu his by the eloquence of his speech and the excellence of his discourse. As to the claim of the Muhammadáns that the Qurán itself, on account of its eloquence in style and diction, is a special miracle, in this case also the superiority of the Babu remains, for the Qurán is in Arabic, and Arabic was

Muhammad's own language. It is no wonder if a man is sometimes eloquent in his mother-tongue. The Babu is eloquent in the English language, and so if the eloquence of the Qurán is a miracle how much are the lectures of the Babu a miracle, and how much more must all his claims be admitted, for what Muhammad claims the Babu claims. The Babu without worldly guile led men from darkness, infidelity and ignorance. Muhammad filled the treasuries with the spoils of booty. The Babu pronounced all such deeds a sin. Muhammad considered them an excellent work.

(VI.) Is Muhammad sinless or a sinner? His sinlessness is not proved in the Qurán. As a sinner he cannot be an intercessor for sinners. The following passages prove his sinfulness. "Ask forgiveness for thy sin, and for believers both men and women. (Súra xl, 57). "Truly we have given thee a manifest victory, in token that God forgiveth thy earlier and later sin" (Súra xlviii, 1-2.) "Be thou steadfast and patient, for true is the promise of God and seek pardon for thy sin" (Súra xl, 57.) (See also Súra-i-Múmim and Súra-i-Qatál).—From these passages it is clear and plain that Muhammad himself needed the forgiveness of sins, hence he cannot be the intercessor for others, as he himself needs an intercessor.

The other subjects discussed are—The claim of Islám to superiority over other religions, Muhammad's denial of power to work miracles, the nature of God, the alleged abrogation and corruption of former holy books, and the borrowing which the Qurán has made from other religions. There is nothing out of the usual course in these sections of the pamphlet. The extracts we have given are the strongest in it. There is nothing in it which can be called abuse of the Prophet and yet this is the reason, apparently given, for answering it by a Fatvá instead of by reason and argument. If the Moulavis consider a comparison between Muhammad, a founder of one religion, with another great man, founder of another religion, to be "finding fault with him" in the legal sense, they must be men who have no conception of the spirit of the age in which they live. They themselves do this, they compare Muhammad with the Prophets of former dispensations, much to their disparagement, and this they have no right to do, for in the Qurán God is represented as saying "We make no difference between them" (Súra iii. 78.) They even compare him to an ordinary barrister-at-law, a fact we shall prove later on. The Fatvá declares that to impute defect to Muhammad is kufr, the author of the pamphlet quotes passages from the Qurán which, as clear as words can express it, impute sin, and sin is a defect, to Muhammad. Surely, it would have been wiser for the Moulavis to have explained these passages, than to have excommunicated those who read them. The fact is that this doctrine of the sinlessness of the Prophets is not taught in the Qurán, it is *'bid'at*, something new, and of this the Moulavis are perfectly aware.

Where can men learn the character of the Prophet better than from the Qurán? Is it infidelity to believe just what it teaches about him? The Fatvá is as follows :—

After praise to God and the Prophet be it known that the author of such a pamphlet and similar books and tracts, those who correct them, lithograph and print them, those who make them known, or peruse them with belief, are certainly Káfirs and Murtadds (apostates) and are not to be considered as Muslims, because to impute defect to, to lessen the dignity of, or to abuse Huzrat Muhammad Mustafá (on whom and on whose descendants, and on whose companions be the mercy and peace of God), or any other prophet, or to show contempt for, or to deny any verse of the noble Qurán is kufr (infidelity) and a cause of irtidád (apostacy). In the Radd-ul-Muhtar, a commentary on the Durr-ul-Mukhtar, in the chapter on Irtitád it is written that "whatever Muslim should abuse the Prophet, or call him a liar, or find any fault with him, or attribute any defect to him, without doubt he is a Káfir, and his marriage void." In the chapter on Murtadd (apostate) in the Fatává-i-Alamgiri it is written, "whoever should joke about a verse of the Qurán, deny it, or find a defect in it will be a Káfir."

2. Those people who teach padris, and earn their livelihood from them, and who teach the Qurán, &c., (*waghairahu*) are a cause of disgrace to the Muhammadán religion and make false the noble Qurán; these also are Káfirs and Murtadds for "to aid kufr is kufr." Those people who listen to the preaching of padris, and with the *ear of acceptance* listen to their preaching are Káfirs; they should abstain from such places.

3. Also to send children to places where Padris teach religion is kufr, because to incline to kufr is kufr. Know, that Muslims should remain far from such things, and such pamphlets. They should not salute such persons, nor read prayers at their grave, nor bury them in Muhammadán cemeteries, they should consider the corpses of such persons as those of Káfirs. People should not go to their wedding feasts, although they may be related to them, for, if any one has any doubt about their kufr, he becomes a Káfir. Even though these people wear the Muhammadán dress, and according to custom repeat the creed, it produces no benefit to them. In the Fatává-i-Alamgiri, in the chapter on murtadd, it is written "the marriage of a Murtadd is void, cohabitation with their wives is fornication, the children of such intercourse are illegitimate. In the Ashbáh w'al Nazáir it is written "when one dies in the state of apostacy, he should not be buried in the Muhammadán cemetery, but like a dog. In the Miftáh-us-Saadat, in the chapter on murtadd, it is written, "he who in the state of apostacy cohabits with his wife, causes her to commit fornication and the children are illegitimate, even though he reads the kalama (creed) as usual. The Nourisher of the world, (great in His glory) has said "assist in good and pious acts, and not in sin and tyranny," and again "He who does not order according to what has come from God (*i. e.* Qurán) is a Káfir.

Written by Sultán Mahmúd Hanifi, the 7th day of Rabi-as-Sáni, 1301 A. H.

Then follow the signatures of Moulavi Ubaidullah, Sunni Qázi of Madras, and a number of Moulavis.

It will be observed that the Fatvá describes the punishments to be inflicted on Murtadds and Káfirs,* (Apostates and Infidels.) It then defines what the authors of the Fatvá consider irtidád and kufr to be. According to them Murtadds are those,

(1.) Who compose, print, circulate and read (with belief) such pamphlets as the P'lán-i-Zarúri, the reason given for which is that to abuse the Prophet or to show contempt for the Qurán is kufr, a position supported by two quotations from law books.

(2.) Who teach padris, earn a livelihood from them, and who teach the Qurán, and *waghairahu, i.e.* other things beside it! The only argument to support this decision is the sentence "to aid kufr is kufr," which has no bearing in the case at all.

(3.) To listen to the preaching of padris. No proof whatever is given of this assertion.

(4.) To send children to mission schools, for which the only argument adduced is that to incline to kufr is kufr. No decision from any Muslim legal authority is given on this point, for the simple reason that no trustworthy one can be found, and who can prove that all parents of Muhammadán boys in mission schools incline to kufr.

We have next a passage from the Radd-ul-Muhtár and from the Fatává-i-Alamgiri telling us that, if a Muslim abuses the Prophet, or finds fault with the Qurán, he is a Káfir and a Murtadd. Now, the author of the P'lán-i-Zarúri is not a Muslim, so the decree given in the Radd-ul-Muhtar cannot possibly apply to him. To what Musalmán then can it apply? In a book, called the *Tádib*, on the second page, a description is given of a sermon by a Moulavi who compares God to a session judge, Muhammad to a barrister and other prophets to lawyers of the lower courts. The author of the *Tádib* very properly† prays that God may preserve him from such conduct. Now, it is interesting to know that the Moulavi who makes the comparison is one of those who signed this Fatvá, whilst he who prayed to be preserved from such evil is a disciple of the father of the Moulavi who wrote the Fatvá, preparatory to its signature. What Mard-i-Muslim,‡ to use the exact words of the Fatvá, has abused the Prophet? I charge no one with so doing, but

* I shall now use these terms; also Irtidád for apostacy and Kufr for Infidelity.
† From a Muslim stand-point. ‡ Musalmán man.

I do ask, with reference to the person referred to in the *Tádib*, and described as using disrespect to God and all the prophets, especially to Muhammad, whether he can now sign a Fatvá such as the present one? Will the Qázi instruct the public on this point? So much for the first decree of the Fatvá.

With regard to the second, we have already noticed that no decision of any legist of Islám is given on the point. If to teach the Qurán to an Ahl-i-kitáb, a Christian, is kufr, it seems plain that the Fatvá makes the Qurán itself a cause of kufr. I do not say that, but it is clear that the authors of the Fatvá do. As they have neglected to give any legal authority on this point, I will do so for their special instruction, and for the information of my Musalmán readers. In the Fatáva-i-Qázi Khán, in the chapter on Qirát-ul-Qurán (the reading of the Qurán) it is written.

"The Harbi* or the Zimmi† when they desire to read the Qurán may be taught, and so also with regard to the Fiqh and Ahkáms (the law and the commands). It may be hoped that they will find the road to the Truth (Al-Haqq). But until they have washed they must not touch the Qurán; after they have done this, they are not to be hindered."‡

The fact is, that any one may be taught it, provided he conforms to the verse "Let none touch it but the purified" (Súra lvi. 78.) If it is said that the purification refers to the ceremonial ablution of a Muslim, and that none but a Muslim can make that, it is sufficient to reply that the Fatvá just quoted recognises the fact that the Harbi and the Zimmi can make whatever ablution is required, and thus it explains the verse in the Qurán, and shows that all it means is that the Qurán must not be touched with unwashen hands. This is in accordance with the Traditions (Ahádis).

* A non-Muslim not subject to Muslim Rulers and, therefore, according to Muhammadan Law, a Kàfir.

† A non-Muslim who is subject to a Muslim Ruler.

‡ In order to show the Qázi and his friends how careless they have been, and how culpable in issuing a Fatvá without first ascertaining the law on the subject, I append the original text of Qázi Khán's Fatvá. It is as follows:—

Al-Harbi au al-Zimmi iza talaba ta'lim al-Qurán yu'allamu wa kaza talaba al-Fiqh w'l-ahkám rajaan an yuhtadá ila al-Haqq lákinnahu yumma'u min massi-l-mus'haf illá iza aghtassala falá yumma'u ba'da zálika.

اَلْحَرْبِيُّ اَوِ الذِّمِّيُّ اِذَا طَلَبَ تَعْلِيمَ الْقُرْآنِ يُعَلَّمُ وَكَذَا طَلَبَ الْفِقْهِ وَ الْأَحْكَامِ رَجَاءَ اَنْ يَهْتَدِيَ اِلَى الْحَقِّ لٰكِنَّهُ يُمْنَعُ مِنْ مَسِّ الْمُصْحَفِ اِلَّا اِذَا اغْتَسَلَ فَلَا يُمْنَعُ بَعْدَ ذٰلِكَ‡

فتاوىٰ قاضى خان فصل قراة القرآن

Thus when Fátimah, the sister of 'Umr (who was afterwards Khalíf), was asked by him to lend her copy of the Qurán, she replied "wash and I will give it you."* 'Umr was not then a Muslim.

The Fatvá further prohibits the teaching of other things "beside the Qurán." What other things? A legal document should not be ambiguous. The authors of it know full well that this prohibition is untenable, and this accounts for the absence of any proof whatever from the law of Islám on this point.

The answer to the fourth charge is very simple. If to send a Musalmán boy to a mission school in 1884 is wrong, it must have been wrong in all the years that are past. That is to say, gentlemen of the highest rank in South India are now declared to be Káfirs. Men who are doing excellent work in various departments of the State are thus branded with an opprobious name. Again what have the Qázi of Madras and these Moulavis been doing all these years, that they have never taken any steps to prevent good Muslims from falling into such a sad and calamitous state? Their own Fatvá convicts them of the most careless negligence. From their point of view the salvation of devout Muslims has been for years in the utmost peril, and yet the Qázi and the Triplicane Moulavis have looked quietly on. However, the Musalmáns of Madras may let this pass, for the Fatvá is absolutely contrary to the Qurán itself on the subject of reading the sacred books. It is also opposed to the practice of good Muslims all over India, and, last of all, neither the Qázi, nor any Moulavi, has the least power over the future state of any Muslim.

But let us try and see what a Murtadd really is. According to the Durr-ul-Mukhtár, a Murtadd is one who turns away from Islám, or who abuses the Prophet. The Ruler† must call him and try to put away his doubt and imprison him for three days. If he repents not, he must be put to death "Man badala dinahu faqtalahu"—"whosoever changes his religion, kill." I am quite aware that many Moulavis of repute do not agree with this decree. Indeed, Moulavi Cherágh Ali Sahib of H. H. the Nizam's Service says—"The Muhammadán Scripture confers pardon on those who convert a Moslem to unbelief".‡

* Hujjat Ullah Ul-Báligbah.

† In Madras, I presume the ruler would be H. H. the Prince of Arcot, who, I believe, has the patronage of the appointment of Preachers in the Mosques.

‡ Proposed Political, Legal and Social Reforms under Moslem Rule, p. 50.

Our Triplicane Moulavis, however, do not agree with one who considers the sacred law of Islám to be common law and who speaks of the 'Ulamá thus: "Some of the 'Ulamá—always fanatic as a rule, may pass an opinion or Fatvá against a Moslém condemning him for a supposed act of apostacy, but this will not, and cannot be cited as an authority. Even in India, we hear of such Fatvás from fanatic Moollás, but they are not, therefore, authoritative." Moulavi Cherágh Ali Sahib's opinion is of as much, if not of more, value as that of any person who has signed the Fatvá.

The Durr-al-Mukhtár defines Káfirs to be:—

(1.) Those who deny the Creator (Dahriah).
(2.) Those who deny the unity (Sanawiah).
(3.) Those who believe not in prophets (Philosophers).
(4.) Those who deny prophetship.
(5.) Those who abuse a prophet.
(6.) Those who abuse the Shaikain, *i.e.*, The Khalífs Abu Baqr and 'Umr.

There is absolutely nothing whatever to connect teaching the Qurán and *ghairahu*, whatever that may mean, to an Ahl-i-kitáb, or with going to a Mission School, with irtidád. Had it been so we may be quite sure that the authors of the Fatvá would have eagerly quoted it.

It is quite clear, then, that a Murtadd is (1) an apostate and (2) an abuser of the Prophet and *no one else*. What Musalmán is there in Madras who does these things? If it is said that Moulavi Háji Yusuf Hamid Sahib is charged with being a Murtadd, the answer is simple. He is not under Muhammadán law, nor has he abused the Prophet; nor, if he is to be made the subject of a Fatvá, has the Ruler called him and tried to put away his doubt. Will the Qázi kindly remember this another time. If Yusuf Hamid Sahib has compared Muhammad to Babu Chunder Sen and if this is an offence, I reply that a well known man, a Moulavi, who signed the present Fatvá, has been charged with comparing him to any barrister. If it is irtidád in the one case it is equally so in the other. The proverb "Physician, heal thyself" certainly applies to the Qázi and his friends.

The Fatvá errs by excess and defect (ifrát and tafrít). It describes as irtidád acts which cannot be proved to be such. It does not describe the full punishment for a Murtadd. And so far from the P'kán-i-Zarúri being written in an offensive style, it is mild compared with the discussions Madras Musalmáns hold amongst

themselves. The book already referred to, the *Tádib*, is one long invective against a Madras Moulavi and his views. The Shiah Qázi of Madras in a pamphlet, called the *Hasaniah*, after describing his own sect, considers that it alone of the seventy-three sects of Islám is the *one to obtain salvation*, for he says:—"all others are false, vain, and in error" (p. 43). His sect is the Náji (saved), others are the Nári (belonging to fire) (p. 44). The Sunnis return the compliment. The Durr-ul-Mukhtár defines a Káfir to be one who abuses a prophet. Muslims are bound to honour and respect the Anbiya-Ulul-'Azm, the six great prophets, Adam, Noah, Abraham, Moses, Christ and Muhammad. A Madras Musalmán has called Christ the 'helpless one' (bechára) a term of great reproach, from a Muslim stand-point. I feel inclined to ask the Qázi's opinion on this point. It is thus evident that there are Muslims in Madras who, from an Islámic point of view, are in a very dangerous condition. It is sufficient to call the attention of the learned doctors of the law to the state of affairs in their own community.

The Fatvá shows how intolerant Triplicane* Moulavis have become. A Christian declines to admit that the style of the Qurán is miraculous. This is such an offence in their eyes that they immediately inflict punishment, not on him, for that they cannot do, but on a large number of good honest Musalmáns who happen to be sending their sons to schools where they can get a good education. What connection is there between these two things? The Qurán is the sacred book of one of the great religions of the world. It must be subject to criticism just as the Vedas and the Bible are.

How different was the state of affairs in the time of the Abbasside Khalífs of Baghdád. Then Al-Kindí, a Christian Arab, said—

"The Qurán is a confused heap, with neither order nor system. What could betray greater *ignorance than to bring forward* such a book as an evidence of apostleship. Surely no one with a grain of sense would dream of it; much less should we who are versed in history and philosophy, be moved by such deceptive *reasoning*. If the *contention be that the language* surpasseth all other composition in eloquence, our answer is that every nation regardeth its own language the most beautiful, while the Arabs hold every other tongue but their own as barbarous and similarly the Arabic, held by them as the most beautiful, is regarded by other nations to be barbarous. Thy book (Qurán) *throughout is broken in its rhythm, confused in its composition*, and in its flights of fancy unmeaning."

Al-Kindí was not the subject of a Fatvá, though, according to the

* I especially refer to Triplicane Moulavis, because it is well-known that there are other Qázis and Moulavis in Madras who do not agree with the authors of this Fatvá.

Moulavis of Triplicane, he must have been a Káfir, for he certainly 'finds defects in the Qurán'. The Khalíf-al-Mámún and the Mutazala Khalífs encouraged perfect freedom of discussion, and the time of Islám's greatest glory, was just the time when it was most tolerant. Of all the Muhammadán rulers of India, Akbar stands supreme, and he was one of the most tolerant of men. It was so, for a while, in Spain, and then Muslim learning flourished, and the fame of Cordova equalled that of Bagdád. All this is passed away. Islam * as a system, in which art and science can flourish, in which freedom of thought can find a home, is steadily on the decline. The Sunni Qázi of Madras and the Moulavis of Triplicane are but a sign of the times. Here we see men, who claim to be learned doctors of the law of Islám, delivering judicial opinions, which they cannot prove; and which, if they could, would only show how utterly bad a thing the law as they understand it is, how it must retard all healthy growth, and produce that stagnation in Islám which is its bane. In these days all claims are weighed, all systems investigated, all religions tested, and so the Qázi and his friends must not expect that they can do public acts, which seriously interfere with the liberty of other people, without such action being challenged and such conduct criticised. As the younger Muslims become more and more imbued with the Mutazala doctrines, as the influence of Syed Ahmad Khán Bahadur, C. S. I. spreads wider and wider, so Islám will begin to recover some of that influence in the political and social progress of India, which such persons as the authors of the Fatvá are deliberately casting away. To them it is probably useless to appeal, but to the Musalmán alumni of the colleges and schools, to the men, in all parts of the Presidency, who have learnt something of the pleasure of liberty of thought, who breathe a purer air than that of Triplicane, I would say that the future prosperity of your people and of your community rests upon you, to whom God has given wider views of truth, and better opportunities of knowing how He deals with men and nations. The words of Lord Beaconsfield, one of the greatest statemen of the age, are worthy of your attention. He speaks of "The irresistible law of our modern civilization which has decreed that the system which cannot bear discussion is doomed." The Sunni Qázi of Madras and his friends practically say that Islám cannot bear discussion.

KHAIR-KHWÁH-I-KHALÁIQ.

P. S.—It has been suggested to me that it would be well to ask

* If the Islám of the Madras Qázi and of the Triplicane Moulavis is the true orthodox system, which many learned Muslims would deny.

the Qázi to issue another Fatvá, in order to clear up some doubtful matters connected with the present one. As I have not the pleasure of a personal acquaintance with him, or with the writer of the Fatvá, I hope that they will, on seeing this, condescend, with their usual alacrity and courtesy, to remove the doubts which now exist in the minds of so many Musalmáns. I do not refer to the very grave doubts which Muhammadáns, as learned as themselves, have on the subject matter of the Fatvá, but to doubts as to the signatures attached to it. I will now submit the question, on which I seek for a Fatvá.

QUESTION.

What is the opinion of the 'Ulamá of Islám, and of the Doctors of the perspicuous law on the following points?

1. Can a Moulavi who has been accused of comparing God to a sessions judge and Muhammad to a barrister-at-law and other prophets to vakils, sit in judgment on a person who simply prints or reads a pamphlet, in which Muhammad is compared to Babu Chunder Sen, and can such Moulavi affix his seal to a Fatvá?

2. Is such comparison of Muhammad to a barrister contrary to the Fatvá of the 7th of Rabi as-sáni, 1301, A. H., and, if so, is it just for the Qázi to declare Syed Haji Yusuf Hamed Sahib, a Murtadd and a Káfir, and yet to pass over this greater offence; if such comparison is not contrary to the Fatvá, is the author of the *Tádib* justified in praying to be preserved from such acts?

3. A Moulavi who has signed the Fatvá has aided a mission school. Now, assuming the correctness of the Fatvá, and of the applicability of the sentence 'to aid kufr is kufr' what is this Moulavi? Was he legally entitled to sign this Fatvá which *condemns good Muslims for attending a place aided by himself*?

4. Making the same assumption as in the preceding paragraph, can a Moulavi, who has himself taught in a mission school and who has not publicly repented of this act, sign a Fatvá, such as the one referred to? In the absence of such repentance what is this Moulavi?

5. In the Durr-ul-Mukhtár a Káfir is described as one who insults a prophet. What is the Muslim who writes disrespectfully of one of the Anbiya-ulul-'Azm? Is he a Káfir or is he not?

As-Sáil,

Khair-Khwáh-i-Khalá,iq.

MIGNON'S SONG.

(From the French of Theophile Gautier.)

Angel of poesy, O maiden pure as snow,
Wilt thou then leave my side through the rude world to go?
When from our threshold forth peeping with timid gaze
Thou sawest the evening clouds through sunlit western haze
Thou wert content t' admire their fairy hues of gold
But wish to follow them ne'er on thy heart laid hold,
Thou, in the summer's prime the warmest bluest day,
A Cinderella crouched beside the fire alway.
O foolish swallow mine! What impulse seizes thee
Now to unfold thy wing and from the nest to flee?
By the fireside let's stay and no such dire risk run.
Let us remain, I'll tell thee stories little one,
Sitting together so,—I'll tell thee stories prime
To keep thine eye and ear alert all evening time.
Hear the wind moan and plain like one in agony,
While the awakened dog growls as each step goes by.
The winter night is cold, the hail with rattling shock
Batters the window panes, the rusty weathercock
Creaks like an owl upon the pointed roof. Wouldst go?
Whither would'st go my dear?

O Master dost thou know
The song in Goethe's poem Mignon to William sings?
"Knowest thou the poet's land replete with all fair things,
The land of the brightest sun where the rich citron grows,
Where through the dark green leaves the golden orange glows?"
'Tis there, my master, there that we must live and die:
Thither the way lead thou, thither will follow I.

Stay, stay my child, this bright blue sky of thy desire,
This heaven without a cloud, this brilliant sun of fire,
Will burn thy pure white skin through which the blood shines [fair.
The sweet pale violet droops in the summer air;
It needs the thick fresh grass on which the dew-drops gleam,
The willow's shade that bends above some gentle stream:
A flower 'tis of the north and nature's law is so,

Thou daughter of the north a fragile flower art too.
Upon an alien soil we look for joy in vain
One's native land is fair, to leave it is no gain.
Trust me, beware the dream.

Italy! Italy!

So rich, so gilded, how thy guests do sully thee!
What crowds from every land in all thy ways one sees
Wearing the edge off all thy Rome's antiquities,
Dilletanti, who ape the airs of art sublime,
The rich ennuied ones, the tourist-fools who rhyme,
The petty Byrons swoop from all sides *sans* remorse
O Cæsars' mother down upon thy prostrate corpse!
Thy columns and arcades they measure one and all;
This raves about some rock, that of some waterfall.
At every step or turn admiring they exclaim,
Raise foolish eyes aloft to Heaven, contort the frame
At the least shapeless block all over-grown with moss,
At the least space of wall the lentisk trails across
They into raptures fall or weep at ease, enough
To make the monuments smile pitying such stuff.
One with his eye-glass close against thy frescoes jammed,
Tries to find beautiful their great gigantic damned,
Consults his book (O shade of Michael Angelo!)
To see if it's there he should into raptures go.
The next, an amateur in antique ruins goes
Dreaming of pediments, cornices, porticoes;
I' the Via Lata tries to raise each paving stone,
Swears but by Vesta's flame believes in Jove alone.
Some making poems on their travels spend the time,
With odd Italian words stuffing each feeble rhyme.
On the great pictures some turn sonnets vilely bad;
On they go artist, lord, aristocrat and cad.
Each rends thee with his teeth O Italy the fair!
And from thy raiment strives at least a shred to tear.

Stay, stay, how great a risk on one's return one runs
To find the old sire no more alive amid his sons.
E'en your dog flies at you, poor beast how should he know
The stranger burnt and brown his lord of long ago?
Hearts that once oped to you are now closed in each breast;
Others have got their keys, and those who loved you best

Keep but an empty name of you that fades away;
When you come back you find no place where you may stay.
The world where erst you lived has ranged itself anew
Parted has been 'mongst all, the share that fell to you,
Like a dead man are you, whom folks thought safely buried,
But who has from his tomb broken and homeward hurried;
And to his house returned thinking to see there still
His wife shed tears for him, his gold his coffers fill,
But finds her tears are dried for she has filled the void,
And that his greedy heir hath long his wealth enjoyed;
And all his friends are changed, so the unhappy wight
Sees his mistake and longs, longs only to take flight;
Once more below the sod to lay his weary head
And sleep the dreamless sleep upon his lonely bed.
'Tis the way of the world! Men's hearts right soon forget,
Unstable water they, no seal on them is set.
On the grave's fresh turned mould the grass less quickly grows
Than new love in the heart; and the salt tear that flows
Is not yet dried before smiles the lips once more part,
And a new name is graven on the tablets of the heart.

Stay we then to be loved, that all remember may
That we are in the world. No love endures alway
Against long absence. O ye absent ones ill-starred!
The absent as the dead are from all power debarred.
When you of sight of you e'en well loved eyes deprive,
Nothing remains of you to prove you still alive,
Soon as your voice's tones can be no longer heard,
When by your finger's touch the pulse no more is stirred,
You're dead, your features those of others soon efface
From memory's page and reign supremely in their place.
That friends may faithful be the fair ring-dove must not
Fare forth and leave the nest but dwell in the dove cot.

Let's in our dove cot dwell, for after all our France is
Well worth your Italy, which fame so much enhances;
And, as in Venice, Rome, Florence or Naples, here
Are palaces most fair and pictures without peer.
We have our donjon keeps, our old cathedrals grey
Lift up their towers to heaven high as St. Peter's may.
Notre Dame that holds aloft her two great arms crosswise
St. Severin whose spire darts through the roofs towards the skies.

There is the Sainte Chapelle with Moorish Minarets,
St. Jacques who neath his load of grotesque monsters frets.
Great woods we have and birds that sing in all the bowers,
Our airs are balmy with the scent divine of flowers.
Through our enamelled meads run sweetly babbling streams,
Where we may peacefully wander and dream our dreams.
We've fruits as honey sweet and grateful to the eye,
Islands of silver cloud on deep blue seas of sky;
And, what in alien lands you find not anywhere,
What is worth more than all my little wanderer,
The dear domestic hearth, where purest joy is found,
The mother in her chair, the sisters grouped around,
And the familiar cat who rolls around and plays,
And,—just to pass the time if heavily it weighs—
Welcome old friends to talk of poesy and art,
Who drop in early and do not too soon depart.

M. R. Weld.

LITERARY NOTICES.

The Witness of God, *and* Faith; *Two lay sermons by the late* T. H. Green, M.A., LL.D., *Fellow of Balliol College, and Whyte's Professor of Moral Philosophy in the University of Oxford. Edited by the late* Alfred Toynbee, M.A., *Tutor of Balliol College, Oxford. London: Longmans Green and Co.* 1883.

The utterances of a philosopher on religion are generally interesting: and in the case of this little volume there are not a few circumstances to heighten the interest. It contains, not lectures on religious theory, or controversial discussion, but two "lay sermons" addressed by the late Professor of Moral Philosophy at Oxford, who was also a Tutor of Balliol College, to his pupils, the senior students of that College. Professor Green was no common tutor. Not theory, but practice, was to him the end of the study of moral philosophy, and right nobly and faithfully did he keep before him, in private and civic and university life, the ideal that had been presented to him in Christ and justified to him by Kant. His pursuit of philosophy, moreover, was not "the dialectic with which the enlightened man of the world flatters his own conceit and confutes his neighbour's" but "a faithful quest after hidden truth"; for he conceived that "the scientific impulse after truth",—"the desire to know what nature is and means"—is a manifestation, on another side, of "the desire for

reconciliation with God, the faith that worketh by love." His life and his teaching being thus inspired by the loftiest religious aims, his teaching was not dry bones of information or criticism or speculation, but living seed of thought bearing manifold fruit in those that heard it; and his life was even more influential than his teaching; in a word, he had the gift to win, not pupils, but *disciples*. The editor of this little book speaks of the second sermon as "a discourse which, even in its most metaphysical passages, seemed to summon us to a new spiritual life"; and such a summons, or the echo of it, was to be heard in all Professor Green's teaching and living.

His mind was eminently metaphysical, and he was perhaps the most original thinker of the "transcendental" school that England has produced in modern times. Scientific pursuits had his sympathy but did not attract him; the rare atmosphere of lofty metaphysical abstractions, in which common minds could not sustain themselves but must have soon dropped to the concrete, seemed to be his native element.

He parts company at the first step of his philosophy, with materialists of all shades, taking as his fundamental axiom the existence of a "spiritual principle" as the necessary condition of knowledge and of the existence of nature as an intelligible system. And the chief aim of his teaching is to vindicate the importance of consciousness in regard to knowledge, and of "the idea of a perfected self" in regard to morality.

His method of philosophical enquiry was mainly determined, as in the case of all original thinkers, by his character; and its leading features were earnestness and conscientiousness. His earnestness is shown in a marvellous patience and perseverance—what Professor Robertson calls a "massive persistence"—that must strike even a cursory reader of his works. He analyses and analyses the conception under examination till he has resolved it into its ultimate atoms and shown that they are ultimate; he tracks and tracks his thought, pursuing it from inference to inference, disclosing its fallacies or testing on all sides its soundness: baffled by no intricacy, wearied by no multiplicity in the branching issue of his argument, he patiently follows out each to its conclusion, and, as patiently, if necessary, retraces his steps to the starting point. His conscientiousness is no less marked than his earnestness. He examines and criticises his own theories as carefully as those of his adversary; he is as ready to suspect fallacy in his own expressions as in his opponent's; and he does not conceal, but sets plainly forth and dwells upon the weak points of his own system and the strong points of that which he rejects. It is plain in all his enquiry that his aim is not triumph but truth.

The book under review gives an epitome of the man. It shows better than his distinctly philosophical works how supremely religious his character was; there is metaphysics and abstract argument in it, but there is also a "buried life of spiritual passion that burns beneath." There operates all through the transcendental spirit aiming to separate the spiritual from the supernatural in religion as it aimed to separate the spiritual from the material in philosophy, but there is also a tender appreciation of spiritual wants and a loud summons to a new spiritual life. The style is marked by a strenuous and careful earnestness, requiring the reader to give laborious attention as the preacher has given laborious thought; charging every sentence, almost every word, with its weight of meaning, that the reader cannot afford to miss. If, however, the reader will not grudge to imitate the patience and earnestness of the preacher, he will find the thought to be as clear as it is close, and the sentences, however pregnant, to be safely guarded against ambiguity. Occasionally also the style rises to an unforced but powerful eloquence, an eloquence of thought rather than of form, when the spirit of the man breaks through and speaks to the spirit of the listener.

The first sermon is entitled "The Witness of God." As has been implied above, Professor Green could not be called an "orthodox" Christian. He refuses all belief in the supernatural, declaring indeed that "a proposition which asserts divine causation for any phenomenon is not exactly false but turns out on strict analysis to be unmeaning." He refuses further to believe that religion can be in any way vitally dependent on assent to "certain propositions concerning past events." He conceives the "original intuition" of Christianity, the essence of religion, to be the idea of a denial of the fleshly self as the beginning of a divine life. This intuition, he holds, belongs to all nations but has never been "realised in action either intellectually or morally" except in Christianity. Christ came displaying in Himself the realised idea; Paul followed, and "bringing with him certain 'metaphysical' conceptions, the result of the philosophy of his time, found them, in this man, suddenly become real; and in spirit, yet with a light above the brightness of the sun, saw manifested in Him that which Philo and the Stoics knew must be." Thus Mr. Green regards St. Paul's language and doctrine about Christ as metaphysical, Christ being to him "an idea or form of intellectual consciousness," though none the less potent on that account in the quickening of the spiritual life; for "all moral action begins from ideas." Theology has taken its modern shape, he contends, from the inability of the generations that followed St. Paul to take his metaphysical conceptions metaphysically.

"The original intuition, depending, as it seems to have done, on peculiar personal and historical conditions, could never be re-produced in its native form and force. It had to be translated into other terms, which might make it available for men who could only see through the eyes of the Jewish and Greek enlightenment of their time. In this altered state it constantly required new supports of the understanding, and suggested new deductions, which have gradually constituted the theology of the Church." And again;—"In a generation or two, the intuition of the present Christ, which Paul even in his lifetime seems to have been unable to convey to others as it was to himself, had faded away. In its stead came the belief in past events, or in present mysterious transactions, external to the man, which had to be stated in a creed. . . . . Thus Christ, if I may use the expression, was gradually externalised and mystified. The miraculous overpowered the moral and spiritual, as much as, in the view of St. Paul, the moral and spiritual overpowered the miraculous."

Taking this view of the history of Christian belief, the chief aim of the sermon is to set the idea of Christianity free from "conventional theological language," to give the essence of St. Paul's belief in Christ, and to show how, apart from all "objective" proofs, the Christian life can in all ages justify itself and witness for itself and be its own sufficient proof.

Mr. Green differs from many other eminent disbelievers in the supernatural in that he considers St. Paul to be the exponent of the true Christianity and the error of the Church to have resulted from its misunderstanding of

St. Paul; whereas they have generally taken St. Paul as the arch-perverter of the simplicity of the Gospel, who has misled all succeeding generations. But apart from this, his explanation of Christian belief as a gradual evolution is not novel; and it would not be hard to show that the theory, as he states it could not stand the simplest historical tests, and that Christ and Christ's relation to men were as objective to St. Paul as they are to the orthodox Christian of to-day. Like Kant and Hegel, Mr. Green comes to the Bible not so much to discover *its* meaning as to discover in it a preconceived meaning that will harmonise with his philosophy.

But Professor Green does not invite criticism and controversy: for his heterodoxy is not of that dangerous sort which "not content with showing the supernatural to be a mere phrase to which no reality corresponds, seeks to apply the same process to the spiritual." His great zeal is for the spiritual and for the spiritual as Christ displayed it and St. Paul understood it; and he only seeks to unwrap from it the supernatural and the objective because he thinks that they hide its form and clog its operation. He says in effect: 'Believe in the spiritual, on its own evidence if you can; that is best and truest: but if you cannot, on the evidence of history. It is matter of thankfulness that the cogency of such evidence should be what it is. Let no one rashly tamper with it. But whether on internal or objective evidence, hold fast to the spiritual, to the idea of an ever accomplished death and resurrection of Christ in the soul as the source of a divine life.'

Readers who cannot accompany Mr. Green in his theory that St. Paul idealised Christ; will still find themselves richly instructed by his exposition of St. Paul's teaching in its spiritual and philosophical aspects. For it must be acknowledged that the current and historical conceptions of Christ, although they are conceptions such as St. Paul himself had, tend to embarrass us when we would follow him in his philosophy of spiritual things. It was only to a mind like his that Christ could be at once so real and so ideal. But Mr. Green by rejecting the objective reality of Christ as we conceive it, is therefore set free to scale the heights and sound the depth and expatiate in all the length and breadth of the Apostle's spiritual conceptions.

St. Paul has a great attraction for Mr. Green. 'Of the Bible', his editor tells us, 'he once characteristically said that it was the only book he really knew well': and the writings of the Bible that he knew best were St. Paul's. The metaphysical cast of mind of the great Apostle, his subtle, often paradoxical dialectic, delighted the transcendental philosopher; the idea that pervades all St. Paul's writings of a supreme contrast in the spiritual sphere, a contrast described on many sides and by many names, of 'word' and 'power,' of 'flesh' and 'spirit,' of 'bond' and 'free,' of 'death' and 'life,' of 'darkness' and 'light,'—harmonised closely with Mr. Green's own philosophy; while St. Paul's intense earnestness and utter self-devotion won the deepest admiration of his kindred nature.

The writer well remembers a remarkable passage of Professor Green's lectures, in which he compared together St Paul and Kant and Hegel, and showed how much loftier a level St. Paul's philosophy reached than Kant's, inasmuch as Kant's conception of the highest state attained by man—Autonomy of the Will—was to St. Paul only 'bondage to the law,' superior indeed

to 'the bondage to the flesh,' but far below that 'glorious liberty of the children of God' in which even the law is no longer a yoke but is obeyed freely and with delight. It is in such appreciation of the inner meaning of St. Paul's teaching that the chief worth of these sermons lies, the chief worth at least next to that indefinable spiritual influence which attends the utterance of an earnest spiritual man. It is easy to underrate and impossible to overrate the depth of meaning in such expressions of the Apostle as "I am crucified with Christ: nevertheless I live; yet not I, but Christ liveth in me: and the life that I now live in the flesh, I live by the faith of the Son of God," or of "To me to live is Christ" or "If ye then be risen with Christ:" and Professor Green brings us nearer to the full measure of their meaning in this little book than many learned commentators have done in ponderous tomes.

It is unnecessary to dwell in detail on the second sermon entitled 'Faith.' It aims at treating Faith in the way in which the essential ideas of Christianity were treated in the first sermon, cutting it off from all objective support, and seeking to show that even in the man who *thinks* his faith rests on the assurance of outward facts, it is really derived and supported from within; the "promise and potency" of it lying in the consciousness of sin, and the attainment and realisation of it in the consciousness of the death into life wrought by the indwelling Christ.

About the closing passages of the second sermon there is a significantly mournful ring. We have spoken of the Professor's conscientiousness in philosophical enquiry, a conscientiousness which led him to dwell on the strong points of his opponent's system and the weaknesses of his own; here, with the same candour he does not hesitate to confess, with no little pathos, that a religion such as he has set forth cannot be expected to suffice for most men, scarcely even suffices for himself. After telling "the failing heart that cries out for evidence" that God is within it and cannot be discovered without he proceeds:

"Whether such language will carry much meaning to those to whom I speak, I cannot but feel doubtful. But I can only say to them what I say to myself, and offer them the thoughts in which, amid much misgiving and frequent failure of heart and will, I still find assurance. Even if the truth of such thoughts, be accepted, the difficulty of making them available for the daily food which human weakness requires, still remains. They may suffice for us while reason is strong and the temper calm, but when

> 'Our light is low,
> When the blood creeps, and the nerves prick
> And tingle, and the heart is sick
> And all the wheels of Being slow,'

we need another sustenance—the support, as we should be apt to say, of something more 'objective' and tangible. It is idle to ignore the reality and inevitableness of this demand. . . . . To those therefore who find themselves, not indeed even seemingly detached from the eternal basis of faith, but to a certain degree weakened and distressed in their spiritual walk by inability to adopt the received dogmatic expression of the Christian faith and by consequent estrangement from Christian society, I must frankly confess that there is no present compensatory support which I can indicate. I can but make a few suggestions for lessening the danger and loss which cannot be wholly avoided."

The suggestions he makes are that those who cannot join in the Christian creed may yet join with the Christian in prayer and in work, bearing each

others burdens and not isolating themselves needlessly from the fellowship of the faith. And then he closes with this noble passage:—

"Meanwhile, if the present distress must still for a time continue, if the cheerfulness and brightness of faith should still seem necessarily to disappear along with the abandonment of that dogmatic expression of it which criticism invalidates, let us be all the firmer in refusing any compromise with our lower nature. It is not the reality of God or of the ideal law of conduct that is in question, but the adequacy of our modes of expressing them. We may be passing through a period of transition from one mode of expressing them to another, or perhaps to an admission of their final ineffableness. Whatever we do, let us not make the difficulties of the transition an excuse for concessions to the spirit of self-indulgence. If doubts come thick, and we have ceased to look for any rending of the heavens to remove them, so that our faith in God no longer brings the old joy and peace of believing, let us rather ask ourselves what right we have to be happy, than seek our happiness in pleasures where, because we are capable of God, we cannot find it. Faith in God and duty will survive much doubt and difficulty and distress, and perhaps attain to some nobler mode of itself under their influence. But if once we have come to acquiesce in such a standard of living as must make us wish God and duty to be illusions, it must surely die."

To those who recall the face of the Professor, grave, even sad, with the burden of duty faithfully and willingly borne,—the face of one finding in life little joy, though perhaps a satisfaction deeper than joy—and the tone faltering with emotion but not with doubt, in which he thus sought to encourage his pupils and himself, there will be found in these passages all that was most characteristic of the man.

In these passages also it will be seen that Professor Green is conscious of a great lack in his theory of religion, a defect which it inherits from his philosophy. He sets out most nobly the nature and excellencies of moral perfection, elaborates in sympathetic detail the idea of a perfect life, but, though holding that not theory but practice is the end of moral philosophy, he neither discovers nor prescribes any means, any motive power, by which men in general may be induced to seek after moral perfection. In his philosophy, indeed, he scarcely seems to recognize the need of any such inducement. Having one of those rare natures in which the "Categorical Imperative" loudly and incessantly declares itself, and being moreover a spiritual disciple of Christ, he did not himself feel the need of any special influence to incline him to good; and he seemed to imagine that all men heard the Divine voice speaking as clearly and authoritatively as it spoke to him.

He constructed a beautiful machine; but alas! there was no steam to work it, surely, he thought it would work itself, seeing that, if it did work, it would work so beautifully! Rejecting the Christian revelation, he could point to no influence by which the multitudes of ordinary self-seeking men might be led to something higher than their trivial worldliness. The greatest of all practical problems surely is not 'what is the highest good?' but 'by what power may selfish earth-engrossed men be induced to seek the highest?' No philosophy apart from Christianity, and no other religion has so much as named the name of that power; Christianity alone has declared it in its great commandment "Thou shalt LOVE": and has introduced its influence and made it operative upon men, by that simple story which Professor Green rejects.

ON THE DIFFERENCE BETWEEN PHYSICAL AND MORAL LAW. *The Fernley Lecture of* 1883. By WILLIAM ARTHUR. *London; T. Woolmer,* 1883.

One of the chief merits of this book is the very clear way in which the author conveys his meaning without resorting to the use of those Greek words which seem a necessity to many writers on scientific and philosophical subjects. We can therefore confidently recommend it to our readers as a thoroughly readable book on a very important subject. The great distinctions that exist between moral law and physical law are clearly pointed out, abundantly and aptly illustrated, and strongly insisted upon. The author very plainly and fairly puts the question to be discussed, which is briefly, "Are physical law and moral law one and the same?" A great deal of what passes current for philosophy has for its basis the assumption that these two classes of law are the same, though often it is more implied than openly stated. Some plainly and boldly state it, notably "John Stuart Mill when interpreting the ideas of a Frenchman, Auguste Comte. 'All phenomena, without exception are governed by invariable laws, with which no volitions, either natural or supernatural, interfere.'" This is plain enough as the opinion of one man, but our author naturally enough objects to such a proposition, and says

"I must confess that with me it is to this hour a case not proven that any man could, in the silence of his soul, even say to himself with intelligent conviction: I do believe that discernment, judgment, and choice, forethought, afterthought, and conception, that affection, imagination, and conscience, are governed by laws of one and the same order as weight and measure, taste and odour, colour and form. Strictly speaking there are not two different orders of law, for law in physics is nothing more or less than *rule*, and can be called law only in a metaphorical sense."

These rules represent discoveries made by mind in the realm of matter, and the laws are physical only as they pertain to the realm of physics.

"But if we dare to say that inasmuch as it required an act of mind to discover them, an act of mind to enunciate them, and acts of mind to accept and verify them, so in all reason must it have required an act of mind to conceive them, an act of mind to embody them whether in stone, or tissue, or solar rays, also an act of mind to erect them into operative laws, and that all these acts must have been ruled by a design; if we say this we are jeered at, and the jeer is called thinking. Nevertheless we do say it, and while saying it jeer who may, we feel that every fact in recorded experience cheers us with its *amen*; for of things unknown there is nothing more perfectly unknown than the setting of rules of proportion and methods of procedure without a mind to measure magnitudes and to devise plans, or without a purpose to which those plans have tended."

In the second part of the work "the difference between the two kinds of agents governed respectively by the two orders of law" is discussed, and it is shown that the common attribute possessed by the two orders of law, leading to their being confounded, is that "each of them determines an order of relations between one agent and another agent," that is to say, moral law determines an order of relations between one or more moral agents and others, while physical law determines an order of relations between one or more physical agents and others. It is impossible to influence the atoms of oxygen by law, as it is by advice or money; we know what matter will do, when we know what kind of matter it is. But we do not know what a moral being will do under all circumstances. We know that oxygen will always fulfil the

law of its being: but we do not know that a father will always fulfil the law of his being. Oxygen can never be tempted to burn; but a father may be tempted to treat his child cruelly. It is because of this inability to violate the law of its being, that we rhetorically term these agents trusty, faithful, and so forth.

"The two kinds of relations established by the two orders of laws respectively" are next dealt with. Among all inanimate substances such relations are utterly devoid of moral considerations. Things may differ in size, but one has no contempt for the other; many bodies have relations of motion towards one another, but they do not move with caution or circumspection. In all the relations of space, motion, time, intellectual problems of the most difficult kind are constantly occurring, but no moral problem. The light has to come from the sun to the earth. It has to bridge the incomprehensible abyss. It does it, and the problem will never cease to be a cause of profound astonishment to the intellect, but no one would ever dream of imputing any moral relations to the sun in its action upon the earth. But when we come to animals and especially man, the relations are entirely changed. A man collides with another man and knocks him into the mud. The man falls by the inviolable laws of physics. Were they two inanimate bodies, they would lie still and never dream of reproaching each other; but these two men are not likely so to act. The act, as it came from a man, has a moral aspect. Did the man do it intentionally or accidently? If he did it intentionally there were emotions in the mind of the man urging him to do it. These emotions are absent in matter. Their presence brings about an entirely new set of relations. In the relations of animals and man "the operation of inviolable physical law is kept within a limited circle, and only serves as the base for government in a higher circle, within which a certain play is given to self-determining agency, and a door open for degrees of variety of action."

In discussing the nature of the two kinds of law, the author brings forward one definition after another and criticises them acutely and justly.

"All the writers feel that by law in physics they mean something which somehow represents order among physical agents, and enforces a perfectly trustworthy constancy in the sequence of cause and effect, given only similar circumstances. The immutability of every agent in its own qualities, and the uniformity of changes under like causes of change, are two points present to all. To some the idea is welcome that order here as on every field where we can physically verify beliefs, represents an ordainer, and that the embodiment of rules of proportion and modes of procedure in agents themselves incapable of design, purpose, or adjustment, represents a ruler capable of all three. To others, such a belief is the black beast to be escaped from by doubling round any corner, by hiding your eyes in any heap of sand."

While all is confusion in the definition of law by physicists, all is plain when the subject is discussed by jurists, and Mr. Austin's definition is quoted with approval. A law is "a rule laid down for the guidance of an intelligent being by an intelligent being having power over him." It is evident that such laws contemplate disobedience on the part of those to whom they are addressed; but "imagine gravitation contemplating bodies that now and then refuse to gravitate! Imagine temperature contemplating bodies which generally will expand and contract by rule, but occasionally may take a bad turn!" It is very evident that physical laws cannot be broken or modified although their effects may be modified; but moral laws may be broken.

"Physical law, not involving the possibility of any conflict of wills, works itself. It is, and it rules. It is backed by irresistible force, Moral law, on the other hand, assumes the existence of this lower order of rule over unconscious agents, and also assumes on the part of the higher order of agents to whom it is addressed a power so to set in motion physical agents as to do wrong and bring about harm..... It assumes, further, the presence in the agents addressed of the consciousness that there exists a relation higher than any conceivable physical one—the relation between a rational being and the author of his being."

The part dealing with man's power of modifying phenomena is exceedingly interesting and aptly illustrated, the practical result being that man "though mighty is accountable, though in power, he is subject to power, though in authority, he is under authority."

The last question dealt with is this, "What is fairly presupposed by the existence of the two orders of causes, and their co-ordinated action?" The positivist (whose point of view the author especially criticises) declares there are only three groups of things in nature—the mathematico-physical group, the chemical group, the organic group. The first presupposes the second, the second the third, the third nothing! Here the author joins issue, and asserts that this order is contrary to all that men know and that experience teaches. It makes the intelligent dependent on the unintelligent, the living upon the dead. "Physical laws clearly presuppose the power of fitting unconscious agents to co-operate, first, with other unconscious ones, and, secondly, with conscious agents, and the power of adjusting such fitness to distances small or great, from the insensible to the practically infinite." To think that such can be done without the control of mind is to do violence to our whole intellectual nature. "Moral law, besides the intellect, will, and power presupposed in physical law, supposes, further, love of the moral agents and care for them." The only conclusion to be drawn is the existence of the infinite and eternal mind, which orders all that is.

We should like to refer to the way in which the author shows the utility of prayer from the fact that mind has power of modifying phenomena, but our space is limited. We have given the briefest outline of an able book with a wealth of illustration sufficient to make it easily "understood of the people."

LIGHT IN LANDS OF DARKNESS: *A Record of Missionary Labour, by* ROBERT YOUNG. *With Introduction by the Right Hon. the* EARL OF SHAFTESBURY, K.G. *Illustrated. London: T. Fisher Unwin.* 1883.

This work is a sequel to "Modern Missions, their Trials and Triumphs" which was published a year or two ago. Together they complete an historical view, to use Hallam's word, of the work of Protestant Missions. Mr. Young, from his position in the Free Church offices, has direct access to various sources and a wide extent of information. But it is clear that he has done more than merely avail himself of what was ready to his hand. His work shows the results of a vast amount of careful inquiry and diligent research. There is nothing to indicate a special acquaintance with one church, or to betray with which of the many bodies whose operations he describes he is in closest sympathy. The work is historical rather than contemporary, though in many cases the history is brought down to the present day. Mr. Young's style is clear

vigorous and pleasant. Every one of the four hundred pages of each volume is crowded with facts. The history is not exhaustive, but for ordinary purposes it is sufficient. There is no philosophy of missions and little criticism. The value of the work of missions is assumed, but on every page lessons of missionary experience are to be met. We recognise the result of vast labour and a life-long interest—a labour of love.

The countries chosen for the former volume were those that appeal most powerfully to the imagination—China and India, Africa and the Isles of the Pacific. Yet in other respects the interest of this volume is equal. While the first chapters are taken up with work among lower races (Eskimos, Greenlanders, Patagonians), to the wonderful effects of which the high and cordial testimony of Darwin is quoted, the greater part of the volume deals with countries where religions of a higher type exist—Muhammadanism, Judaism, or corrupt forms of Christianity. The record of work in Egypt will be read with interest at a time when so much public attention is concentrated on the region of the Nile. An interesting chapter deals with the Nestorians, of whose origin and ultimate destiny, Mr. Young takes the most favourable view. Over a hundred pages are given to work amongst the Jews. In each case a brief account is given of the rise or progress of the race or religion of the country under review, and on disputed questions the opinions of the best authorities are quoted. Both volumes are handsomely got up and contain many illustrations.

NOTES AND EXTRACTS.

In the *Modern Review* for January there is a most interesting article by Sophia Dobson Colley entitled "*Outlines and Episodes of Brahmic History.*" It is a brief sketch of the history of the Brahmo Somaj from the days of Rájá Rám Mohun Roy its founder, who died in England in 1833, up to the close of last year. To all who look for signs of moral and spiritual progress in India and especially to those who are working for that end, the Brahmo Somaj must ever be a centre of much interest. Drawing to itself—as it has done for the last half century—many of the noblest amongst thoughtful and reverent Hindus, and being a centre for all benevolent effort as well as for spiritual work, it deserves and commands the sympathy of all earnest men and especially of Christians. We know not where a better and more interesting account of its struggles and progress is to be found than the article we have referred to. In the short space of thirty pages Miss Collet succeeds in giving a clear and lucid sketch of the progress of the 'Church,' and her pages are crowded with facts many of which will, we believe, be new even to those who have for years watched the movement from an Indian stand-point.

In the portion of her article devoted to the Madras Somaj, Miss Collet dwells with reverent appreciation on the self-denying labours of one whose name is now almost forgotten except in Brahmo circles.

'It must have been in the course of the year 1863 that a young man named K. Sridharalu Naidu, who appears to have been a native of Cuddalore, in the Madras Presidency, heard of the existence of the (then undivided) Brahmo Somaj in Bengal, and was greatly stirred by the news—so much so that he

felt it his duty to go to the centre of the Brahmo movement and make himself fully acquainted with it. Being very poor he had to dispose of his small property in order to pay his passage thither. He had no recommendations or friends in Bengal and could not speak either Bengali or Hindustani, and when he landed in Calcutta his whole vocabulary of what he came to seek consisted in the words "the Brahmo Somaj" and "Jorasanko," (the suburb in which the Somaj was then located). But he had sufficient knowledge of English to make himself understood by the English-speaking Brahmos, and there "was about his face and manners an earnestness, simplicity and intelligence that could not be mistaken." He applied himself with energy and perseverance to the work for which he had come, and having acquired, within about eight months a full knowledge of Brahmoism "in Bengali, Sanskrit and English," he resolved to devote his life to its propagation in Southern India. One of the Brahmo Missionaries wrote as follows (Sunday mirror, September 6th, 1874) in recollection of this time; "Those who have once seen him in Calcutta, can, I dare say, never forget him. . . . He lived with our Missionary friends, slept and dined with them, and, indeed, was one of them. We well remember the solemn occasion when, in the small room of the late Calcutta College, with tears and supplication and a solemn lifting of our eyes to God we gave him the heartiest farewell and, like the Apostle of old, we saw him in a ship bound for the field of his labours (Madras.)"

It must have been somewhat before this farewell scene that Mr. Sen paid his first visit to Madras in February 1864, and delivered several lectures there which produced considerable effect. In consequence of this a society was established in the following April under the name of the Veda Somaj, which held weekly prayer meetings, started a monthly journal, and otherwise displayed much religious activity. The leaders of this movement were Messrs. V. Rajagopal Charlu and P. Subrayalu Chetty, both well-known members of the Madras bar; and while they lived the movement thrived, and several other Somajes were founded,—in Tanjore, Coimbatore, Salem, Bangalore and other towns in Southern India. But in the year 1868 these two leaders were both removed by death, and for sometime the Somaj suffered greatly in consequence. Then the quiet worker who had hitherto passed unnoticed, came to the front, and after awhile Sridharalu Naidu was appointed Secretary to the Madras Somaj. He had not the advantages of position and education which had been possessed by his predecessors, but he appears to have had a much stronger grasp of Theistic principles, and not feeling satisfied with the half-measure of a *Veda* Somaj he at length succeeded in converting the Society into "The Brahmo Somaj of Southern India." This was finally settled at a meeting of the Somaj held on June 18th, 1871. The rules of the Somaj were revised, and the old "Covenants of the Veda Somaj" were replaced by a confession of faith which was doubtless written by Sridharalu Naidu.'

Miss Collet here quotes the two Covenants which we need not repeat, the latter being well-known in Madras, and the former being quoted at length in Miss Carpenter's *Six Months in India*, Vol. I, pp. 157-8. She then proceeds:—

'Both of these documents are based upon the original Brahmic Covenant of Debendra Náth Tájore; but the Veda Somaj version reproduces little beyond the first paragraph, and half paralyses that by the added clause—"Subject to the following conditions." Sridharalu Naidu's version not only omits this clause and its melancholy amplifications, but simply ignores the surrounding beliefs and customs altogether. . . . . There is also a far deeper view of spiritual faith in this second series of Covenants than in that of the Veda Somaj. . . . .

'About the same time he gave a practical proof of the new policy adopted by the Southern India Brahmo Somaj by drawing up on its behalf a memorial to the Viceroy in favour of the Brahmo Marriage Bill then pending before the Indian Legislature; and shortly afterwards he officiated at the first Brahmo marriage which took place in Madras, September 29th, 1871. Sridharalu also

exerted himself to bring the best productions of Brahmo literature within the reach of his own countrymen. He translated Debendra Náth Tágore's standard work, the *Bráhma Darma*, into Tamil and Telugu, and published a Tamil translation of Mr. Sen's excellent *Model Form of Divine Worship*. Besides writing these (and, I believe, other works), he revived the monthly (Madras) *Thathvabothini Patriká* (which had collapsed after the death of his predecessors), and conducted it as "the organ of all the Brahmists in Southern India."

. . . . . .

'Meanwhile Sridharalu Naidu continued to work unremittingly at his post. Occasional glimpses of his proceedings appear in the *Indian Mirror* of the time, especially in its issues of February 2nd and March 11th 1872, containing two letters of his concerning some projects for the benefit of South Indian Brahmos. These letters bear witness alike to his enthusiastic faith and his practical good sense. We also find that he made divers missionary tours to various parts of the Presidency,—Bangalore, Mangalore, Tanjore, Trichinopoly, &c. "Sowing quietly and perseveringly the seeds of Theism in the midst of the thick darkness of ignorance and superstition." All this time he suffered greatly from poverty. "He had a very old mother to take care of, and a wife, both of whom were against him in all his views and practices, and caused him no little pain. He was often at a loss how to support them, and was at times obliged to put up with hardships which it is not possible to describe. He never complained, he never asked, he never even acquainted his friends in Calcutta with his circumstances. Alone he suffered, depended, prayed and worked, and God alone watched the deep trials and sorrows in the midst of which he lived."

At last the end came. Near Chollambram he 'was thrown out of a carriage, the horse having taken fright, and terribly injured. He was taken to Pondicherry hospital, but no skill could save him, and after lingering for about twelve days he died, calm and faithful to the last. He left behind him a touching letter in English, headed "Memo. to friends in the last hour," and signed "K. Sridharalu, Pondicherry, the 15th January 1874." In this letter, addressed to twelve friends, he requested them to take care of his family, and gave his advice on the affairs of his Church, which evidently lay very near his heart. It may be noted that while the funerals of the previous Madras Secretaries were conducted in regular Hindu style, with those idolatrous funeral rites which, even in their Veda Somaj covenant they had not the courage to renounce, Sridharalu Naidu distinctly wrote with his own hand;—"My funeral should be simple, with only Brahmic prayers. . . . I die a devoted Brahmo."

It is well that the memory of a life of such unusual earnestness and singleness of purpose should not be allowed to pass away. It is such men that India needs. Men of enthusiastic devotion to their countrymen and truth, and with a high ideal of life and duty. Men who, amid the place-hunting, the hollow worldliness and the superficial learning of the age, are content to labour with self-denying patience in the hard and too often disappointing task of seeking to raise their fellows to truer thought and higher aims. Such men there are, but, alas, too few. For fifty years Brahmoism has given a succession of them to India, and amongst these Sridharalu Naidu holds no mean place.

Troubles still go on in the Calcutta Brahmo-Samaj, as to the relation of the departed minister to his followers, and the appropriate mode of expressing it. The dispute about the *vedi* a pulpit of Keshub Chunder Sen's seems however to be only a symptom of a far deeper antagonism between the parties, which are really as widely separated as traditionalists and men of progress generally are. One result of the dispute has been a great fall in the tone of the references to the late leader, whose faults and follies are now in danger of being more exaggerated than were his rare excellences a few weeks ago. Our own estimate of his worth was founded on matters which cannot be shaken by these controversies, and as time passes we believe it will be found that Keshub's fame will grow. Meantime the controversy threatens to add another schism to Brahmoism, so that the movement which was destined to extinguish sectarianism becomes the fruitful mother of new sects. Brahmos need to learn that external unity can only be attained by the subordination of the community to some external authority.

Teachers, scholars and parents throughout the Madras Presidency have recently been thrown into a state of excitement by a Government notification raising the rate of fees. It is the policy of the Government of Madras to throw as much as possible of the cost of high and secondary education upon parents and guardians. This policy is in harmony with the recommendations of the Education Commission, and so long as it is strictly confined to high and secondary education, has very much to be said in its favour. Whilst we agree with the general policy of which this order is the application, it is nevertheless a question whether the right time has been chosen for issuing it and whether its details are adopted to secure the end it seeks with the least amount of hardship and annoyance. A more unfortunate time than just a month after schools had re-opened for a new year could not have been chosen for sending forth such an order as this, especially as it is made retrospective from the 1st of January. Pupils had joined their new classes, made their arrangements for the year, when they were told not only that their fees were raised, but that an excess would be demanded from them on the two months already paid. It was no doubt the intention of the framer of the rules that they should receive Government sanction before the 1st of January, and not be retrospective in force, but when that time had passed by without Government having passed orders upon them, a change in the date of their coming into force should certainly have been made. It surely is axiomatic that a Government order should not even appear to do an injustice. On comparing this new scheme with that which it supersedes, we are struck with its simplicity. In the old notification the towns of the Presidency were divided into four classes, and a different scale for Government and for aided schools laid down in each. But in the new notification there is only one scale for all Government institutions (the Presidency and Kumbakhonam Colleges excepted) and one for all aided institutions. Now simplicity in a Government order *per se* is a good thing, but it may be obtained at too great a cost, and this is what, we think, has been done here. Any one acquainted with the educational needs of the Presidency must know that fees suitable for the town of Madras are too high for numbers of mofussil towns. It is true the notification provides that Government may order for a specified period in any district, portion of a district, or town, that fees may be levied at lower rates. But this provision is not sufficient, for it is evidently the intention of the order that such exceptions shall be few and temporary. We question whether the time will ever come when one scale of fees will be equitable for the whole Presidency. Surely some means might have been found between the eight different scales of the old notification and the two of the new. Theoretically, however, this order does not prescribe one rate for all schools, but only lays down a minimum below which none shall fall, but which all are

at liberty to increase by 50 per cent. But then as this prescribed minimum is as high as any school manager will be willing to charge even in Madras, the order will practically equalize the fees of town and country. This we regard as a decided evil, and if we are not much mistaken, it will operate as a check upon the spread of middle school education in all but large towns.

Instead of the monthly fee the system of payment by term so common in other countries has been introduced into all departments except the Primary. Here again a good principle has been carried to an extreme. What may be advantageous in a college or high school department is not necessarily so in a middle. With the majority of parents whose children are attending middle school classes, payments other than monthly are an innovation, and whilst the term fee may not be greater in amount than the six monthly fees, yet it is to them much more difficult to pay.

Under the old scheme it was only in the college department that the rate of fees in all classes was the same, but that principle has now been extended into the high and middle. Believing as we do that it is premature to introduce payment by term into the middle school, we also think it would have been better to leave the old arrangement of different fees for different classes in that department too. Whatever arguments there may be for retaining the old system in the primary department appear to us to hold good for retaining it in the middle. One consequence of carrying this principle into the middle school is that whilst the rate of fee will remain the same for two or three years when a pupil once gets into a department, yet in passing from one department to another, the rate is excessively raised *e.g.* according to the new scale when a pupil passes from the middle, to the high department, his fees are raised 100 per cent.

On the whole, however, the fees are only slightly raised in the primary and middle departments of Madras schools, though there is a considerable increase in many mofussil schools. We are strongly of opinion that the fees in these departments are now as high as they ought to be for many years to come. Comparing Indian with English education, we find that the 7th standard of the English code approximates very closely to the middle school standard here. The maximum fee permitted by the English code for that standard is 9d. per week, and the minimum fee in this Presidency is according to the new order Rs. 18 per annum. Thus if we reckon 40 weeks to the school year, the maximum fee permitted in England is the minimum fee permitted here. And yet there can be no doubt that Rs. 18 to the average parent in India is a much larger sum than £1-10 to the average English parent. The whole policy of the English Education Department is to reduce fees as much as possible, while the whole policy of the Indian Department is to raise them as much as possible. This can only be justified temporarily by the poverty of the Government and the pressing needs of strictly vernacular education; but nothing we hold can justify the raising of the fees in the lower and middle schools to a rate higher than the one now prescribed. A middle school education is rapidly becoming a necessity to a large section of the community, and as such it should be made as cheap as possible. In colleges and high schools, an advance may perhaps at some time be made, but below that, any change ought to be in the other direction.

We are glad to find that the new scheme applies to all schools except primary ones aided on the results-system, whoever their managers may be. In the past, the development of private enterprise in education has been checked by the fact that schools managed by Municipal and Local Boards were exempt from the rules respecting fees. These Boards thus had it in their power by charging very small or no fees at all to prevent any private school from competing with one of theirs, and not unfrequently they exercised that power.

The disturbance caused by the Triplicane fatvá is somewhat subsiding. The Qázi and the Moulavis are still unable to give legal proofs in support of the fatvá, and as the weakness of their position becomes more and more apparent the courage of the Madras Musalmans is reviving, and they are asserting their rights as free citizens in a free country, and are sending their sons to such schools as they please. The Qázi and the Moulavis have been publically challenged to give some proof from the Qurán, the traditions, or from the decrees of a Mujtahid (Canonical Legist) that it is wrong to teach the Qurán to a Christian. They have sent a long rambling reply to the *Ittifáq*, a Hindustani paper published in Madras, but have entirely failed to give even one text from the authorities referred to, in support of the fatvá on this point.

It is now becoming apparent to the Muhammadan public that the fatvá was the work of a few discontented persons and was written in great haste and without that careful investigation which doctors of the law of Islám should make before publishing a legal decision. Having committed this initial error, they find it very difficult now to defend the untenable position they have taken up. The whole affair then, damaging as it does the reputation for learning of these bigoted Moulavis, may be looked upon as one of those events which are helping forward freedom of thought and liberty of conscience even in so dark a place as Triplicane.

Of the 340 registered candidates for the B. A. Examination of January last, 334 were examined. Of these 159 passed. The following table shows the number who passed from each of the 1st grade colleges of the Presidency.

College.	1st Class.	2nd Class.	3rd Class.	Total.
Presidency College	...	29	22	51
Madras Christian College	1	23	25	49
Kumbakónum College	...	8	15	23
Maharaja's College, Trevandrum...	...	6	8	14
Rajahmundry College	...	4	1	5
Central College, Bangalore	...	2	3	5
St. Peter's College, Tanjore	...	1	4	5
St. Joseph's College, Trichinopoly ...	...	1	3	4
Hyderabad College	...	1	...	1
Private Study	...	...	2	2
Total...	1	75	83	159

Of the 175 candidates who failed, 5 failed in total marks only, 59 in only one subject, 52 in two, 28 in three, 29 in four and 2 in all subjects. Of the 59

failures in one subject only, 13 were in English, 1 in Optional Language, 22 in the Optional Subjects, 4 in Mental Philosophy and 19 in History.

The Government of Madras has recently given much anxious attention to the preservation and extension of irrigation works throughout the Presidency. From a very interesting paper recently communicated to the Government by the Director of Revenue Settlement and Agriculture we extract the following instructive statistics. The statement embraces four classes of irrigation works:—(1) Productive public works for which capital and revenue accounts are kept; (2) Agricultural works for which capital and revenue accounts are kept; (3) Agricultural works for which a 'continuous record' is maintained (but apparently no capital accounts); and (4) Smaller agricultural works for which capital accounts are not kept and which are accounted for, not individually, but collectively according to Districts.

	Irrigable Area.	Total Area effectively irrigated.	Capital outlay up to date.	Net Revenue due to irrigation.	Percentage of Net revenue to capital outlay.
Class I	Acres.	Acres.	Rs.	Rs.	
Godavery Anicut ...	612,000	535,396	110,20,241	15,56,401	14·12
Kistna „ ...	415,000	261,237	63,30,628	8,32,423	13·15
Cauvery „ ...	906,017	999,215	11,50,138	29,04,846	252·56
Pennér „ ...	64,000	64,278	16,65,159	2,34,957	14·11
Srivaikuntham Anicut ...	35,500	37,193	13,12,135	1,71,741	13·08
Class II.					
Palar Anicut ...	66,750	86,796	16,80,965	2,17,364	12·93
Chembrambaukam Tank	18,000	15,979	7,36,589	48,262	6·55
Pelandorai Anicut ...	7,541	3,560	3,87,028	8,596	2·22
Madras Water Supply and Irrigation Project	8,087	10,420	1,709,997	21,135	1·23
Class III.					
59 Works ...	357,256	447,553	No capital accounts kept.	16,88,985	
Class IV.					
2872 Major Works ...	1,237,548	1,297,593		33,95,784	
28776 Minor „ ...	1,329,412	1,481,730		33,21,457	
Total...	5,055,111	5,240,950		144,01,951	

These statistics bring out very clearly the vast importance to the country of the smaller irrigation works, and it is upon these that the Government is at present bestowing most attention. In connection with the enormous return made by the Cauvery anicut, it must be remembered that the capital outlay only represents the amount spent by the Government in *repairs*. This magnificent work, which, to use Sir Charles Trevelyan's words, is strong and solid as Stonehenge, was constructed long before Native rule gave place to English.

In the January number of the nineteenth century there is a remarkable article by Mr. Herbert Spencer on "Religion, a Retrospect and a Prospect." The article expands anew the Spencerian doctrine of the origin of religion, the ghost theory, which is doubtless familiar to most of our readers. All religion rises out of a fear of ancestral ghosts, and all worship may be traced back to modes of appeasing them. From this simple beginning have arisen the vast accretions of mythology and the theological systems of mankind. The deity of the theists is the ultimate survivor of a vast supernatural population, gradually stripped in the process of evolution of all grosser attributes, and clothed instead with superhuman goodness and greatness.

One great difficulty under which Mr. Spencer's theory labours is this,—that God has spoken, has manifested himself, and has been found by many to be not the survival of extinct ghosts, but the living Father in heaven. Like all other anti-supernaturalists, Mr. Spencer is under the necessity of denying a part of the phenomena in order to get his theory to work. If there is no supernatural making itself heard from time to time among the phenomena of the natural, then the ghost theory or any other theory will do equally well. But we insist that the thing needing to be done is to explain religion *with* its phenomena, and not to cut away the phenomena in order to explain it.

The question which Mr. Spencer goes on to discuss is that of the future of religion. The process of development must proceed until the deity has become a wholly disintegrated idea. With the development among mankind of the higher sentiments, the attribution to the deity of inferior sentiments will no longer be tolerated. With intellectual development the crude notion of a personal deity will altogether vanish.

All this may well be so if mankind, as Mr Spencer alleges, are themselves the creators of their God. But if there is any objective reality corresponding to our idea of God, it may turn out that our sentiments are not the measure of the divine perfections. It is difficult to say where Mr. Spencer gets his popular notion of God. Certainly it is not in the Bible that he finds the Power that is seized with a craving for praise, and having created mankind, is angry with them if they do not perpetually tell him how great he is, or the God more cruel than a Fijian idol, or any other of the remarkable notions he describes as bound to pass away. But even granting for the moment that Mr. Spencer is in the right, and that our idea of God is the result of evolution, we venture to join issue with him on one point. He argues that in process of time the notion of the severity of God is bound to disappear, if it has not already done so. Why should it? Has the severity of nature in any degree altered? A flabby sentimentalism, equally unfaithful to the teachings of Scripture and to those of nature, but which happens to be the fashion in our present-day literature, may dominate our modern theology, and even those preachings upon science which represent the bulk of Mr. Spencer's work. But the theist who keeps his faith alive in the presence of nature has every now and then a healthy shock of pain administered to him, to keep him in mind that God's world is a world of stern realities, and not of sentimental dreamings.

But the finest sample of pure Spencerianism is the substitute that we are offered in days to come for belief in God, as personal and intelligent. We are told that this belief must go because it becomes unthinkable the moment we

attempt to carry it out into detail. An infinite consciousness, for example, is really no consciousness at all, an infinite will is inconceivable because will demands localisation of time and place. Now suppose we grant for a moment that this is so, and that the idea of God is of the kind that transcends articulate thought. This is the very thing that has always been held by theists. Instead of being gradually brought by the course of evolution to the discovery of it, and thus to the rejection of the idea of God altogether, they have never at any time been oblivious of this truth, and have found it a help to their faith. But is Mr. Spencer's series of ultimate ideas any more satisfactory? By his own confession it is not, for he tells us "Those who think that science is dissipating religious beliefs and sentiments seem unaware that whatever of mystery is taken away from the old interpretation is added to the new. Or rather we may say that transference from the one to the other is accompanied by increase."

Whatever else may be assented to in Mr. Spencer's article this last sentiment will meet with general acceptance. We are asked to exchange our former religious ideas for a new set which have not even the merit of greater intelligibility. To say—'I believe in an eternal and infinite energy from which all things proceed' is about as great a stretch of faith as to say 'I believe in God.' But when we are asked in addition to deprive the infinite and eternal energy of intelligence and will, and to believe that thought itself and the whole mechanism of thinking are the outcome of an energy as destitute of thought as pure water is of life, we are called upon to be credulous rather than believing.

This article has not increased Mr. Spencer's reputation either as a man or as a thinker. The presence of the *odium theologicum* in quantities sufficient to furnish a synod of modern divines is accompanied by a flippancy of style and unfairness of representation which are usually foreign to Mr. Spencer. Some such article has however long been a desideratum, in order to define Mr. Spencer's attitude towards Christianity. Perhaps this is Mr. Spencer's protest against those interpreters of his system who turn it from its legitimate scope—that of thorough going fatalistic force and materialism,—to one that is capable of a theistic and Christian exposition. If so, it is particularly well-timed.

SCIENCE JOTTINGS.

We have received from Professor O. H. Marshall of Kingston, Canada the following interesting account of a little known phenomenon :—

"Whoever heard of Lake Ontario being a hot lake? Yet I could shew you the lake steaming like a pot of water when it is nearly boiling. This most interesting phenomenon of the lake actually hidden from view by thick clouds of steam given off from it, can be seen on dry cold mornings before the lake is frozen over; and yet as you walk along the shore the rocks and stones are beautifully fringed and thickly coated with transparent ice as dry as glass, and the ground on which you tread may be covered with pure white dry snow-dust. I call it so to draw attention to the difference between the snow in a Canadian climate and the damp flaky snow of temperate regions. To return to the lake. What is the cause of all this steaming? Let us measure the temperature of the water and see whether it be hot or not. We find it almost at the freezing point. But on directing our attention to the temperature of the air we find it about twenty degrees centigrade below the freezing point, so that *relatively* to it the water is really warm. It is this fact which leads us to the explanation of the phenomenon. What is popularly called steam is aqueous vapour condensed in the form of a cloud. In a scientific sense steam is water in the gaseous state, and is invisible, like air. It is only when it is condensed into the form of innumerable minute globules of water which we call cloud that its presence can be detected by the eye. Water gives off steam or aqueous vapour at all temperatures until the space surrounding it is saturated with it. There is a definite maximum pressure which the vapour can attain to for every temperature, and water will go on evaporating into any space until the space is filled with vapour at that maximum pressure. If more vapour is given off than is necessary to produce this pressure, the excess is immediately condensed again. This is what takes place when water is evaporating into a space colder than itself. There is a tendency on the part of the water to saturate the space with vapour at the maximum pressure corresponding to its (*i.e.* the water's) temperature, which being greater than the pressure corresponding to the temperature of the space, the space soon becomes supersaturated with vapour, and the excess is condensed. If the difference of temperature be very great, so much vapour is condensed that a cloud is formed. Now on the morning on which we are viewing the steaming lake, the atmosphere is dry and much colder than the waters of the lake. The air immediately above the water is kept constantly super-saturated and thus filled with clouds, which, carried by convection-currents or wind to the upper parts of the atmosphere are reconverted into invisible vapour to quench the thirst of the yet thirsty air above. We thus see that for water to steam profusely even under the pressure of the atmosphere it is not necessary that its temperature be near the boiling point, but only that the surrounding space be dry and of a considerably lower temperature than that of the water itself. The steaming of the lake far from being an indication that the water is hot affords an assurance to us that the lake may soon be frozen over, for every gramme of steam that is given off robs the water of an amount of heat sufficient to form 7½ grammes of ice. This will be understood at once when it is remembered that the latent heat of steam at 0°.C. is 606, whilst that of water is 79·14.

"Another curious phase of the same phenomenon above described may often be seen during the winter. I shall never forget the first time I saw blocks of ice as much as two feet thick sawn from the lake and carried off to be stored for use during the following summer; but my astonishment was not so much at the thickness of the ice which the intense cold seemed to me easily to account for, as at the fact that the water on which the ice was floating was steaming so much as to tempt one to have a good hot bath! How strange it seemed, that a lake of warm water should be so thickly covered with ice! Thoughtful Student, beware of that ice-cold water! The steam you see is but another form of the allurements of the Sirens to ensnare you into certain death. If you but thrust your stick into the water and draw it out again you will find it coated with a perfect varnish of transparent ice without a drop of water dripping from it.

As in the former case these sights, so strange to one from warmer climates, are best seen on dry cold days."

We are glad to learn that the Council of the Royal Society has appointed a committee to investigate all the phenomena connected with the eruption at Krakatao, including the celestial phenomena which many believe to have been caused by it. Such a committee will be able to get all the available information on the subject better than any private individual can, and the results of its deliberations should be of great scientific value.

Sophus Tromholt has recently been engaged in measuring the height of a large number of aurorae by means of a system of concerted observations at different stations. The materials obtained have been only partially worked out, but, so far, altitudes have been obtained varying from 76 to 163 kilometres with an average of 113 kilometres or say 70 miles.

The death is announced of John Hutton Balfour, Emeritus Professor of Botany in the Edinburgh University. Born in 1808, he early showed a strong leaning towards the study of botany, though it was not till 1840 that he began lecturing on the subject. In 1842 he was appointed Professor of Botany in the Glasgow University, and in 1846 he obtained the chair of Botany in the Edinburgh University which he occupied till 1879. Outside of Edinburgh he was probably best known through his Text Book of Botany which was till quite recently considered a standard work on the subject. Equally in public and in private life he gained the respect of all with whom he came in contact. He was a deeply religious man and a genial companion. His death leaves another blank in the circle of those who have made the University of Edinburgh famous.

The change in the English Patent Laws which took effect at the beginning of the year has already produced a most extraordinary increase in the number of patents applied for. Last year the whole number of patents applied for was only 5,000 while no less than 2,000 applications were made in the first fifteen days of this year.

We are glad to learn that Messrs. P. Orr and Sons of Madras are likely to undertake the work of manufacturing the apparatus required for teaching physics in matriculation classes. There must be many managers of schools in this Presidency who would gladly get the apparatus if it could be obtained in Madras at reasonable rates, but who do not care for the trouble of sending to England for it.

C. M. S.

QUERIES.

18. O. KANDASAWMI.—*Does the prerogative of mercy offered to man through Christ's death extend to those who lived before him as well as to those who lived after him? In particular, what of the many souls of our ancestors, who, as shown by the Vedas, would doubtless have accepted the truth, if it had been offered to them as it was to the Israelites?*

Our correspondent partly answers his own question himself when he implies that those Israelites who lived before Christ might possibly have an interest in His saving work. They did not know Jesus after the flesh, and yet Jesus tells us that Abraham rejoiced to see His day. The fathers were saved by faith in a Saviour to come, even as we are saved by faith in one who has come and will come again. Nor is the Bible silent regarding those who stood

outside the covenant people. In the early history the unique figure of Melchisedek meets us, at once king and priest of the Most High God, to whom Abraham, the father of the covenant people, gave tithes as to a superior. Later Scriptures are still more instructive, and are well calculated to rebuke the narrowness of the late Judaism and its lawful successor, a late and narrow form of Christianity. The noble drama of *Job*, which depicts so powerfully the spiritual struggle of the guiltless amid the darkness of apparent desertion by God and man, has for its hero, not an Israelite, but an Arab chief. The grand lesson of the book of Jonah seems to be that outside the bounds of Israel there was a Providence, and that the word of the living God was addressed to the Gentile as well as the Jew. The prophet who in self-will and national prejudice sets himself against this truth, is represented as compelled, however unwillingly, to bear his divine message to Nineveh. The claim of Jehovah to be the ruler of *national* Gentile movements is well brought out by such passages as Amos ix. 7.

The whole difficulty indicated by our correspondent arises from an imperfect conception of the Kingdom of God, of which Jesus and his apostles were ministers. The establishment of the divine sovereignty over the hearts and lives of mankind was the grand object of Jesus, and the object of the whole series of *preparatory* events which went before his advent. This end demanded a gradually *unfolding revelation*, to be completed only when the fulness of time had come. The devout student of the divine methods is struck with wonder at the marvellous way in which the Master Hand guides the ages and leads up to the incarnation. If then the general interests of humanity are seen to be so perfectly subserved by the divine plan, may we not also believe that the particular interests of individuals like those referred to by our correspondent will be safe in the same keeping? "Shall not the judge of all the earth do right?" At the same time, let it never be forgotten that according to the constitution of this world, the part must often be sacrificed for the whole, and that we must guard against our tendency to exaggerate the importance of the individual life. Such souls as really groped in darkness after God, and were by the providential circumstances of their age or race, prevented from a full apprehension of him, seem to gain the high honour of being fellow-sufferers with Christ, who though he was rich yet for our sakes became poor. Not so those who refuse Christ's Headship and decline loyalty to Him. They deliberately choose a lower instead of a higher leading, and must take the consequences.

CORRESPONDENCE.

To THE EDITOR, *of the*
Christian College Magazine.

SIR,

It seems to me that Mr. Krishna Singh's article in your February number has been viewed in a wrong light by both your March correspondents. Mr. Sharrock goes so far as to call it an 'attack' upon Christianity, and your edit-

orial note deduces from his letter a doubt as to the Christian character of the magazine in which such an article appears. I do not think that Mr. Sharrock's words will bear out your interpretation, but if it be the correct one, I would ask Mr. Sharrock if he believes in the Christian character of the 'Epiphany'. Nobody, so far as I know, doubts the Christianity of the Oxford Missionaries, and yet they open the columns of their organ to all sorts and conditions of men, glorying too in what Mr. Sharrock probably considers their shame. Still if so highly respectable an organ as the 'Epiphany,' for the orthodoxy of which even Mr. Sharrock would doubtless be responsible, can admit the superstitious lucubrations of Col. Olcott, it is surely possible for you to admit Mr. Krishna Singh's article into a magazine avowedly conducted for the purpose of stimulating earnest thought, without being on that account relegated to the court of the Gentiles. But is the article an attack upon Christianity? Yes and no. It consists of two parts, a head and a tail, but they were evidently not meant to belong to the same body. The first part of Mr. Krishna Singh's article is to my mind, most Christian; the second part is a piece of incoherent eclecticism. His conception of religion as the quest of the Good as well as of the Great Spirit is profoundly true, but hardly reconcileable with a polytheism which presents us with gods that are worse than men, or a pantheism that recognizes no difference between the evil and the good, or a deism that shuts God out of his world as effectually as if he had never made it, or an atheism that recognizes no God either good or great, to seek. Yet in all these, and apparently in about equal measure in all, he finds religious good. Along with this conglomerate belief, he apparently holds the divine inspiration of the Vedas, as the medium of a divine revelation. Your other correspondent (a Native Christian) at once challenges him to produce sentiments of equal nobility from the Vedas with those which he quotes from the Bible. I have no doubt that Mr. Krishna Singh will send you such quotations, and then a wrangle will commence as to whether they are really inferior or superior to those from the Bible. Now, it seems to me that this is not the way in which reasonable people should go to work. Beautiful sentiments are, thank God, tolerably common. The higher class of minds have them in abundance, and the lower too for that matter. But *divine facts* are a very different sort of thing. If 'A Native Christian' had challenged Mr. Krishna Singh here, he would have raised a real issue. As it is, he has raised only a logomachy.

The Bible is pre-eminently a revelation of the divine activity, working for men. Teaching is not all we need. The more perfect the teaching, apart from a revelation of what God does, the more absolute the despair that settles on the hearts of men. The writings of the later Judaism show this. When the sense of God's working for men grew dim, and religion changed into religious speculation, the literature begins to show a spirit of hopelessness, in strong contrast with those parts which were permeated with the sense of God's presence with his people. The spirit of hope re-appears in the New Testament, because of the sense of the great things God has done. And this is the grand question. Has God verily done them? If so, then Christianity stands forth as *the* religion. If God has not done them, then Jesus is a myth, and the sublime teachings of the Bible possess only an antiquarian interest. The strength of the historical evidence is the strength of Christianity. While it may safely be

affirmed that the whole scope of Christ's teaching and the ideal of life which he illustrated are incomparably higher than those of any other teacher, the thing to note is the fact that Jesus died and rose again according to the Scriptures.

One word as to Indian Christians. It is quite true, as Mr. Krishna Singh tells us, that the majority of them belong to the lower stratum of society. So it was also in the first days of the Christian church, and in Christ's own day, "Have any of the Pharisees believed in him?" was Jesus' own reproach. The Christian church that Nero and Domitian attacked was really so contemptible in point of numbers and influence as to be beneath imperial notice. Yet the time came when Cæsar too was a convert. The wealthy and cultured philosophers and theosophists of the third century despised the faith. It lives now, and they are forgotten.

I am, &c.,

INDOPHILUS.

SIR,

I am much pleased, without any reference to the soundness or unsoundness of your correspondent's remarks on my article on "*The Influence of Religion*," to see that he is anxious to be enlightened on some points contained in the same article. In the first place he desires me to refer him to a religious book of the Hindus which dwells on what is perhaps the most exalted of all moral sentiments:—"Bless them that curse you, do good to them that hate you, pray for them that despitefully use you and persecute you." I am sorry your correspondent seems not to have read any religious books of the Hindus carefully, or else he would have found therein enough to satisfy his curiosity. For ready reference I shall place before him the following:—

In the Code of Manu it is stated:—

"*Kruthyanthum náprathekruthátha. Aerushta Kusallumvatháthe.*"

"He shall not return anger to him who is angry.
He shall speak gently to him that abuses him."

Veda-Vyasa, the author of *the Mahbarata* when asked by *the Rishis* (sages) to give the sum and substance of his great work in a few words, said:—

"*Slokárthána pravatchyamee yáthuk thum grantha kotibihee.*
Paropa kara punyaya pápaya para peedanam,"

I shall relate in half a verse what is expressed in crores of stanzas:—

"To serve our neighbour is to serve ourselves,
To harm our neighbour is to damn ourselves."

Quotations of this kind might be multiplied *ad infinitum*.

Now, I leave it to your impartial readers to judge whether I was justified or not, in stating that "*all that is noble and admirable in morals is to be found in the system of Indian Religion.*"

I shall now turn my attention to the second statement made by your correspondent, *viz.* that the cardinal ideas of the Bible, the Fatherhood of God and the brotherhood of man are not set forth in the Vedas. This is indeed a gross misunderstanding of the Vedas. However, to satisfy your correspondent, I quote the following passages from the Vedas and other sacred books of the Hindus to illustrate that the fundamental truths of Christianity

were known in the system of Indian Religion long before the advent of Christ had been prophesied.

The Divine love for man can be well seen from the following passages from *Sree Ramayana*.

"*Vyasanashu manushyanam bhrusham bharathy thukkithâh*
Vooscha weshucha sararasha pithama parithushyathy"

"Like a father; in all the griefs of men He is grieved still more, and on all occasions of joy He is delighted still more."

"*Papanamma subhanamma. Vatharhana pravamgama*"

"In the case of all beings whether they be sinful and deserving of death or whether they be righteous, it is the duty of the noble to compassionate and forgive."

One of the noblest aspects of Hinduism is the destruction of pride and selfishness. This I believe is the doctrine preached also by Christ with great force and eloquence. In the Upanishad we read—

"*Mamethy thyatchara mruthu, Namamathycha sasuytham.*"

"The dissyllable (*mama*) "for me" is destruction and the trisyllable (*namama*) "not for me" is the Eternity or Heaven."

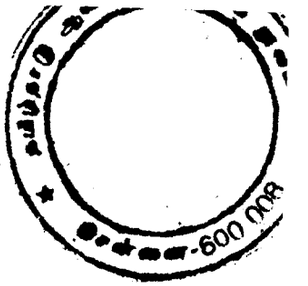
I shall not trouble you by citing more passages. But I can assure your correspondent that there are many more, and even the few that I have cited above are sufficient to convince him that my statement "*that the Bible can teach nothing which the Veda has not taught before,*" is the truth and nothing but the truth. By studying and appreciating each other's religious books and successful lives modelled thereby we would on the whole render to our common Father more acceptable service than by indulging in cavilling. Let us beware of the taunt of Dean Swift—"*that we have enough of religion to make us hate each other but not enough to make us love each other*".

If there is any truth in the assertion that the enlightened Hindus of the present day are "Atheists or the followers of some European school of thought," it is chiefly due to the want of religious instruction at home, and the godless education imparted by our Christian rulers. The consequence is that the so-called enlightened Hindus prefer the God of Huxley to the God of the Veda or the Bible. The attempt of your correspondent to alter my statement that only a small percentage of enlightened Hindus have embraced Christianity, scarcely requires an effort to be upset. One can easily learn by carefully studying the statistics of the Native converts from what classes of society the majority of Hindus have embraced Christianity. To settle this point finally I would ask your correspondent to read the farewell address delivered by the Right Rev. Bishop Caldwell, who after many years' Indian experience, expressed that it is a matter to be regretted that no high caste educated Hindu has ever embraced Christianity and almost all the converts are from the lower and the famished classes. What better authority can I produce?

In conclusion allow me to say that I was very much disappointed by the way in which your correspondents received my article. It was intended as conciliatory, not in any way as antagonistic to Christianity or any other religion. Its object was to do good in the sphere of religion generally.

BANGALORE,
March 18*th*, 1884.

Yours, &c.,
B. KRISHNA SINGH.



THE CHRISTIAN COLLEGE MAGAZINE.

MAY, 1884.

WHY THE PEOPLE OF INDIA SHOULD READ THE BIBLE.

"The Bible" in plain English means "The Book." It is so called by way of eminence because it is believed to be the best book. It was written by different authors, in different languages, at different times, during a period of about fifteen hundred years, and under circumstances the most diverse. Its subject-matter ranges over a wide intellectual field; and the form of its composition embraces narrative and poetry, history and biography, odes and hymns, and letters didactic and affectionate.

Whatever views we may hold as to the origin of the Bible, we cannot deny that it is a great fact in the history of the world. The revolutions effected by it in the religions and habits of nations are well known. No book has been translated into so many languages, and diffused so extensively over the earth; and no book exerts so much *real* influence at the present day as the Bible. The most enlightened nations believe it to be a Revelation from God. Apart, however, from the question "Is the Bible the word of God"? there are many weighty reasons why Hindus in general, and educated Hindus in particular should read it.

I.

It contains the religion of their rulers and the principles on which the English Government is conducted. The Queen-Empress regards

the Bible as the only rule of life, by the observance of which all nations can please God. Her representatives in India are professedly Christians, though doubtless the lives of some contradict their profession. The English Government is based on the Bible. All English laws, institutions, literature, and social habits, that are of any value, have been either created or modified by it. Whatever of justice, of liberty, or of happiness is enjoyed under the English Government is wholly attributable to the influence of the Bible. England owes her elevation and greatness to that book. The ancient inhabitants of England were rude barbarians, roaming in the forests half naked, with their bodies smeared with ochre, as is the custom, more or less, of all heathen nations. And, like the ancient Hindus, they sacrificed to their gods, not only dumb animals, but human beings. The oak groves of England have witnessed many a bloody rite, and many a now well cultivated spot in that land was formerly a place where men were consumed in huge wicker-work baskets as offerings to the invisible powers! The change in that country from what it was to what it is was affected by the Bible. "That book banished superstition and idolatry, raised Christian temples where once stood the groves of Druids, introduced civilization, intelligence and social order, laid the foundations of Cambridge and Oxford, and formed the literature and laws of the nation."

Many Hindus are acquainted with English, and have a strong desire to become good English scholars. Now, it is obvious that, without a knowledge of the Bible, they can no more be accomplished English scholars than Europeans can be accomplished Sanscrit scholars without a knowledge of the Vedas. The Bible is so woven into the fibres of all that is best and noblest in English literature, that it is impossible to understand the various allusions, the apt illustrations, and the striking metaphors which abound in the English classics without a knowledge of it. Read authors differing as much as Bacon and Locke, Milton and Shakespere, Macaulay and Carlyle, and you will be astonished to find to what extent the Bible has stimulated their thoughts, guided their judgments, and moulded or tinctured their language. So profoundly convinced was the late Maharaja of Travancore, that a good English education must embrace a knowledge of the Bible, that he made the reading of it compulsory in his College at Trevandrum. Then when we consider that the laws of England are reflections of the Bible, it is difficult to understand how they can be *thoroughly* understood and efficiently administered without a knowledge of it.

II.

The Bible is the oldest book in the world. It contains the oldest record of human life and actions; and hence is eminently adapted to satisfy the Hindu admiration of the remote past. Of course it is not intended that the *whole* Bible is older than any other book. Some portions of it were written long after the Vedas were completed. What is meant is that a considerable part of it is older than any other record of human thought. The Book of Job is supposed to be the oldest poem in the world, having been written probably long before the oldest hymns in the Vedas were sung. The Book of Genesis is the oldest history. Take it away and there will be a gap of at least two thousand years in the history of man, which neither the hieroglyphics of Egypt nor the inscriptions of Assyria, have yet been able to bridge over. And what do we find in the oldest records of human thought in India—in the Vedas, Epics and Puranas—about the creation of the world and the origin of the human race, but a tissue of contradictory fables which no educated man can believe? The Bible carries us back with no faltering steps to the home of our first parents, and is the only intellectual memorial of the remotest generations.

III

The Bible is pre-eminently an oriental book. It originated among an oriental people; it was composed under an oriental sky; and it teems with oriental customs and images. Hence "*ex oriente lux*" light from the east—is as true intellectually as it is physically.

The Jewish nation, through whose instrumentality the Bible was given to the world, dwelt in Asia Minor, and formed a part of the great Semitic race. Their founder, Abraham, is represented as having been called by God in a spiritual manner to depart from his native home in Chaldea and proceed to dwell in the land of Canaan. He was encouraged to do so by a promise given by the same divine voice that his posterity should inherit the land, should become as numerous as the sand of the sea, and a great blessing to all the nations of the earth. The Patriarch after many wanderings and trials died in good old age, and was buried in the 'land of promise'; but his family, in spite of many vicissitudes of fortune, grew rapidly into a powerful tribe and the tribe into the most wonderful nation on the face of the earth.

The Jews differed from all other nations of antiquity in three things. (1) They acknowledged and worshipped one supreme God separate

from nature, whom they called *Jehovah*, the self-existent, and *Elohim*, the omnipotent; while all other nations were grovelling in nature worship. (2) They attributed their monotheism and elevated conception of the Supreme Being, not to their own wisdom, but to the fact that *Jehovah* had given them a Revelation of Himself and of their duties to Him. (3) They believed that Revelation was given gradually through the prophets, a class of men, whom God raised from among themselves and taught supernaturally the truths which He desired them to communicate to the nation. Some of those communications were intended only for the Jews, but others—and by far the most important—were intended for all nations and all times. As the culmination of Judaism (meaning by that the religious and political system of the Jewish nation) a Saviour, Christ, was to come and perfect Judaism on the one hand by fulfilling what was symbolical and transient in it, and on the other by developing its elementary truths and principles into a spotless system of 'Universal religion.' The Old Testament is the record of God's dealings with the Jews and the communications which He made to them respecting the future of the human race, and the New Testament is the record of the life and teachings of Jesus Christ, the Fulfiller of Judaism, and the Founder of Christianity, the 'Universal Religion.'

If it be affirmed that the Jewish nation did not enjoy any particular advantages which were not equally enjoyed by other nations, and that their notion respecting the peculiar relationship in which they stood to their God, *Jehovah*, was a mere hallucination, the product of their pride and bigotry; we may then reasonably ask, how is it that they *alone* were Monotheists when all other nations were Polytheists? How is it that they were able to give to the world the highest conception of the Author of the universe, a conception so high and spiritual that the wisest and best in every age have not been able to improve upon it? How is it that they were able to formulate such a perfect code of morals as to preclude the possibility of the least improvement? How is it that they were able to foresee and foretell events which have happened in the history of the world long before those events occurred? How is it they were able to predict the down-fall of Egypt, of Assyria and of Babylon, long before those once mighty empires showed any signs of decay? How is it that they were able to foretell their own destruction as a nation and their dispersion among the Gentiles long before those events happened? Lastly, how were they able to produce such a person, possessing such a unique character, as Jesus of Nazareth? These questions

cannot be answered on any supposition except that the account which the Jews give of themselves in relation to Jehovah is true.

Now, the fact that the Bible is pre-eminently an oriental book, ought to commend it to the earnest attention and profound reverence of all Asiatics. Jesus Christ, the most prominent figure in it, and the most wonderful man that has ever appeared on this earth, was an Asiatic! What a thrill of joy and gratitude such a fact ought to send through the hearts of all the sons of Asia! The people of India ought at least to contemplate such a fact with the same feelings of pardonable pride and thankfulness as Europeans contemplate such men as Luther, Newton, Kant, and Shakespere. The late eloquent Babu Keshub Chandra Sen was fully alive to this, which is evident from his public utterances, in which he boasts that Jesus, the best of men and the greatest of the reformers, was an Asiatic.

IV.

The Bible has inspired more intense admiration, and excited more vehement opposition, than any other book. It is marvellous to think what an enormous amount of thought and energy has been expended for and against it. Take away all literature relating to the Bible, all translations of it into more than two hundred languages, all books expounding, illustrating, impugning and defending it, and the literature of the world will be reduced to a comparatively small compass. Destroy all sculpture and painting which are based upon the Bible or stimulated by its incidents, and consign to oblivion all the musical creations inspired by it, and you deprive the world at one stroke of the greatest works of art and the highest efforts of genius. It has waked both the hearty homage of the learned, and the loving admiration of the humble. "There never was" says Carlyle, "any book like the Bible, and there never will be such another." And Theodore Parker says, "This collection of books (the Bible) has taken such hold of the world as no other. The literature of Greece, which goes up like incense from that land of temples and heroic deeds, has not half the influence of this book from a nation despised alike in ancient and in modern times. It goes equally to the cottage of the plain man and the palace of the king. It is woven with the literature of the scholar, and colours the talk of the street. It enters men's closets, mingles in all the grief and cheerfulness of life. The Bible attends men in sickness, when the fever of the world is on them. . . . It is the better part of our sermons; it lifts man above himself. Our best

of uttered prayers are in its storied speech, wherewith our fathers and the patriarchs prayed. The timid man, about to wake from his dream of life, looks through the glass of scripture, and his eye grows bright ; he does not fear to stand alone, to tread the way unknown and distant, to take the death angel by the hand, and bid farewell to wife and babes and home. . . Some thousand famous writers come up in this century to be forgotten in the next. But the silver cord of the Bible is not loosed, nor its golden bowl broken, as time chronicles his tens of centuries passed by." Sir Walter Scott, the great novelist, when dying said to his son-in-law, "Read to me." "What book shall I read to you ?" "Can you ask me ?" said the dying man, "There is but *one*;" and Lockhart read him a chapter in the Gospel of John.

On the other hand the Bible has excited more vehement opposition, and survived more numerous attempts to destroy it, than any other book in the world. Men in every age under the garb of philosophers, scientists or critics, have attacked it from every quarter, employing all the weapons of learning, ridicule, power and influence to destroy it. All its facts have been severely examined, and all its words have been remorselessly dissected and made bare by learning ; ridicule has exhausted its resources upon it, and power has often attempted to crush it. But the Bible, like the rock on the sea-shore, has survived every surging wave of opposition, and stands to-day before the world, like the everlasting mountains before the sun, as symmetrical and invulnerable as ever. The frivolous but witty Voltaire predicted its downfall in his days. The French Revolutionists trampled it under their feet, publicly declared it a lie, and forbade the people to read it. Voltaire and his influence have passed away, and the French Revolutionists are known only by their execrable deeds, but the Bible stands as firmly as ever !

We naturally feel peculiar interest in anything that has survived repeated attempts to destroy it. The fort that has sustained many a siege and yet remains impregnable, the old temple that has defied the ravages of the storm for many a generation, and the remains of an ancient castle that has withstood the assaults of mighty armies, excite a deep interest. We gaze upon them with mingled feelings of admiration and awe. But no fort has endured so many sieges and stood so firmly amid the thunders of war and the ravages of time as the Bible ; no ancient temple or castle has weathered so many storms and outlived so many assaults as that book. Verily it has come down to us through the conflicts of nations and the revolutions

of empires without injury, while thousands of other books have sunk into oblivion.

V.

The Bible is the greatest philanthropist. Its sole aim and tendency are to make man happy and great. Hence it is the enemy of every thing that is evil and degrading, and the friend of anything that is noble and elevating. It denounces tyranny, slavery, superstition, ignorance and cruelty of any kind. It curtails the power of the husband over the wife, of the father over the child, and of the master over the servant. It commands kings to rule in righteousness and subjects to obey in the fear of the Lord. It proclaims war an evil, idleness a sin, and manual labour a virtue. It holds up gluttony, drunkenness, fornication, adultery, theft and murder as crimes of the deepest dye. It nips feud in the bud by denouncing revenge ; and it inculcates love, patience, forbearance, and good-will towards all men. It enters the secret chamber of the soul, makes bare its sorrows and aspirations, and points out God's balm to sooth the former, and God's plan to gratify the latter.

Wherever, therefore, the Bible goes, it silently influences every stratum of society, and acts like a great *lever* in elevating individuals and nations intellectually and socially, religiously and politically. We have pointed out already the marvellous effects it produced in England among the ancestors of the English nation, and we can point to similar effects being produced now in different parts of the world among different peoples. At the beginning of this century, most of the South Sea Islands were occupied by peoples sunk in moral degradation almost to the level of the beast. They possessed no tatters of civilization, and were, moreover, cannibals devouring one another like birds of prey ! The Bible was introduced among them, and in a short time the change it produced in their condition was well nigh as great as if the old inhabitants had been swept away from the face of the earth and a new race created in their place ! Now they possess all the elements of modern civilization, *viz.*, government, laws, education, agriculture, arts and commerce. Again, within the memory of some now living the Bible was introduced to the large Island of Madagascar. The Malagasyes were then idolaters as rude as the ancient Britons, possessing neither a regular form of Government nor anything like a civilized code of laws. Now, however, they form a strong nation, sending ambassadors to the Courts of Europe, making treaties with the old kingdoms of the west, and bravely resisting the wanton invasion of their

country by a nation more powerful and superficially more refined, but apparently less just and humane, than themselves. And lastly, see what wonders the Bible has done in a very short time even in India! Whence the righteous and humane government under which the people now live securely and prosperously? Whence the universities, colleges, schools and hospitals that dot the land? Whence the railways, telegraphs, canals and trunk-roads that cover the land like a net work, facilitating communication and transit? Hindus may deny that all these are attributable to the influence of the Bible, but that will only reflect on their ignorance and bigotry; it cannot alter the fact. Let Hindus calmly and intelligently compare the present Government—the outcome of the Bible—with the governments of the Rajas, and Mahomedans of former times, and I feel sure they will be compelled to acknowledge that the Bible is, at any rate, the greatest philanthropist, the greatest friend of man.

VI.

Lastly, Hindus should read the Bible because it professes to be an authoritative revelation from God to man. There is nothing astounding in such a profession; for there is not an *a priori* improbability that God would make such a revelation. Nay, considering the circumstances of man in this world, and especially his instinctive groping after the Supreme Being, there is every probability that He would satisfy that instinct by a revelation of Himself. Otherwise we should have to conclude that God constituted man with a powerful instinct which He either could not or would not satisfy; a conclusion, I need hardly say, against which (viewed in the light of the abundant provision which he has made to supply our physical wants) our whole nature revolts.

The idea of a 'Book-Revelation' is not unfamiliar to the inhabitants of India. It occupies a prominent place in their literature and creed. The ancient philosophers argue with much ingenuity to prove the divine origin of the Vedas. Some of them in their zeal go so far as to assert that the Vedas are eternal, without either beginning or ending, and hence the source of all things. This notion probably originated in the fact that *each*, speech, is personified in the Rig Veda like wisdom in the proverbs of Solomon. The old Rishis, the reputed authors of the Vedic hymns, we are told, were only 'Seers' whose mental vision was supernaturally stimulated to see the hymns, and the channels through which they were communicated to the race of Manu. Strange to say, however, the old Rishis claim no such dignity, neither do they seem to have ever

been conscious of any supernatural vision They represent themselves and their ancestors as the "Makers," "Fabricators," and "Generators" of the various hymns which they addressed to the deified elements of nature in order to obtain the good things of this life, *e.g.* "Indra and Agni, desirous of wealth, I consider you in my mind as kinsmen, and relations; the clear understanding you have given me (is given) by no one else, and (so gifted) I have *composed* this hymn to you, intimating my wish for sustenance." "This praise, Maruts, is for you (the work) of a venerable author, capable of conferring delight (by his laudations.) May the praise reach you for the good of your persons, so that we may obtain food, strength, and long life." "The *Gritsamadas* have *composed* this prayer, these praises, Asvins, for your exaltation; be propitiated by them, leaders of ceremonies, and come hither; that blessed with excellent descendents, we may worthily glorify you at the sacrifice." How the *idea* of a 'Book-Revelation' originated in India, it is not necessary at present to consider, but the fact that it laid such a firm hold on the thinkers of post-vedic times shows clearly that it is adapted to supply a want which human nature has long and keenly felt. This doctrine, like every other, has been greatly exaggerated in India. It is now maintained that not only the Vedas, but the Darsanas, Darmasastras, Epics, and Puranas were all given by divine beings.

The writers of the Bible, conscious of the divine afflatus, declare openly that they write by the inspiration of God. Moses and the prophets constantly preface their writings by such phrases as "thus saith the Lord" and "the Lord spake saying." The four Gospels contain the sayings and doings of Jesus, the divine man, written by His disciples after His death, by the aid of the Holy Spirit which He gave to guide them into all truth and to bring all things to their memory whatsoever He had spoken to them. The Apostle Paul, who wrote about one-third of the New Testament, asserts his inspiration in several places. With regard to the Gospel he says, "I neither received it of man, neither was I taught it, but by the revelation of Jesus Christ." (Gal. i. 11-12) Again, speaking of the doctrines of the Gospel he says, "God hath revealed them to us by His Spirit;" (I Cor. ii. 10-13) and "How that by revelation He made known unto me the mystery (of Christ), which in other ages was not made known to the sons of men, as it is now revealed unto His holy Apostles and Prophets by the Spirit." (Eph. iii. 2-5) Paul further testifies that "all Scripture is given by inspiration of God"; (2 Tim. iii. 16) and the Apostle Peter says, "Prophecy came not in old time

by the will of man; but holy men of God spake as they were moved by the Holy Ghost (2 Pet. i. 21).

I wish to emphasize the fact that the writers of the Bible *alone* among all the writers of 'Book-Religions' declare that they wrote by the inspiration of God. I am aware that one Rishi of the Rig Veda pronounces his hymn "God-given" (devadattam), but it is obvious that he meant nothing more than that his hymn was given by God in the same sense as other blessings. Mahomed also professes to have received the Koran from Heaven, but his evident acquaintance with the Bible and the claims of its writers is sufficient to account for his pretensions. The declaration of the writers of the Bible, therefore, that they wrote as they were moved by the Spirit of God is unique, and as such demands a most careful examination. For if true, it is evident that the temporal and eternal welfare of man depends on conforming, his life to their teaching; and if false, it is the imperative duty of every one to satisfy himself by examinations that it is so. But it must be either true or false. If false, we must suppose either (1) that the writers were deceived themselves, or (2) that they made such a declaration in order to deceive others. Were the writers of the Old Testament deceived? If so, who deceived them? Were they deceivers? If so how are we to account for the anomalies mentioned in Section III? If the writers of the New Testament were deceived, we know only one person who could have deceived them, namely, Jesus, their Master, to whom they were so intensely attached. But the holy perfection of his character as pourtrayed by themselves, if *real*, precludes the supposition that he was capable of deceiving any one; and if *fictitious*, then it is far more difficult to believe that ignorant fishermen could have conceived and painted such a man than that he *did* actually live among them. Were they deceivers? If so, they must have had a motive. What was it? We know that they were Jews, proud, bigoted and exclusive: that they promulgated doctrines the most repulsive to their personal and national instincts; and that for the sake of those doctrines they suffered persecutions the most cruel, and deaths the most excruciating! It is utterly inconceivable that any rational beings should voluntarily subject themselves to such sufferings simply for the sake of deceiving their fellow-men. Nay, we may go further and declare boldly that they were neither deceived nor deceivers, because the New Testament is a book, such as Jews could no more have produced by any *natural process* than the Ethiopian can change his skin or the leopard its spots. This point has been so strikingly put by the late Professor Rogers in his book "The Superhuman Origin of the Bible," that I cannot do better than quote what he says. "It has always seemed to me an incomprehensible anomaly that Jews should by any natural process have originated such a book as the New Testament and such a religion as it contains. If they originated it (as they certainly did), it would seem to be in diametrical contradiction to all the principles and tendencies of *their* nature, as well as of human nature in general. There is hardly a feature of the religion which the Jew might not naturally be supposed the last man in the world to tolerate. The entire system of institutions under which his character had been formed made him recoil from it, and especially from its cosmopolitan character. That the Jewish nation was the chosen of Heaven; that to them "were committed the oracles of God"; and that they had a monopoly of them—these were first principles to the Jew; and everything in his education, habits, prepossessions, made him clutch them passionately to his heart. The Gospel abruptly broke in upon these, and, as with volcanic force, fractured and upturned these solid strata of his belief. It went avowedly on the principle that all the Jew's privileges were transient, and subordinate to higher ends than his glory or welfare; that they were abrogated by the Gospel; that under it there was to be "neither Jew nor Greek;" that Christ came to throw down the "middle wall of partition" between them. One of the first lessons taught to Peter when he entered on his apostolic mission (and, like every Jew, he was astonished at it), was that God had abolished this distinction, and that he was henceforth to regard the Gentiles as on a level with himself. That all this should be most repugnant to the ordinary Jew, was natural, and the inevitable effect of the abuse of those privileges on which he had plumed himself for ages. He was of the highest caste, and the Jewish Brahmin looked down on the Gentile Pariah with all the contempt with which the Pharisee regarded the Publican. We are not left to conjecture as to the degree of revulsion which his mind experienced; we see how it manifested itself, and may thence exactly measure the improbability of any such religion as that of the Gospel having *naturally* originated with him. It was his grand quarrel with Christ and his Apostles that they proposed to ignore the religious prerogatives of the Jews, and their exceptional religious position among the nations of the earth. So slow, indeed, were even the immediate disciples of Christ to entertain any

such notion, that the expectation that the Messiah would found a temporal kingdom, of which the Jews should form as it were the aristocracy, and in which they were to cast off the Roman yoke, was a besetting hallucination. We see, again, the same principle at work in the natural reluctance even of many of those Jews who *did* become converts, to part with any tatters of their ancient law that they could retain, and in the infinite trouble which their "Judaising" tendencies gave to the Apostle Paul and the Churches which he had founded. We see it still more strongly in the national hostility to Christ himself, in the persecutions, which in the first age of the Gospel the Jews almost always originated, and always fomented, against the hated sect of the Nazarenes; and in the persistent abhorence with which they have recoiled from this religion for near nineteen centuries. How came Jews, then, to fabricate a religion so diametrically opposed to all their native prejudices? How came they to rise to this grand conception of a universal religion, in which all mankind were to be of equal value in the eyes of God, and equally entitled to a participation in His favour? How came incarnate bigotry to go forth as the spontaneous apostle and herald of universal love?"

These and similar questions have never been satisfactorily answered. And regarding human nature, and especially Jewish nature as we find it, it is far easier to believe the testimony of the writers of the Bible that they wrote that book by divine guidance than that they should have produced it by any natural means. We conclude therefore that they were neither deceived nor deceivers; and that the Bible is, what it professes to be, an authoritative Revelation from God to man. And if that be the case, no Hindu can be true, either to himself, to God or to his country, who from prejudice or carelessness abstains from reading it.

MAURICE PHILLIPS.

*INDIA UNDER HER NATIVE PRINCES.**

"India under her Native Princes." I have chosen this as the subject of my lecture because I have learnt by experience that there

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is, in India, no greater impediment to the removal of even acknowledged evils and deficiencies in our administration of the country than the false and fantastic notions which are prevalent concerning the condition of the country under its Native Princes. The English rulers of India conceive of that condition as of one of such extreme misery and oppression that any change could hardly fail to be a change for the better, while a change which substituted British Rule for what they summarily describe as "Oriental Despotism" is, in this, equivalent to a transition from darkness into light. The consequence is that even when defects are admitted in the existing order of things, they are regarded like spots in the sun, too insignificant to impair the general splendour, and exhortations to reform are pushed aside upon the plea that the people suffered from far greater and more numerous evils anterior to our appearance in the country. This continuous state of wretchedness is never demonstrated; it is assumed to be like a mathematical axiom which requires only to be stated in order to command acquiescence. And yet even upon the surface of things there is much which would seem to render this assertion, so confidently made, a highly questionable one. It was not the wretchedness and poverty of India which first attracted European adventurers thither. It was, on the contrary, its wealth and magnificence, and the high level of civilisation to which the people had attained. And still, it is impossible for the least observant traveller to journey in India without meeting, in all parts of the country, the indications of a greatness and prosperity which has only recently decayed. What I propose to attempt this afternoon is to draw, in such detail as time will permit, a picture of this India of the past, and to sketch the political and social institutions under which it was built up and furnished. Among the earliest of the Indian travellers whose writings have been preserved was John Batuta, a highly accomplished Moslem, and a native of Tunis. He journeyed through India when Muhammad Toghlak was Emperor of Delhi, and his book contains ample evidence of the suffering caused by the rule of this cruel and insane tyrant. But even then, it is clear that the continent, taken as a whole, was in a highly prosperous condition. The following are a few passages selected from his itinerary:—

"After four days journey I arrived at the city of Sarsati. It is large, and abounds with rice which they carry hence to Delhi, the capital of the Empire. And after this at Hansi, which is a very beautiful and closely built city with extensive fortifications.....we then proceeded till we came to Delhi, the capital of the Empire. It

is a most magnificent city, combining at once both beauty and strength. Its walls are such as to have no equal in the world. This is the greatest city of Hindustan, and indeed of all Islamism in the east.....Without the city is a reservoir for the rain-water; and out of this the inhabitants have their water for drinking. It is two miles in length and one in width. About it are pleasure-gardens to which the people resort."

Subsequently John Batuta had occasion to make a journey to the Malabar Coast, and of this part of India he gives a glowing description.

"Its length is a journey of two months along the shore. The whole of the way by land lies under the shade of trees, and at the distance of every half mile, there is a house made of wood, in which there are chambers fitted up for the reception of comers and goers, whether they be Moslems or infidels. To each of these there is a well, out of which they drink; and over each is an infidel appointed to give drink.....And in all this space of two months journey, there is not a space free from cultivation. For every body here has a garden and his house is placed in the middle of it, and round the whole there is a fence of wood, up to which the ground of each inhabitant comes.....They put a thief to death on stealing a nut or even a grain of seed of any fruit; hence thieves are unknown among them; and should anything fall from a tree, none except its proper owner, would attempt to touch it."

When he reaches Bengal proper, he is amazed at the abundance and fertility round him. He calls it "an extensive and plentiful country," and adds, "I never saw a country in which provisions were so cheap." Yet at the very time when the Batutu was in Bengal, the Governor of the Province was in rebellion against the Emperor of Delhi. Later on, during the reign of Allah-ud-din—another sanguinary tyrant—we learn from a contemporary historian that—

"Either through his agency or the beneficent ruling of Providence, there were several remarkable events, and matters which had never been witnessed or heard of in any age or time, and probably never will again.

1. The cheapness of grain, clothes and necessaries of life. 2. The constant succession of victories. 3. The destruction and rolling back of the Mughals. 4. The maintenance of a large army at a small cost. 5. The severe punishment and repression of rebels and the general prevalence of loyalty. 6. The safety of the roads in all directions. 7. The honest dealings of the bazaar people. 8. The erection and repair of mosques, minarets and forts, and the excavation of tanks. 9. That during the last ten years of the reign, the hearts of Musalmans in general were induced to rectitude, truth, honesty, and temperance. 10. That without the patronage of the Sultan, many learned and great men flourished."

Of the Emperor Feroz Shah—the second after Allah-ud-din—we are told that—

"During the whole forty years of his reign, there was no appearance of scarcity, and the times were so happy that people forgot the reign of Allah-ud-din, although no more prosperous times than his had ever fallen to the lot of any Muhammadan sovereign..... Fabrics of all kinds were cheap, and silk goods, both white and coloured, were of moderate price.....Such was the prosperity that throughout the Doab.....not one village remained waste even in name, nor one span of land uncultivated. In the Doab there were fifty-two districts flourishing, and a similar state of prosperity prevailed elsewhere.....The inhabitants were happy and free from care. Such perfect happiness did the kingdom enjoy in those days."

The Sultan, we are further told, "excelled all his predecessors in the erection of buildings. These were chiefly works of utility—such as *bunds* thrown across rivers for purposes of irrigation. He also built monasteries and inns for the accommodation of travellers. One hundred and twenty monasteries were built in Delhi and Ferozabad for the accommodation of the people of God, in which travellers from all directions were receivable as guests for three days. These 120 buildings were full of guests on all the three hundred and sixty days of the year."

Abuses which had pressed upon the public in revenue matters, malpractices in the administration of public business, and breaches of the Holy Law were effectually repressed. The result, we are told, was, that, though this sovereign was sedulous to narrow the dimensions of the Empire from the enlightened conviction that it was impossible properly to govern an indefinitely extended territory—that though he sacrificed by the abolition of unjust and oppressive taxes a large income which had accrued to his predecessors—yet, in the aggregate, his revenues surpassed all preceding experience, while the wealth and happiness of all classes of his subjects was such as had been known at no previous period—

"Things were so plentiful and cheap, and the people were so well to do, and enjoyed such ease that the poorest married their daughters at a very early age". As for the upper classes,—the Khans and Maliks—they "grew rich in his reign and had vast stores of wealth

and jewels and diamonds of great value. The Sultan being thus beneficent, all men, high and low, were devoted to him."

Sixty years later we get another vivid glimpse of the internal condition of India. Shah Rukh, the sovereign of Persia, sent an embassy to the Hindu Kingdom of Bijanaggar, and his ambassador Abd-ar-Razzak, has left an account of what he said. He entered India by the port of Kalikot, which he describes as follows:—

"It is a city inhabited by infidels, and therefore a legitimate object of conquest to us . . . . . such security and justice reign in that city that rich merchants bring to it from maritime countries large cargoes of merchandise which they disembark and deposit in the streets and market-places, and for a length of time leave it without consigning it to any one's charge, or placing it under a guard. The officers of the Custom House have it under their protection, and night and day keep guard round it. If it is sold they take a custom duty of 2½ per cent., otherwise they offer no kind of interference." . . . . The pirates of the sea do not molest the ships of Kalikot, and everything is procurable in that part, with this sole exception, that you cannot kill cows and eat their flesh. Should any one be known to have killed a cow, his life would infallibly be sacrificed. The cow is held in such respect that they rub the ashes of its dung upon their foreheads—the curse of God be upon them." When the ambassador arrived at Bijanaggar, he beheld a city, he declares,—

"Such that eye has not seen nor ear heard of any place resembling it upon the whole earth . . . . . By the palace of the King, there are four bazaars situated opposite to one another . . . . . These are very broad and long . . . . . The tradesmen of each separate guild or craft have their shops close to one another. The jewellers sell their rubies and pearls and diamonds and emeralds openly in the bazaar . . . . . The country is for the most part well cultivated and fertile, and about three hundred good seaports belong to it . . . . . It is so well populated, that it is impossible in a reasonable space to convey an idea of it. In the King's treasury there are chambers with excavations in them, filled with molten gold forming one mass. All the inhabitants of the country, whether high or low, even down to the artificers of the bazaar, wear jewels and gilt ornaments in their ears, and around their necks, arms, wrists and fingers."

In later times, when the descendants of the Emperor Baber ruled India from the two capital cities of Agra and Delhi, we continue to find in the annals of the time, abundant evidence to show the well-being and prosperity of the people. I take, as illustrations, the

following extracts from the autobiography of the Emperor Jahangir:—

"The city of Agra, it is almost superfluous to observe, is one of the greatest in Hindustan; and being defended by a citadel of great antiquity, my father had caused such a citadel to be thrown down, and a new fabric of hewn stone to be erected on the site . . . . The city is built on both banks of the river Jumna; the part which is situated on the hither or western side being four kos in breadth, and ten kos in circumference, and that on the opposite side being not more than two kos in breadth, and three kos in circumference. The multiplicity of noble structures erected on all sides, such as mosques of superior magnitude, large spacious caravanserais, and splendid private palaces are to an extent that would place it on a par with the most celebrated cities in Irak, Khorasan, and the famed territory beyond the Oxus; the ordinary dwellings of the inhabitants being built for the greatest part, three or four stories high. Such is the immensity of the population that from the hour of evening prayer to the close of the first quarter of the night, the throng is so closely wedged that it is not without the utmost difficulty that people can pass and repass along the streets . . . . . Every day through the year there are conveyed to the place by boats along the Jumna, not less than ten thousand loads of fuel, and yet on dirhems, it would be difficult to purchase a single branch so rapid is the demand. For nearly eight months, moreover, which is the duration of the dry season, or the interval between the periodical rains, not less than five and six thousand horses for sale daily enter the city from Kabul and the countries in that direction; and such is the rapidity with which they are disposed of that not one is to be purchased on the succeeding day. . . . The citadel or castle of Agra, as already intimated, was re-built by my father, from the foundation altogether of red-stone, with four principal entrances, and two sally-ports It was, in fact a monument of his power, so perfect in execution that one might almost venture to say it was a fabric shaped by the architect of eternal destiny from a single rock . . . . . At the same time emulating the example of their sovereign, every member of the court and subject of the empire, each according to his station, hastened to construct and lay out in the city and its environs, mansions of the most sumptuous description and the most beautiful gardens."

In the next passage that I shall quote, it is not improbable that Jahangir is claiming credit for the good deeds of his father, but the passage is of value as showing the advanced state of civilisation

which India attained during this period. "At the period when I took my departure from Lahore to Agra, ... it happily occurred to me to direct that the different Zamindars on that route should plant at every town and village, and every stage and landing place, all the way from Lahore to Agra, mulberry and other large and lofty trees affording shade, but, particularly those with broad leaves and wide spreading branches, in order that to all time to come the way worn and weary traveller might find under their shadow repose and shelter from the scorching rays of the sun during the summer heats. I ordered, moreover, that spacious places of rest and refreshment substantially built of brick or stone, so as to be secure against early decay, should be erected at the termination of every eight kos for the whole distance, all provided with baths, and to every one a tank or reservoir of fresh water; a certain number of attendants also to be allotted to every serai for the purpose of sweeping and keeping them clean. And lastly at the passage of every river, bridges were erected, so that the traveller might pursue his journey without obstruction or delay." The most convincing proof, however, of the general order and security which prevailed in India under her Native Princes, is to be seen in the irrigation tanks, the mango groves, the wells, caravanserais mosques and temples, which meet the eye of the traveller in all parts of the country. These—and they must formerly have been much more numerous—were nearly all the creation of private munificence. They demonstrate alike the wealth, the liberality and the public spiritedness of the people, and what is not less important in passing judgment upon a Government—the safety with which the evidences of wealth could be publicly shown. In 1829, Colonel Sleeman caused an estimate to be made of the public works of ornament and utility which in the single district of Jubbulpore owed their existence to the munificence of private persons in days anterior to British Rule. The population of the district amounted to about half a million, and there were in various parts of town and country, erected by individuals for the public good, and with no view to return in profits, 2,286 tanks, 209 large wells, with flights of steps extending from the top down to the water in its lowest stage; 1560 wells lined with brick and stone and cemented with lime but without stairs; 360 Hindu temples and 22 mosques. The estimated cost of these works amounted to £866,640. In addition to these, two-thirds of the towns and villages were imbedded in groves of mango and tamarind trees, mixed with the banyan and peepul; all planted at the cost of private citizens at an

estimated cost of £120,000. Lastly, to complete this rather long series of extracts, the following is a picture of the wealth and prosperity of Bengal, as we found it drawn by Mr. Verelst, one of our early Governors. On the 5th April 1769, he writes to the Court of Directors—

"Though our provinces (*i. e.* Bengal, Behar, and a part of Orissa) afford no gold, silver, nor precious stones, yet the vast variety and abundance of the produce of the lands, and the excellence of the manufactures of the inhabitants leave them no great occasion for imported commodities; and, at the same time, invite foreign merchants to purchase and export these goods and manufactures from their superior cheapness and quality. I have observed that the natives had occasion for few foreign commodities, either for convenience or for luxury, and consequently a very small proportion of their trade could be carried on by barter, and the rest only by giving specie for goods. The extent of this traffic was prodigious; and besides the large investments of the different European nations, the Bengal raw silk, cloths, &c., were dispersed, to a vast amount to the west and north inland; as far as Guzerat, Lahore and even Ispahan. In proportion, therefore, to this diffusion of commerce, the quantity of specie in the country necessarily increased; the farmer and workman were able to answer the demands of government with ease by the readiness of their sales; and every extension of industry at home, or trade abroad, on a new opening to an advance of the central opulence. ..... If these facts are admitted we can be no longer at a loss for the source of the prodigious ancient riches of Bengal, as there flowed in every year an increase of specie equal to the export trade of the country; and of the immensity of this we must conceive the most consequential idea, when we find from the Custom Office books at Moorshedabad that so late as Aliverdi Khan's time, the value of 70 lakhs (£ 875,000) of raw silk were entered there exclusive of the European investments which were not registered in them, as being either duty free or registered at Hooghly. Here then we trace the grand and true fountain of the wealth of these Soubahs, and the splendour of their Nazims. But besides this, there were also several collateral streams which served in their turn to feed and swell the principal one. The advantages accruing from so beneficial a commerce enabled, as we have seen, the farmer and manufacturer to discharge their stipulated revenue to their prince, and these revenues again did not centre nor were sunk in his coffers, but returned through various channels into

the general circulation. Large Jaghires were granted to men of noble families or particular favorites; while districts were allotted to other branches of the reigning family at a rate vastly below their real value. Large armies of horse, &c., were maintained either for show or security at an enormous expense: and even the luxury and pomp, ever customary among the potentates of the east, contributed in some degree by encouraging a spirit of expense, and dissipating large sums among the people in general; which, if they had remained shut up in the Treasury, would have been a loss to the currency and no present advantage to the proprietor. By these means, therefore, and the advantage of trade already mentioned, an extensive and brisk circulation of specie was kept up everywhere; the farmer was easy, the artisan encouraged, the merchant enriched, the prince satisfied. It would not be easy to ascertain the precise era in which all these began to decline; but so far is certain that the decline was neither sensibly felt by the country, nor perceptible to us, till after the revolution in favor of Mir Jafir *i.e.*, until the English began to govern the country, or rather to plunder it."

Exhibits to a similar purpose might be multiplied indefinitely but the foregoing are sufficient for my purpose. They show, beyond reach of dispute, that India under her Native Princes was possessed of wealth, and abundance of goods, that her upper classes were remarkable for their liberality and public spiritedness, and her lower classes were in a thriving and prosperous condition. What is the explanation of all this—so contrary to the common notion of wretchedness from which we imagine that we were divinely commissioned to deliver India? It would be absurd to ascribe the prosperity of India to the character of her kings, whether reigning in Delhi or anywhere else. Great kings, it is true are to be found among them, but extremely bad kings in far greater numbers. Even had this proposition been reversed, we should be no nearer an explanation.

> " Of all the ills which human hearts endure,
> How small the part which kings can cause or cure"—

It is not in the character of the kings of India, but in that of the constitutional order of which they were the head that we must look for the explanation. As far as India is concerned, we must get rid of the popular conception of an oriental despot, and recognise the Emperors of Delhi, as they truly were—monarchs despotic in theory,

but hedged around by conditions which limited their power as effectually as if these conditions had been devised for that end.

It must be well nigh impossible to exaggerate the intensity of the hatred which the Hindus must have felt towards their Moslem invaders for many a year after the inroads of Muhammad of Ghuznee. Those inroads had been especially directed against their religion. Their temples had been defiled and destroyed, their idols overthrown, and the wealth which had been consecrated to the gods had been carried away to enrich the shrines of the victorious faith. Rich cities had been reduced to ashes and their population either massacred, or dragged into slavery. The sense of injury was not likely to be mitigated by any undue courtesy on the part of their conquerors; and with so little of conciliation on the one side, and so much to resent on the other, it is, at first sight, perplexing to understand how any *modus vivendi* could have been arranged between the two races. Nor perhaps would it have been possible but for the existence of the caste system. The warrior caste, represented by the Rajpoots—the Ancient Chivalry of India—never submitted to the Moslem until from the sovereigns of the House of Timour they exacted the concession of complete political equality. But the priestly trading and agricultural castes, as naturally, did not regard fighting as a form of protest within the measure of their abilities. And in a country, like India, where three-fourths of the population subsist by the cultivation of the soil, the people must sow the seed and reap the harvest and acquiesce in any *de facto* government, no matter how deeply they may hate it in their hearts. Consequently the Moslem irruption bought about among the Hindus a segregation of the warlike and industrial sections of the population. The former concentrated themselves in the desert-bound fastnesses of Rajasthan, and there for the space of four centuries, carried on as heroic a battle for their faith and their independence as stands recorded in the history of the world. The latter remaining in the open country continued to pursue their ordinary avocations. The comparative ease, therefore, with which the Moslems overran and held this open country, induced them to settle permanently in a land which, at first, they had entered only for purposes of plunder. Then they were not long in making the discovery that though they might despise the vanquished Hindu, they could not get along without his aid and co-operation. The language they spoke was Persian, and they would have accounted it a degradation to study the language of the Hindus. And yet, without a knowledge of the vernaculars,

it was impossible to comprehend the revenue system, or superintend the collection of the taxes. Thus the management of all revenue business was left to the Hindus, and up to the middle of the reign of Akbar, the Government accounts were kept in Hindee or other of the local vernaculars. For the population at large, the Moslem conquest did not involve that overthrow of ancient customs, and time honoured laws which superficially it might seem to have done. The state machinery at the point where it came into contact with the great body of the people remained the same as it had always been,—namely, Hindu officials carrying on the administration according to ancient Hindu methods. This wise and tolerant system, originating, as it did, in necessity, was subsequently acted upon from motives of policy. The Emperors and the Governors of Provinces soon perceived the immense advantage of having in their Hindu subjects a counterpoise to their too turbulent Moslem chiefs and generals. They purchased their fidelity by the grant of larger and larger privileges, until we find a Moslem historian describing the great princes of Rajasthan, as "the props and ornaments of the throne" and Hindus, such as Todar Mull, and Mann Sing, the foremost men of the Empire. The bigot Aurungzeb endeavoured to reverse this policy, and concentrate all power and place in the professors of the dominant faith, but he was obliged to relinquish the attempt, finding, as a contemporary Moslem historian tells us, "that nothing could go forward unless he employed the Hindus again in his service—a set of men who, either as powerful princes or as keeping the books and registers of the revenue, were the axletrees of the wheels of Government." Here then is the first great cause why India under the Emperors of Delhi attained that flourishing and opulent state which our own Governor Mr. Verelst found so astonishing. It was the seat of a Government from which, in its best days, the spirit of exclusiveness, whether religious or political had disappeared. A fair field was open to merit without regard to race, colour, or religious distinction. When we came into possession of the Gangetic provinces, the wealthiest merchants, the richest bankers, the most powerful landowners were all Hindus—a truly remarkable illustration of the liberal and tolerant spirit of the Muhammadan Government.

For the collection of the Revenues, the Empire was divided into Soubahs or Provinces, and these again were subdivided into Pergunnahs or Fiscal Divisions. The connecting link between a Soubahdar, or Governor of a Province, and the central authority was

the annual revenue which he was expected to remit to the imperial treasury. In other respects, the Provincial Governor might almost be regarded as an independent prince. The army under his command did not receive its pay from the treasury, but was quartered upon rent-free plots of land in those localities which it garrisoned. It looked for pay, promotion and reward—not to the Sultan—but to its own Soubahdar, and these Soubahs were, practically, tributary states rather than sub-divisions of a single organic whole. If the reigning Emperor was a strong man, the Soubahdars were held in due obedience and subordination; but if the central authority became weak, the Empire immediately fell to pieces. Here then was the first efficient check upon the arbitrary desires of the central authority. The Emperors could not afford to quarrel with their own Soubahdars. An excess of harshness practised upon those powerful feudatories arrayed their own provinces in rebellion against the Imperial authority. But the Soubahdar, in his turn, was surrounded by checks as effectual as those which limited the action of his superior. In the province which he ruled, there existed both a Hindu and a Moslem aristocracy,—Zamindars, Jaghirdars, Inamdars, Talukdars—and the measure of his ability to resist the Imperial commands depended upon the degree of attachment and loyalty which he had kindled in this aristocracy. This nobility, in its turn, depended for its power and prestige upon the loyalty and prosperity of the village communities from whose labour its own wealth was derived. The constitution of a village community I shall describe presently, but here I will just say that, among its other advantages, it was specially adapted for the migration of a community from one part of the country to another. And communities which found the exactions of a Talukdar, Jaghirdar or Zamindar intolerable, simply migrated *en masse* within the jurisdiction of another from whom they were certain to receive welcome and protection. The custom was to settle emigrants upon waste lands which for three years paid no assessment, and this contingency of migration acted as an effectual check upon oppressive landlords. For while it impoverished the one, it added to the wealth and power of a rival. Thus we find that when India was ruled by her Native Princes, the social order was so far constituted that politically each grade drew its life, strength and sustenance from the grade next below it, and this effectually protected the mass of the people from oppression and extortion.

The official head of each Pergunnal fiscal division was the Zamin-

dar. What the special status of a Zamindar was has been a perennial source of controversy among the British officials in India, and they are, at this moment, disputing over it as hotly as ever. Was he only an officer of Government? Or was he a landed proprietor as well? This interminable controversy has been provoked by the supposition that, if we only insisted upon it, we should find in India precisely the same notions regarding ownership of land as those which among ourselves have been artificially created by English Law. A Zamindar was not a landed proprietor in our sense of the word, because no such exclusive proprietorship was to be found anywhere in India. He had an interest in the land, in common with several others, and, if he was recognised as the official head of it, or Zamindar of the District, that interest was superior to that of any other personage. The *Sunnad* or paper of nomination ran in the following terms. "The office of Zamindar has been bestowed upon such an one. He is to be conciliatory to the ryots, so as to increase cultivation, and improve the country—to pay the revenue of Government into the treasury at stated periods, to keep the high roads in repair and safe for travellers—to be answerable for the property of travellers if robbed—to render and transmit the accounts required of him to the Presence every year."

For the preservation of the peace of his district he was assisted by a numerous police. "To convey" (I am now quoting a passage from the Fifth Report) "an idea of the means possessed by a principal landholder for the purposes above mentioned, it may be sufficient to notice the case of the Zamindar of Burdwan. This Zamindary on a rough estimate may be taken at 73 miles long and 45 broad, comprehending about 3,250 square miles, nearly the whole of which was in the highest state of cultivation, and well stocked with inhabitants. His police establishment . . . . . consisted of thanadars or chiefs of police divisions . . . . . under whose orders were stationed at the different villages for the protection of the inhabitants and to convey information to the thanadars about 2,400 armed constables. But exclusive of these guards who were for the express purpose of police, the principal dependence for the protection of the people probably rested on the Zamindary constables; for these are stated to have been in number no less than 19,000 men who were at all times liable to be called out in aid of the police." At the same time they were not an unproductive body quartered upon the labouring section of the populace. They received no pay but in lieu of it grants of rent-free land from the cultivation of which they drew their subsistence. As regards the efficiency of this police, Mr. Holwell, the hero of the Black-hole, writes of this very district of Burdwan as follows.

"Here the property as well as the liberty of the people are inviolate. Here no robberies are heard of either private or public; the traveller, either with or without merchandise, on his entering this district, becomes the immediate care of the Government which allows him guards without any expense to conduct him from stage to stage; and these are accountable for the safety and accommodation of his person and effects. At the end of the first stage he is delivered over with certain benevolent formalities to the guards of the next who, after interrogating the traveller as to the usage he had received in his journey, dismiss the first guard with a written certificate of their behaviour, and a receipt for the traveller and his effects. In this form the traveller is passed through the country; and, if he only passes, he is not suffered to be at any expense for food, lodging or carriage for his merchandise or baggage . . . . . If anything is lost in this district, for instance a bag of money or other valuable, the person who finds it hangs it upon the next tree, and gives notice to the nearest Police station, the officer of which orders immediate publication of the same by beat of drum."

Here, then, we find another leading cause which accounts for the great prosperity of India under her native princes. In desire and intention, the central authority might be, and probably often was, as rapacious as the proverbial Oriental despot; but it had set limits to its own power which, practically, it was impossible to overpass. The entire financial machinery—the assessment and recovery of the taxes, was confided to those whose strongest interest it was to keep the burden of taxation as low as possible. From the Soubahdar of the Province down to the humblest ryot there was no one who did not lose by every rupee which was abstracted from the Province to swell the magnificence of the Imperial Court. And, being the men in possession, they were masters of the situation. Accordingly, as Mr. Holwell indignantly informs the Court of Directors.

"The Rajas and Zamindars by private contract with the Soubah's officers, who are charged with the management of this department, obtain more lands than by their *Sunnads* appear, and consequently pay no rent to the King for the surplus land. The same artifice is practised between the Dewans of the Rajas and Zamindars and the farmers; and the tenants or lease-holders under them by bribing the officers of the Jummabundi and those entrusted with the

measurements of the lands, that they may enjoy among them the benefit of the surplus land; and I may justly aver that there is not a tenant in Indostan but possesses and occupies a greater quantity of land than his Pottah expresses, or than he pays rent for. Consequently, it is the tenant that ultimately enjoys the benefit of the surplus land, thus gained by corruption, while the King suffers in his rents. It extremely well answers the tenant's purpose to possess, if he could by a small bribe, more land than he pays for, because himself and his heirs enjoy the profit of it in perpetuity; since by a fundamental law of the Empire, their Pottahs are irrevocable so long as they pay the rent, rated to them respectively, and so tender and indulgent are the courts of Indostan in this particular that no tenant forfeits his land, before he has failed in his payments for twelve months; though the land-tax by the same laws is to be paid every three months."

ROBERT D. OSBORN,
Lieutenant Colonel.

(*To be continued*).

*LETTERS FROM THE HOLY LAND.**

I. JERUSALEM.

Jerusalem, as it appears on a superficial observation, is a modern Syrian town enclosed by walls of the sixteenth century, and built in a not unpicturesque style, prescribed by the scarcity of wood, with vaulted terraces to the houses and domed chambers above. The crooked and dirty lanes of the city—for it can hardly be said to possess streets—are in many places arched over to exclude the sun. The bazaars are mean and scantily furnished with wares, and, except where some large hospice or ecclesiastical building intrudes its obviously foreign architecture and uneastern trimness of style, one may traverse almost the whole town without seeing anything to suggest that it is more than a second-rate provincial city of the Ottoman Empire. It is only at the gates of the Haram area and in the fore-court of the Church of the Holy Sepulchre that the historic greatness of Jerusalem betrays itself to the wanderer in its streets, and even at these points the immediate suggestions conveyed

* Written from Palestine in 1879.

by the architecture are of the Crusaders, the Saracens, the Byzantine Empire, and not of those earlier glories and sacred associations on which the fame of the mediæval city rests.

The Jerusalem of the Bible is a buried city which the curious traveller must seek in vaults and caverns far below the level of the modern town, or trace from point to point where the live rock, scarped by ancient engineers or honeycombed with cisterns and rock tombs, still rises above the debris which has filled the valleys, and changed the whole surface of the site. The visitor will therefore find it wise to gather his first impressions from a commanding point beyond the town, from the hill of Scopus to the North whence the Assyrian shook his hand against the mountain of the daughter of Zion, from that famous turn in the winding road from Bethany where our Lord pronounced his lament over the city, or, better still, from the top of the Mount of Olives, where the magnificent situation of Jerusalem is seen to full advantage, and entirely overcomes the air of provincial insignificance which prevails within the walls. The impression of the general view from Olivet may be strengthened and filled out in detail by walking along the two great valleys which defend Jerusalem on every side but the North. After completing this survey the visitor may either proceed to examine the two principal centres of interest, the Temple platform, or Haram area, and the great Church of the Sepulchre; or still better he may complete his general view of the topography by walking along the top of the northern wall, from which, in spite of the contrary assertion of Robinson, the line of the ancient valleys within the city can still be very fairly made out. Before taking this walk he will do well to examine with care the excellent maps of the modern and ancient contours of Jerusalem, constructed by Zimmermann of Basel, from the measurements of Mr. C. Schick. He will then be able to visit individual places of interest without losing the whole in its parts. The minutest vestige of the ancient city will acquire meaning and importance as a key to some point in the great topographical problems on which the learned are still so much divided, and he will begin to understand the intense eagerness with which enquirers welcome every new fact that bears on the reconstruction of the plan of ancient Jerusalem.

Now that the shafts of the Palestine Exploration are closed, it is doubtful if the visitor can see in Jerusalem any masonry older than the time of Herod. Herodian work appears in several parts of the walls and substructions of the Temple area. The great wall of the

Jews wailing place, Robinson's arch, which is the fragment of a viaduct connecting the temple with the Western Hill, the labyrinth of vaults beneath the south-east corner of the platform which goes by the name of Solomon's stables, and the massive double gateway a little to the west under the Mosque El Aksa are all of them remains of Herod's work in which the presence of older elements is at best matter of precarious conjecture. Another point where one might hope to trace the hand of the great builder is the site of the tower of Antonia, where the barracks now stand at the north-west corner of the Haram enclosure. Here there is not much to be seen above ground; but a very interesting series of vaults, which must once have led to Antonia and the Temple area, may be visited under the convent of the Sisters of Zion on the north side of the Via Dolorosa. The sisters keep a school and their pupils make little books of dried flowers, which are sold to travellers. So one has ready access to the convent, and the good nuns are very willing to show the old pavement of the Via Dolorosa—now the floor of their store cellar—and below it again a series of great arches running north and south, from which, as we were told, a door now built up at one time gave communication with the barracks.

This north-west corner of the Haram area, will I hope, be carefully explored some day when Moslem bigotry no longer misappropriates the site of the Temple. At this point, if anywhere, one would hope to find relics of the time before Herod. For the great plateau of the Temple hill was originally bounded at all points by steep valleys. The Kedron on the East and the Tyropoeon on the West defended three sides, while the greater part of the Northern line was cut off from the adjoining hill of Bezetha by the nameless valley that passed through the *Birket Israin*, the traditional (but not the true) Pool of Bethesda. So from the earliest time there must have been a strong wall of defence to cover the isthmus between this valley and the Tyropoeon, and this is the place where we must look for David's fortification of Millo, if it shall ultimately appear, as seems to grow more probable with every advance in our knowledge, that the true Zion, the ancient city of David, was situated on the Temple Hill, and not on the western heights which, so far as we know, was first called Zion in the middle ages. It is true that, on this theory, David's Jerusalem would be reduced to a very small place, like a mountain fastness than a great city. But this is precisely the idea conveyed by 2 Sam., v. 9, where the term applied to the city of David denotes an inaccessible hill fort, such as the

Israelities were accustomed to retire to when hard pressed by enemies.

Let us get back to the buildings of Herod, one of the most remarkable of which I have not yet mentioned. I mean the so-called tower of David, which forms part of the modern citadel near the Yafa gate, and which Robinson and others identify with Hippicus, though Ferguson, Conder, and Schick seem to have more reason for holding that it is really Phasael. It was the peculiarity of the towers of Jerusalem that the lower part of the structure was either hewn out of the solid rock or built solid of great stones. An example of the first style is preserved at the south-west corner of the city, in a block of rock which now serves as the foundation for the dining room of Bishop Gobat's school. The great tower of the citadel exhibits the other method of construction. It was long a question whether the lower part of this building really is solid, but the point was recently settled in the affirmative through the cupidity of the Pasha, who thought that if the tower contained treasure he had better secure it before the Russians approached. He therefore employed Mr. Schick to sound the building in various directions, with the result that it became certain that this is the real masonry of Herod, solid throughout, just as Josephus describes.

To Mr. Schick, we paid a visit, and found him full of interesting information as to the minutiæ of Jerusalem topography. He showed us a large and elaborate model of the Haram area and its buildings, with the original contours of the Temple hill, and an accurate reproduction of all the vaults and cisterns below the surface, which he is constructing for a Dutch gentleman. A quarter of an hour spent in studying it would do more than a week's reading to explain what is known and what is still problematic in the topography of the eastern half of the Holy City.

Though the position of the City of David may be called the fundamental problem, the topographical question that has always been most warmly discussed is the genuineness of the Holy Sepulchre. Our Lord was certainly buried outside the city walls, but did not these include the traditional sepulchre? The question is one that has seldom been handled without some influence of sentiment or prejudice, which in minds of opposite type may produce either a desire to defend or an inclination to explode the current tradition. The surest arguments are derived from the rock scarpings, which at certain points give indisputable evidence of the course of the old wall; and it is not easy to draw a line in accordance with these indications

which shall throw the sepulchre outside the town and yet satisfy the conditions of a reasonable line of defence. On the whole, therefore, recent research is against the traditional site; though it is not to be thought that the clearest demonstration can seriously affect the reputation enjoyed by the most famous of Christian shrines—a reputation which rests not merely on the Sepulchre itself, with its exploded but still effective miracle of the sacred fire, but on the accumulation within one building of a multitude of sacred associations comprising the entire history of the Passion and Resurrection. The entrance to the church is imposing. The tower and front are fine, and the old French basreliefs over the doorway interesting. But no sooner do you enter, passing the Moslem gate-keepers lolling on a bench at the door, than tawdry innovation begins to predominate. The old church of the Crusaders, though much spoiled by tasteless changes, has still some character left. The dome of the sepulchre is vile, and so in detail is almost everything in the building. Yet the complexity of the structure has a certain fascination, and to the pilgrim whose faith is undisturbed by critical doubts, the gathering of so many points of sacred history into one focus must be highly impressive. Outside you are shown the site of Abraham's sacrifice, and the still living stump of the bush in which the substituted ram was caught. Within, all the parts of the great antitypical sacrifice are set forth. Here is the prison of Christ, there the column of the scourging, there the chapel of the derision. A stair leads up to Calvary, where every point in the Gospel story or in the legendary traditions that have encrusted it is associated with some chapel, or altar, or stone in the floor, or mark upon the walls, and expounded by an illustrative picture. All these and many other secondary objects of interest are portioned out among the different Christian communions. The Sepulchre itself is the joint property of the ancient Churches—Greek, Latin, Armenian, Coptic—each of which possesses itsown share of the precious lamps and ornaments that adorn the spot. To the mind of a Protestant the tasteless luxury of the surroundings is in itself sufficient to create a prejudice against the genuineness of the site. We would rather think of the grave of our Lord as forgotten than see it plated with marble and loaded with tawdry and tinsel decorations. But a visit to the Church at the time of some great religious service will, if it cannot remove this impression, at least enable one to understand that the presence of these intrusive modernisations is inseparable from the living part which the sepulchre still claims in the worship of the greater part of Christendom. We

were too early for the great Easter celebrations, but witnessed a very impressive Armenian service under the great dome in front of the Chapel of the Sepulchre.

There were many things in the service to strike the European observer; the double row of choristers seated cross-legged upon the floor, the sweet but wild notes of the vocal music, so unlike the chants of the Western church, the male worshippers in fez or turban —not an uncovered head to be seen—the women in long white vails, though with uncovered face, sacrists armed with swords as they led the procession that closed the service, the priests bearded and unshorn, the monks in their black cowled cloaks, which they covered during the procession with copes of Oriental splendour, embroidered like the banners with quaint Byzantine imagery. Behind the group of richly vested priests that surrounded the patriarch, the doorway of the Sepulchre like a great jewel shone all ablaze with candles and precious lamps. The sense of tawdriness and incongruity had disappeared, or rather the accessories so foreign to the simplicity of the Gospel story appeared appropriate to a service in which that simplicity was supplanted by gorgeous ritual. But the strangest sight of all was the long line of Moslem soldiers, with loaded rifle and fixed bayonet, drawn up to preserve order, and force back intruders from the line of the procession. They did their work decorously and efficiently, much to the surprise of an Arab of the desert, who strolled right across the protected space with a look of childish wonder on his face, and was very promptly thrust back by the guard.

To the critical enquirer the most interesting things about the Church are the excavations in the rock—the tomb of Nicodemus with its *loculi* or narrow recesses, characteristic of the most ancient Jewish tombs, into which a body could be thrust lengthways; the cistern entered by a long aisle from the Rotunda; the other cistern which is shown as the place of the Invention of the Cross; the long cleft or rent in the rock down from Calvary; and above all, the great Cistern of Helena, still half full of water. These are veritable remains of ancient Jerusalem, and the tomb which has been pitched upon as the Holy Sepulchre, and disguised and ornamented till its original features can no longer be recognised, was probably nothing more than one element in this group of excavations, which may likely enough be much older than the time of our Lord. Altogether, it is the rocks in and about Jerusalem that contain the oldest and most interesting remains. Indeed, the same thing may be extended

with few exceptions to the whole of Palestine. Seldom does one see any building that is older than Herod and the Romans. But the whole country is full of rock tombs and cisterns of very ancient date, which, in spite of the total absence of inscriptions, afford a silent testimony to the distribution of the early population of Palestine. And it is a very curious thing that almost all ecclesiastical traditions attach themselves to caves, tombs, and cisterns. There is scarcely a sacred site in Palestine which has not some rock-cut hollow as its shrine. Even the stable at Bethlehem is a cave, and a grotto is shown as the place where the angelic host appeared to the shepherds.

In visiting the Church of the Sepulchre for the first time we had the fortune to run against one of the most notorious characters in Jerusalem. Most of your readers will remember the so-called Moabite pottery which was bought for the Berlin Museum at an exorbitant price, and which has been pronounced spurious by all the best authorities. The collection was purchased through the well-known Jerusalem bookseller, Shapira,* a converted Jew, who first came out as an agent of the English Mission, but long ago betook himself to business, for which he has certainly a remarkable turn. When the so-called antiques proved to be vulgar forgeries, it became a matter of interest to trace them to their source. Was Shapira himself compromised or was he not rather a victim of the fraud? Jerusalem was divided into two hostile parties upon this question, and all Germany shared the excitement, for the purchase appeared to compromise not only the Government, and perhaps the Emperor himself, but scholars of high reputation, the historian Mommsen, and leading members of the German Oriental Society. In the investigations that followed, the name of a certain Selim took so prominent a place that I remember to have seen a pamphlet which bore as its title, "*Moabitic or Selimitic?*" It was on this Selim that we stumbled in the Great Church, a shabby-looking shambling fellow, who pressed on us his services as guide, and ultimately succeeded in attaching himself to our party by bringing tapers to light up some of the darker corners. At length he got confidential, and told us with some pride of his journey to Germany in the matter of the antiquities, and of the great men he had met there. The things were all spurious, but of course he was innocent, and the forgers were Shapira's own servants. One took these protestations with a grain of salt, but it was clear that Selim had not gained much by his share in the concern, and his breach with Shapira. He looked sadly out at elbows, and as he spoke only Arabic and a few words of broken Italian his function of cicerone did not promise him much profit. We saw Shapira too—a man of remarkable knowledge, who has made himself excellent connections for procuring rare and curious Jewish MSS., but withal a thorough man of business, of the Jewish type, who is not likely to commit himself to support a forgery, but is equally unlikely to scrutinise too narrowly the origin of anything saleable.

I ought to say something about the Haram area, with the great Mosque el Aksa, "the most distant shrine" of Mohammedanism, and the noble dome that covers the mysterious rock, of unknown history, which is deemed the centre of the Mohammedan world, just as the Christians point out their centre of the world within the Church of the Sepulchre. But all these things have been so often and so well described, that I shall only advise you when you go there yourself to gaze your full at the marvellous glass and mosaics of the great dome, and to pay not the slightest attention to the imperious "come on" of the Moslem conductor, who knows just enough of English to make himself disagreeable. You will be surprised to find how Mohammedan bigotry has learned to accommodate itself to the convenience of Nazarenes who pay money and come under the protection of a consular Kawass, while any unfortunate native Christian who ventured into the great area, where his Moslem neighbours lounge and smoke and talk all day long without the least show of reverence, would be attacked at once, and probably fall a victim to his temerity.

W. Robertson Smith.

* News has recently arrived of Shapira's death by suicide at Rotterdam while in a state of insanity.—(Ed. C. C. M.)

CHARLES KINGSLEY AS A POET.

Charles Kingsley was in his 30th year, when he published the "Saint's Tragedy." Six years he had spent in Eversley, first as curate for one year, and afterwards as rector of the parish. He had had time to read and think and weigh. The teaching of his great master Frederick Maurice had been working in his mind. The condition of the poor in his own and neighbouring parishes had stirred to its very depths the intense pity and compas-

sion of a nature in which the enthusiasm of Humanity burnt with loving fervour. Already he had struck the key note of a higher, purer faith, and a more manly life. "There were two doctrines," said Dean Stanley, "which he held with a fervour and tenacity of his own, with a freshness and vigour which amounted almost to the originality of genius, and which in his teaching enlightened and controlled and coloured even the most antique and the most trite of the ordinary teachings of past or present time. One of these was that the main religion of mankind and of Christendom consisted in the strict fulfilment of the duty of man which was the will of God; and the other was the absolute and eternal goodness of God." I have quoted this passage from the *memorial* sermon preached by the late Dean in Westminster Abbey, because it is impossible to understand Charles Kingsley as a poet merely. A poet he was in the truest meaning of the word; but though his first public work—"The Saint's Tragedy"—was a poem, yet his "poetical gifts were rather latent than directly available." Poetry was not the object of his life, nor did it form the basis of his reputation; it was but a "graceful foil" to his other works. It was always made subservient to what he felt to be his highest office, that of a spiritual teacher. It is well that it was so. For instead of having a series of historical plays merely, or a choice collection of æsthetic verses, we have gained a brilliant writer, strong with the strength of common sense, and with the widest sympathy. His poetry has given "colour and animation to his strong nervous prose; it throws a warm light on the scenes and the characters he best loved to dwell among; it served him sometimes for a seemingly spontaneous outburst of verse that brightened up the surroundings it was set in." It was the opinion of the late Baron Bunsen after reading "The Saint's Tragedy" that Charles Kingsley might become a second Shakespeare, and take up the Historical Plays where Shakespeare left them off. The writer in the *Times'* account of Kingsley, however, says that "The Saint's Tragedy" is all but forgotten now, and that its success at first was hardly such as to encourage him to persevere. If it is true that "The Saint's Tragedy" is all but forgotten, I should feel thankful if this article recalled the attention of any reader of Kingsley to what may be called with truth one of the masterpieces of English verse. If its success at first was not great, I trust that future generations will learn to love and admire this manly protest against Manichean asceticism and unnatural celibacy.

We have already said that Charles Kingsley, though a poet in the broadest sense, was far more than a poet. If we were asked what was Charles Kingsley, we should answer rather, a prophet, a preacher of righteousness, a true seer, who, bursting through the barriers of custom and conventionality, and gaining an insight into that Eternal Order in which our petty human life is unfolded, brings down to man those lessons of truth and justice and purity, which in his blindness and earth-bound life he is always in danger of forgetting. Accordingly we do not find that his poems cover a large area—"The Saint's Tragedy" and "Andromeda" constituting two-thirds of the whole. A few extracts will be sufficient to convince those who are not acquainted with them of their power and beauty.

The story of "the Saint's Tragedy" is painfully interesting. Elizabeth, daughter of Andreas II, King of Hungary, was betrothed in childhood to Lewis, Landgrafe of Thuringia. At 14 she married. Her husband was a man "possessed of all virtues but those of action." *Saint* Elizabeth married! Such is the tragedy. What could be expected to follow from the Romish view of human relations, which makes marriage not "honourable in all," but merely "Heaven's indulgence to the infirmities of fallen man"; not "spiritual, sacramental, and eternal," but merely material, carnal, and degrading? What but misery and unreality and doubt? The husband's highest offices were supplied by a spiritual director. Conrad, the Pope's commissioner for the suppression of heresy, became Elizabeth's confessor. After six years of married life, Lewis was slain in the East. Elizabeth's children were taken from her. She herself parted from the world, and died after four years of fastings and penances and deeds of charity, a woman as truly saintly as any character history can reveal to us, but the victim of an ecclesiastical system, tyrannous, inhuman, and degrading. The whole poem in Kingsley's hand becomes not merely a narrative of the touching and painful life, but a sermon for all times and all men. His poetry was, as we have said, always subservient to higher aims. The Past becomes the teacher and interpreter of the Present,

> "Old decays but foster new creations;
> Bones and ashes feed the golden corn;
> Fresh elixirs wander every moment,
> Down the veins through which the live past feeds its child, the live unborn."

So the poem concludes, and this may indeed be taken as the key-note of Kingsley's whole teaching. We cannot sever our connec-

tion with the Past. We are its children, and though we thankfully learn all that it has to teach us, we do not shut our eyes to new lessons and new aspects of Truth, which is many tinted like the rainbow, many-sided like Humanity itself.

Another character in the poem deserves mention—Count Walter, vassal to Lewis, who, as the author says, "represents the 'healthy animalism' of the Teutonic mind, with its mixture of deep earnestness and hearty merriment." What could be more natural in the mouth of the muscular vigorous Walter than the following? :—

"The boy's no fool—
As good a heart as hers, but somewhat given
To haunt the nearest butterfly, and light
The fire of fancy without hanging o'er it
The porridge pot of practice."

The words have quite the ring and force of Shakespeare about them. Or what would our political economists say to Count Walter's definition of property?

"Possession means to sit astride the world,
Instead of having it astride of you."

Again Count Walter's common sense shows itself in answer to Lewis' question "Can I do nothing for the poor, the oppressed, nothing to show myself worthy of the position I occupy?"

"It rests with you, whether the priest be honoured;
It rests with you, whether the knight be knightly;
It rests with you, whether those fields grow corn;
It rests with you, whether those toiling peasants
Lift to their masters free and loyal eyes,
Or crawl, like jaded hacks, to welcome graves,
It rests with you, and will rest."

Readers of Kingsley will detect in these words the lesson of Alton Locke, the responsibility of wealth and rank. Again, who cannot sympathise with the passionate cry of Lewis:—

"Oh, for one friend,
Myself yet not myself; one not so high
But she could love me, not too pure to pardon
My sloth and meanness! Oh! for flesh and blood,
Before whose feet I could adore, yet love!
How easy then were duty!"

But how can Lewis claim the Saint Elizabeth?

"Ah! be less, sweet maid,
Less than thyself! Yet no, my wife thou might'st be,
If less than thus—but not the saint thou art,
What! shall my selfish longings drag thee down
From maid to wife? Degrade the soul I worship?
That were a caitiff deed! Oh, misery!
Is wedlock treason to that purity
Which is the jewel and the soul of wedlock?"

The same painful doubt is ever harassing the mind of Elizabeth.

"They tell me, love is of the flesh,
And that's our house-bred foe, the adder in our bosoms,

Which warmed to life, will sting us.

. . . . . .

And yet I swore to love him—so I do
No more than I have sworn. Am I to blame
If God makes wedlock that, which if it be not,
It were a shame for modest lips to speak it,
And silly doves are better mates than we?
And yet our love is Jesus' due,—and all things
Which share with Him divided empery
Are snares and idols."

But Elizabeth has still a woman's heart. She is not entirely subdued by the spirit of asceticism. She must *work*,

"Oh! contemplation palls upon the spirit,
Like the chill silence of an autumn sun:
While action, like the roaring south-west wind
Sweeps laden with elixirs, with rich draughts
Quickening the wombed earth."

But Conrad too has much to teach us in spite of his warped and one-sided character. It is he who gives Elizabeth this golden maxim, the key to life and power, which a wiser than Kingsley taught us nearly two thousand years ago:

"Sink if thou longest to rise; become most small,
The strength which comes by weakness makes thee great."

or again

"Would you be humble, daughter?
You must look up, not down, and see yourself
A paltry atom, sap-transmitting vein of Christ's vast vine;

. . . . . .

To be a whole is to be small and weak
To be a part is to be great and mighty
In the one spirit of the mighty whole."

It is Conrad again who teaches us the religion of duty, the chief end of man not "doctrines, forms and disciplines" but action, *concentrated action*.

"Dare all thou canst
Be all thou darest; that will keep thy brains full;
Have thy tools ready, God will find the work—
Then up and play the man, fix well thy purpose,
Let one idea, like an orbed sun,
Rise radiant in thy heaven."

But the poem reaches its climax in the magnificent words on the Law of Sacrifice put into the mouth of Elizabeth. She is drawing near to the close of life, young in years, for she is only four and twenty, but old in experience. She has "learnt from the things which she had suffered," and she speaks from the fulness of a deep personal experience.

"Could we but crush that overcraving lust
For bliss, which kills all bliss, and lose our life,
Our barren unit life, to find again
A thousand lives in those for whom we die,
So were we men and women, and should hold
Our rightful rank in God's great universe,

Wherein, in heaven and earth, by will or nature,
Nought lives for self—All, all—from crown to footstool
The Lamb, before the world's foundation slain—
The angels, ministers to God's elect—
The sun, who only shines to light a world,
The clouds, whose glory is to die in showers,
The fleeting streams, who in their ocean graves,
Flee the decay of stagnant self-content,
The oak, ennobled by the shipwright's axe
The soil which yields its marrow to the flower—
The flower, which feeds a thousand velvet worms,
Born only to be prey for every bird—
All spend themselves for others: and shall man,
Earth's rosy blossom—image of his God—

. . . . .

Refuse, without some hope of further wage
Which he calls Heaven, to be what God has made him?"

A few words only can be said of what remains. "Andromeda" is the concrete embodiment of the abstract idea of self-sacrifice already quoted. Andromeda the innocent becomes the willing victim for her race:

"And yet noble it seems to me, dying,
Giving my life for the many, to save to the arms of their lovers
Maidens and youths for a while."

A second point of resemblance to "the Saint's Tragedy" is in the lesson of the holiness of wedlock as the foundation of a nation's strength. Athene speaks;

"Dear unto me . . . . is the wedlock of heroes;
Dear who can worthily win him a wife not unworthy; and noble,
Pure with the pure to beget brave children, the like of their father.
Happy who thus stands linked to the heroes who were, and who shall be,
Girdled with holiest awe, not sparing of self, for his mother
Watches his steps with the eyes of the Gods; and his wife and his children
Move him to plan and to do in the farm and the camp and the council.
Thence comes weal to a nation: but woe upon woe, when the people
Mingle in love at their will, like the brutes, not heeding the future."

And lastly, a third point of resemblance between the two poems is the lesson of the Past repeated in the Present, as in the concluding verses.

"Athene still in her chamber,
Bent herself over her loom, as the stars rang loud to her singing,
Chanting of order and right, and of foresight, warder of nations,
Chanting of labour and craft, and of wealth in the port and the garner,
Chanting of valour and fame, the man who can fall with the foremost—
Fighting for children and wife, and the field which his father bequeathed him;
Sweetly and solemnly sang she, and planned new lessons for mortals:
Happy who hearing obey her, the wise unsullied Athene."

Charles Kingsley took a prominent part in that great social and political movement, known as Chartism. The destitute condition of the labouring classes in England stirred up men like Julius Hare, Arthur Helps, F. D. Maurice and others to do something for them; and one and all were busy, more or less, with pen, tongue and purse.

Christian socialism became an organized movement; and Maurice and Kingsley figured as the champions of the poor. The poems written in 1848 and 1849 show the earnestness with which Kingsley espoused this cause. In one poem he describes the deplorable condition of the working classes:—

"It chanced upon the merry merry Christmas eve,
I went sighing past the church across the moorland dreary,
'Oh! never sin and want and woe this earth will leave,
And the bells but mock the wailing round, they sing so cheery.
How long, O Lord! how long before Thou come again?
Still in cellar and in garret, and on moorland dreary,
The orphans moan, and widows weep, and poor men toil in vain,
Till earth is sick of hope deferred, though Christmas bells be cheery.'"

But Kingsley was a Christian socialist and trusted more in the guidance of a Higher Hand than in his own feeble efforts; for in the same poem, above quoted, he goes on to say:—

"Then arose a joyous clamour from the wild fowl on the mere
Beneath the stars, across the snow like clear bells ringing,
And a voice within cried—'Listen'! Christmas carols even here!
Though thou be dumb, yet o'er their work the stars and snows are singing.
Blind! I live, I love, I reign and all the nations through
With the thunder of my judgments even now are ringing;
Do thou fulfil thy work but as yon wild-fowls do
Thou wilt heed no less the wailing, yet hear through it angels singing."

It is true that Kingsley in 1855, in a letter to his friend Mr. Ludlow spoke in his frank, characteristic way of his own unfitness for a reforming leader at the time that he was so prominent. But the Christian socialist movement, the theories of which are so earnestly expounded in *Alton Locke, Yeast,* and *Parson Lot,* have left a permanent influence on the national mind. It has tended to foster the recognition of a common brotherhood among men, it has promoted principles calculated to increase manly independence among the labouring classes, and has been the means of leading them into a higher and purer atmosphere of thought and brotherhood.

Several of his minor pieces are well-known. That pathetic lyric "The three Fishers," has drawn tears from many bright eyes and perhaps—what the author would have valued more—prompted many to acts of charity and kindness. Here it is:—

"Three fishers went sailing out into the west,
Out into the west, as the sun went down;
Each thought of the woman who loved him best,
And the children stood watching them out of the town
For men must work and women must weep,
And there's little to earn and many to keep,
Though the harbour bar be moaning.

Three wives sat up in the lighthouse tower,
And they trimmed the lamps as the sun went down;
They looked at the squall, and they looked at the shower,
And the night-track came rolling up ragged and brown.

But men must work and women must weep
Though storms be sudden and waters deep,
And the harbour bar be moaning.

Three corpses lay out on the shining sands
In the morning gleam as the tide went down,
And the women are weeping and wringing their hands,
For those who will never come back to the town,
For men must work and women must weep,
And the sooner it's over the sooner to sleep,
And good-bye to the bar and its moaning."

His other minor pieces such as "The Sands of Dee," "Ode to th North-East wind" will always make "Charles Kingsley" a hous hold name in the homes of England. The concluding words "A Farewell" are a simple yet eloquent sermon in themselves :—

"Be good, sweet maid, and let who will be clever,
Do noble deeds, not dream them, all day long;
And so make life, death, and that vast for ever
One grand sweet song."

S. SATTHIANADHEN.

LIFE.

Oh bright is the morning of life!
When flowers around us are springing
When daisies peep out from their home in the grass—
And smilingly open their eyes as we pass—
And sweet birds are merrily singing,
While our hearts and our voices respond to the lay
That all nature pours forth on this morn of our day.

And grand is the noontide of life!
The work and the task well begun,
Though both may be hard, yet all we need ask
Is strength for the labour and skill for the task.
Though scorching the hot midday sun,
Well nerved for the struggle and armed for the strife
Oh! how noble, how grand, is the noonday of life.

How calm is the evening of life!
How sweet when its strivings are o'er!
When its heart-burnings cool, its wild throbbings cease
And above and around us all whisper of peace
And point to that bright happy shore
Where the Saviour is waiting in love to receive
The dear ones who trust, the true who believe.

How glorious is that blessed life
Where death and its terrors are past
When earth's joys, and its sorrows, its troubles and cares
Our hopes and our tremblings our longings and prayers
Are exchanged for a life that will last—
Eternal, unchangeable, never to end
A life with our Father, our God and our Friend.

E. A. K.

LITERARY NOTICES.

THE LIFE OF CHRIST, *by* DR. BERNHARD WEISS. *Translated from the German. Edinburgh. T. and T. Clark.*

For now over forty years the Messrs. Clark of Edinburgh have, in addition to their other work, been creating a Foreign Theological Library at the regular rate of four volumes a year. If the selections have not always been the best possible, yet the work done has enabled English, Scotch, and to some extent American theology to keep touch with that of the country which in this century as in the sixteenth has in this field of literature taken the lead of European thought and progress. Since 1880 a new series has been issued slightly modernised in form, and perhaps improved in quality. At least, the theology of Dorner, the ethics of Martensen, the biblical theology and the life of Christ by Weiss are works which in their respective departments are unsurpassed. And if works of equal value can be found from year to year, the second series will prove of even greater value than the first.

It is now more easy to write a philosophic life of Christ than when half a century ago Baur came forward to impugn the gospel history, and Strauss then, as Renan a generation later, astonished the world by a daring reconstruction. The multitude of pens that were ready in reply have prepared the way for a true criticism; the importance of the subject has been realised and the interest of it has increased. A few years ago, two large lives, the popular volumes of Canon Farrar and the more careful work of Dr. Geikie, were hailed by the British public; and within the last few months a valuable work by Dr. Edersheim *on* the *Life and Times of the Messiah* has been added to the literature of the subject. It is instructive to turn from these to the recent translations from the German. In 1883, we received not only the two volumes of Weiss, but a work of even deeper insight and from the pen of a higher master—we mean the sixth volume of Ewald's history, which deals only with the Consummation in Christ. We do not know that Weiss's *Life* is quite so valuable as his *Biblical Theology* had led us to expect. It is still incomplete. A third Volume is presumably to follow. Hereafter we shall be able to judge the entire work, but unquestionably at the present moment this is one of the best results of fearless yet believing criticism.

In the first place Dr. Weiss has thoroughly mastered the intricacies of New Testament criticism. To this he has given his life; and it is no idle boast

that he has attained to perfect clearness. He takes us back to the positions laid down by Weiss fifty years ago, that the second gospel was prior to the first and that the first and third were entirely independent of each other. These positions soon turn out to be much more important that at first sight appears. The effect of the Tübingen theories, according to Weiss, was to throw criticism off the rails and retard its progress by a generation. Then the Griesbach hypothesis, so strongly supported by Bleek, according to which Mark was derived mainly from the other two, was an almost solitary instance of a "pure blunder" and through its acceptance at Tübingen added largely to the complication. It is remarkable that the results to which we are at last led by criticism, coincide exactly with the two statements in the famous sentence of Papias—the statements concerning the work of Mark the attendant of Peter, and the publication of Mathew the Apostle. These two statements of Papias and the opening words of Luke's Gospel contain all of original knowledge that we have concerning the Synoptics, and the work of criticism is but to establish and elucidate them.

His discussion of the question of John's gospel is equally significant of the tendency of criticism. In England advanced criticism, following in this matter the lead of Unitarians who, guided by strong hate, have dashed themselves on this rock, has been hostile to its authenticity. Weiss speaks as confidently as did Ewald, and with them Renan agrees, that this unique gospel could have proceeded from only one man in history, to wit, the Apostle John. Scientific criticism brushes dogmatic prepossessions aside; and finds not in the Synoptics, but in the fourth gospel which was written to supplement them, the essential history. The last is put first, and the synoptic gospels are called in to supplement and clothe the image found in John. Only a few years have passed since defunct German theories of a previous generation were gathered up, fused in vigorous English, and presented with confidence to the British public. Had it been known at the time that the anonymous author of *Supernatural Religion* was no scholar or divine, but a retired Anglo-Indian man of business, his work would have been in vain. As it was, many believed that the arguments were as real as the words were incisive. We have made some progress since then. Still England is far behind in this department. Is it too much to hope, that with such materials around us, questions so important will be more truly studied and that we shall not again expose ourselves to a like reproach?

The work as a whole we do not care to criticise until it is all translated. It must, however, to be appreciated, be read carefully. Undoubtedly Dr. Weiss's mode of handling his materials is freer than an English writer of equal orthodoxy would adopt. The position of the book is somewhere intermediate between our chief English works, and the work of a very advanced critic such as Keim's *Jesus of Nazara*. Weiss accepts the supernatural more cordially than Keim. He believes in miracles though he explains away some of those recorded. Much emphasis is laid on what is called the failures of Jesus—that is to say, the successive refusals of the Pharisees, the men of wealth, and the hierarchy, to enter into his kingdom. We give a single quotation which will illustrate the writer's style and mode of thought:—

"The ultimate aim of the Messianic activity never varied from being the reformation of the nation's life as a whole, the healing of all its miseries, the satisfaction of its needs, the bringing about of the most ample salvation and blessing even as regards its external existence. We have seen how Jesus made the fulfilment of this side of the Messianic calling dependent upon the consummation of the theocracy in the spiritual sense. For the complete national life this part of the Messianic salvation continued to lie in the future, indeed to be hypothetical. But in the life of the individual it might commence at once; for there, as we have seen, only the one condition of faith was necessary. By those miracles of healing Jesus by helping, blessing and saving, desired to exercise an influence even on the outward life of the individual, healing his sores and removing his troubles."

This we take to be a correct account of the work of Christ, though the inner side is not sufficiently emphasized. The consummation of the theocracy, whether in the national or individual life, was the kingdom of God. We must not forget that the ideal of Jesus was thus expressed—"Seek ye first the kingdom of God and his righteousness and all these things shall be added unto you." (Mat. vi, 33.)

THE CUP AND THE FALCON. *By* ALFRED, LORD TENNYSON; *Macmillan and Co.* 1884.

The Cup and *The Falcon* are not exactly new. They were produced on the stage, the former in the beginning of 1881, the latter in the end of 1879. Both are brief. *The Cup* is in two acts; *The Falcon* is a single scene. Criticism seems to be pronouncing favourably on the former, less so on the latter.

The Scene of *The Cup* is in Galatia when a Roman Province. The vessel from which it takes its name is a "sacred cup saved from a blazing shrine of our great Goddess" in some city through which the Roman army passed. The chief actors are Synorix an ex-tetrarch who had been expelled by the people three years before, but who through the Roman power of which he has become the tool is to be restored as a tributary King; Sinnatus his successor in the tetrarchy; and Camma the wife of Sinnatus. Sinnatus is a feeble but apparently virtuous prince. Camma is heroic. Synorix is able, but of detestable character, unprincipled, voluptuous and cynical. He says

> I cannot help the mould that I was cast in,
> I fling all that upon my fate, my star,
> I know that I am genial, I would be
> Happy, and make all others happy, so
> They did not thwart me.

His aim in the play is to possess Camma—"Camma the stately, Camma the great hearted"—who is said to be beautiful, and is represented as an ideal of female dignity and honour. The play opens with a speech of Synorix, who has just returned from Rome and is now, with the imperial aid, to carry out the schemes of his ambition. By means of the Cup and a false name he proposes to "worm" himself through all the windings of the house of Sinnatus. Alone with Camma, he informs her of the knowledge at Rome of some plan or plot of her husband, some "child's sand-castle on the beach for the next wave," pretends to have been sent as a Roman spy but to be friendly to her house, and

suggests that next morning at the Temple she should meet Antonius the Roman General and plead with him for her husband. At this point he is discovered to be the hated Synorix and has hurriedly to escape. In the morning Camma adheres to her resolve to go to the Temple, but now not without suspicion and with a dagger. She finds Synorix but not Antonius; becomes uneasy with a man of evil reputation; at last draws her dagger. Synorix succeeds in disarming her; Sinnatus appears from behind, seizes Synorix and in the scuffle is stabbed.

The Second Act is six months later. Synorix is to be crowned King, and wedded to Camma now a priestess. She too wills to be married, but her bridegroom is Death. The marriage rites are prepared for she has seemed to consent. "In symbol of their married unity" they are to drink from one cup. Camma pours wine into the cup she had received from Synorix, and having made a libation to the goddess she drinks, then offers to Antonius who refuses. Then gives to Synorix who drinks deep. Thus by the poisoned draught falls the throne of an hour, and Synorix confesses "the Fates are throned, not we." The tragedy ends grandly with the words of Camma who seems to hear her own name called by her murdered husband and hails him in the already visible future.

"Camma!" why there again
I am most sure that some one called. O women
Ye will have Roman masters, I am glad
I shall not see it. Did not some old Greek
Say death was the Chief Good? He had my fate for it,
Poisoned. (*sinks back again*) Have I the crown on? I will go
To meet him crowned! crowned victor of my will—
On my last voyage—but the wind has failed—
Growing dark too—but light enough to row.
Row to the blessed Isles! the blessed Isles!
Sinnatus!

Why comes he not to meet me? It is the crown
Offends him—and my hands are too sleepy
To lift it off. [PHŒBE *takes the crown off*]
Who touched me then? I thank you.
(*Rises, with outspread arms.*)
There—league on league of ever-shining shore
Beneath an ever-rising sun—I see him—
"Camma, Camma!" Sinnatus, Sinnatus! [*Dies.*

This is powerfully conceived; and it is in the spirit of the author of the Idylls of the King. Camma has the vision of the pure. It is clouded indeed while the traitor's crown is near. But this burden is removed, and notwithstanding the poison in her blood she sees with clearness the blessed Isles.

Is Tennyson a dramatist? That there is a certain dramatic power in most of his works since he published *Maud* and *The Princess* nearly thirty years ago cannot be doubted. But can he produce a drama in the Shakesperian sense, and cause a variety of scenes and characters to live before our eyes? Again is it a necessity of the age that has sent Tennyson, like many others to the drama, or is it that in the elegy and the idyll he is played out? The *Cup* is sufficient to enable us to answer these questions. Though possessed of considerable merit it is too slight, too deficient in incident, in character and in action to be reckoned a great drama. Camma is scarcely a real being. She never loses her stateliness. Her human attractions which Synorix eulogised are never revealed. Of Sinnatus we can scarcely form a judgment. The opportunity of presenting to us by contrast two types of character, a good and a bad, is not made use of. Synorix is more fully pourtrayed. Yet the power of making characters reveal themselves gradually through advancing circumstances is not largely displayed by Tennyson. The language of the play is uniformly Tennysonian. Even a servant girl describes scenery in the grand style. And we regret that one so vile as Synorix (his vileness is revealed at the beginning by the Roman general who calls him a filthy tool) is made to utter thoughts so noble in language so beautiful. Yet in the *Cup*, more we think than in his larger dramas of *Mary* and *Harold*, there are elements of dramatic power with the never failing felicity of fancy and all the old beauty and melody of language, sufficient to encourage the fond hope that in this field to which Tennyson has given his riper years he may yet produce some master-piece of creative power, something that will equal if not excel his great elegy or his Arthurian epic.

As specimens of his unique and exquisite power we give these quotations. They might be multiplied. The first is an outburst of patriotism by Camma in reply to Synorix.

Sir, I had once
A boy who died a babe; but were he living
And grown to man and Sinnatus willed it, I
Would set him in the front rank of the fight
With scarce a pang. (*Rises*) Sir, if a state submit
At once, she may be blotted out at once
And swallowed in the conqueror's chronicle;
Whereas in wars of freedom and defence
The glory and grief of battle won or lost
Solders a race together—yea—though they fail,
The names of those who fought and fell are like
A banked up fire that flashes out again
From century to century, and at last
May lead them on to victory—I hope so—
Like phantoms of the Gods.

The next is the reflection of Synorix on Ambition when he has killed Sinnatus.

So end all passions. Then what use in passions?
To warm the cold bounds of our dying life
And, lest we freeze in mortal apathy,
Employ us, heat us, quicken us, help us, keep us,
From seeing all too near that urn. Those ashes
Which all must be. Well used they serve us well.
I heard a saying in Egypt, that ambition
Is like the sea wave, which the more you drink
The more you thirst—yea—drink too much, as men
Have done on rafts of wreck—it drives you mad.

Once more, we quote his illusive hopes when crowned a king.

The wheel of Fate has rolled me to the top.
I would that happiness were gold, that I
Might cast my largess of it to the crowd!
I would that every man made feast to-day
Beneath the shadow of our pines and planes.
For all my truer life begins to-day.
The past is like a travelled land now sunk

Below the horizon—like a barren shore
That grew salt weeds, but now all drowned in love
And glittering at full tide—the bounteous bays
And havens filling with a blissful sea.

It is truly marvellous that the right hand of the septuagenarian poet should thus still preserve its cunning. But it is we think by extracts that his plays will continue to be known. Our opinion is that, after all, the English drama will know no second spring. Great poets since the Elizabethan age have written dramas—Milton himself and Dryden, Byron and Shelley, Browning and Swinburne. For one that has read Cain how many have read Childe Harold! And yet it is in the drama that the poet concentrated the highest energies of his mind. And of Tennyson, as of all the great, it is true that his most valuable work belongs not to his later but to his earlier manhood. His highest point was reached when the first Idylls of the King were published a quarter of a century ago. He has indeed in advanced years—and this seems a pleasing distinction of the great men of this age—kept near this high level. He may still prove himself equal to, he can scarcely enhance his great reputation. Happily his place is secure; not indeed in the highest rank as the equal of Shakespeare and Milton, but in the still small circle that is second.

GLEAMS OF THE NEW LIGHT: *being essays expository of some leading principles of pure theism, doctrinal and practical. By* SITANATH DATTA. *Calcutta. Sadharam Samaj Press 1883.*

If one could be sure that this little book really delineated the inner life of so important a fraction of Indian religion as the Brahmo Samaj, there are many delightful generalizations that might be ventured. We could speak of the depth and spirituality of Brahmo religious experience, of the warm colouring which the East can apparently give to religious dogmas associated in our minds with the icy coldness of Unitarianism, and of the essential oneness of the pious in all ages. For in its main features, Mr. Datta's book is just a Christian manual of devotion *minus* Christ, or rather, it may be compared to a room filled with invisible yet precious odour, that silently affects every person who enters. The sun of real Christianity has, we fear, set for ever in the sky of Unitarianism, but the Brahmos are bathed in the light of the after-glow.

On one point the Brahmo 'Manual' is far from agreeing with the great examples of Christendom to which Mr. Datta points his readers,—with Bunyan, Augustine and Thomas á Kempis. Other Trinitarian books of devotion, like their hymns, are rejected because of their objectionable theology, and judging from what is wanting in Mr. Datta's book, we should have supposed that the three named might also have to be shelved. If there is any idea more prominent than another in Augustine, Bunyan and Thomas, it is that they are sinners, full of blame before God, and enabled to enter into communion with Him only through His Adorable Grace. The peculiar circumstances of Augustine's early life may account for this in his case, but Thomas seems to have been a blameless monk, and the worst crimes that Bunyan can charge himself with are swearing and bell-ringing. While Brahmo and Unitarian stand erect in the presence of God, and discuss how most enjoyment can be extracted out of the thoughts of Him that rise in the pious mind, Augustine and Thomas and

Bunyan fall upon their faces, and join with Isaiah in the cry.—"Woe is me for I am undone, because I am a man of unclean lips and I dwell in the midst of a people of unclean lips, for mine eyes have seen the King, the Lord of Hosts."

The opposition of character between the two religious experiences is complete. Christianity with an imperfect sense of sin can never be the Christianity of the most representative Christians, and modern Theism, like many other products of the day, must be convicted of having but slightly impressed upon it the essential mark of Christian spiritual experience.

Mr. Datta's book contains some very fine specimens of what may be called Erotic Mystical Divinity. There is much that is taking and even beautiful in his chapter on *Spiritual Chastity*, as well as in the preceding section on *Yoga* and *Bhakti*. But this whole method of conceiving the relations between God and the individual soul is one of the most objectionable features of mysticism, Christian and non-Christian. Whatever our relations to the Divine being are, (and they cannot be conceived of as closer than they are,) it is always a mistake to introduce into our conceptions of them thoughts that get their colouring from earthly passion. A certain type of religious character is peculiarly prone to such modes of thought, and when this character is combined with a warm imagination and some power of expression, the product is a nauseous spiritual sentimentalism. The metaphors of the Old Testament and the imagery of the Apocalypse cannot be adduced in defence, for it is Israel as a whole not the individual Israelite, that is the faithless wife of prophecy, and the Church as a whole not the individual Christian, that is the Bride of the Lamb. All that high-coloured symbolism which some religious writers borrow from sexual relations to express the relation of the individual soul to God and Christ, is distinctly fleshly in origin and impure in tendency. It becomes us therefore to speak out against it, whether it appears full blown in the devotional literature of Christians, or in germ as in Mr. Sitanath Datta's book.

As a whole, however, this little work breathes a fine spirit, and may be expected to serve a useful purpose. By its bold appropriation of the results of Christ's revelation of the Father, it cannot but tend to lead souls to the Revealer. The title is therefore misleading; instead of being 'gleams of the new light,' it ought to be 'the old light in a dim Brahmo lantern.'

SCIENCE PRIMERS FOR THE PEOPLE.

1. BOTANY *by* G. T. BETTANY, M. A., B. Sc., F. L. S., *Lecturer on Botany in Guy's Hospital Medical School.*
2. PHYSICAL GEOGRAPHY *by* P. MARTIN DUNCAN, M. B., F. R. S., *Professor of Geology in King's College, London; Vice-President of the Geological Society.*
3. HUMAN PHYSIOLOGY *by* W. B. CARPENTER, C. B., M. D., F. R. S.

London and New York: Ward, Lock and Co.

This is an age of Primers and Elementary Text Books. The immense progress made in Education in England during the last quarter of a century has opened a field for enterprising publishers which they have not been slow to enter. There is now hardly any subject, historical, literary or scientific, of which a good outline written by a recognized master cannot be had for a

shilling. Science has had almost more than its fair share of attention. The introduction of a 'modern side' into schools of almost every kind, and the gradual supplanting of the old classicalism has created an enormous demand for scientific text books. and hardly a year of the last decade but has seen the commencement of some new series more or less pretentious. And yet we think there is room for the one of which the first three volumes are now before us. In many respects it is the best, as it is incomparably the cheapest yet issued. Each volume consists of 128 pp. of excellent matter clearly printed, profusely illustrated and most tastefully got up, and is offered to the world for the exceedingly small price of sixpence. If succeeding volumes are as excellent as those already issued we have no doubt that Messrs. Ward and Co., will find their enterprise succeed.

And yet we have one fault—and that a serious one—to find. Whether the publishers have entrusted the series to any general editor does not appear, but if they have he has certainly not done his work as well as could have been desired. The volumes vary considerably in their simplicity and in the amount of knowledge which they presuppose. Now considering that these little books are professedly *Primers* and that they are moreover written *for the people* rather than for use in school, each of the authors would have done well to assume absolute ignorance of the subject on the part of his readers. Professor Duncan however has not done this, and hence excellent as his book in many respects is it does not realize our idea of a Primer. It requires an acquaintance with scientific terms as well as with other branches of science not likely to be brought to its perusal by the class of readers for whom it is intended. For example, we notice in the first two pages of Chapter I, such words as aphelion, perihelion, vernal equinox, geodesy, ellipsoid, &c., used without any explanation—words which to say the least make the dictionary a necessary companion volume. Mr. Bettany and Dr. Carpenter admirably avoid this error. The former remarks in his preface.

"Much harm continues to result from the long-prevalent idea that Botany, more than any other science, bristles with technical terms, which it is essential to learn in order to gain any satisfactory knowledge about plants. I maintain that the careful observation of ordinary plants, together with the reading of even so small a book as this is, will lead to a profitable acquaintance with them. In no sense do I disparage the technicalities of the herbarium and the laboratory; but the vast constituency of intelligent people who are not specialists have the right to ask that the best endeavours shall be employed in order to divest this subject of technicality for their benefit."

Starting with this end in view Mr. Bettany has produced a primer, simple and interesting in no ordinary degree. He confines himself entirely to the phenomena of plant life and outward form and wisely refrains from entering in the small space at his disposal on the vast subject of classification. Dr. Carpenter's work is equally excellent and is written in that plain and lucid style of which he is so thorough a master. His aim is to set forth "such general doctrines of Physiology as have an immediate bearing on daily life," and he bears in mind throughout that his readers are not supposed to have had any preliminary training in anatomy. The book he tells us consists of the outlines of his lectures to School Teachers, and considering the excellent results which these lectures have from time to time produced, many, we are sure, will be glad to have them in this modest but permanent form.

NOTES AND EXTRACTS.

The news of the Duke of Albany's death has awakened deep and sincere regret among all classes of the Indian people. The fact that the Queen-Empress had suffered bereavement would have been sufficient in itself to evoke expressions of real sympathy from all loyal subjects, but the death of Prince Leopold is felt to be more than a personal bereavement to the Sovereign. More than any other of the Royal House, the late Prince showed that seriousness of personal character which Englishmen and Hindus alike have agreed to consider the most worthy of respect. It is a remarkable fact that the two peoples, whom Divine Providence has so strangely linked together, should differ in so much, and yet be at one in their estimate of what a public man ought to be. And Prince Leopold with his thoughtfulness, his studious habits, his ready command of apt and even eloquent language, filled a large place in the public eye. Just as the Queen-Empress herself is regarded by the nation with pride, as a peculiar possession, so it was with her youngest son. He was the Prince who, next to the heir-apparent, drew to himself the national feeling of proprietorship. His well-known delicate health invested his person with a peculiar interest, as is always the case with one who is known to live close to the borders of the silent land. His sudden death has intensified the feeling with which he was regarded in life, and he will be known to history as the brightest ornament of the Royal House. It is touching to see how every personal sorrow of the Sovereign brings her nearer to Her people's heart, in every land over which she reigns. In times of revolutionary movement, when the prestige of antiquity waxes feeble and the programme of revolution is war against society, human sympathy with a personally beloved Queen is the strongest bulwark of the Throne.

A large assembly gathered at the Madras Christian College, on the 20th of March, to witness the distribution of prizes to successful students by His Excellency the Governor. The Principal read a long and interesting report of the work of the preceding year, from which it appears that the institution, in spite of the multiplication of Arts' Colleges throughout Southern India, still draws to itself a very large number of students from all parts of the Presidency. The average number of undergraduates in the College during the year was over 400, while the school department contained over 1000 boys. Reference was made to the new buildings now in course of erection, and grateful mention was made of the extent to which old students of the College have come to the help of their *Alma Mater* in this matter. It is hoped that before another anniversary comes round the Professors and students will be able to welcome their friends in a Hall more worthy of the Institution. The short speech of Mr. Grant Duff touched upon no question of public interest, but was distinguished by all His Excellency's well-known wealth of information and grace of expression.

The Guild of S. Matthew is an institution of which more should be known in India. Its existence and apparent popularity in what is sometimes con-

sidered the narrowest section of the English Church is one more proof of the marvellous Christian vitality of that venerable branch of the Church Catholic, and of the undiminished power of the Christian spirit to assert itself above all repressive influences of whatever sort. One great object of the Guild is to 'justify God to the people,' and another 'to promote the study of social and political questions in the light of the Incarnation.' These, it seems to us, are the true objects of the Christian warfare against secularism. "In the polemical method, and by the polemical spirit" says one of our own contributors, writing in the *Contemporary Review*, "they (*i.e.* Socialism, Nihilism, Secularism, &c.) can be easily dealt with; in the subtle and dexterous hands of an apologetical protagonist, they can be made to look void of intellectual strength, full of political and economical immoralities. But it is a small thing to expose their mental or moral crudities—that no way ends their being or prevents their rise; it is a greater thing to enquire why they are?—what are the causes and conditions of their existence?—for to ask this may be to find a way to prevent their formation and growth."*

This is the spirit in which the Guild of S. Matthew, composed of members of the Church of England, a large proportion being clergymen, approach their work, and the two reports before us for the years 1882 and 1883 seem to show that a large measure of success has followed their labours. One noteworthy feature of the work is the lecture list. Not only have lectures on subjects of religious interest been delivered in Christian schoolrooms and halls, but the lecturers of the Guild have placed themselves at the disposal of the secular societies. "Applications for lectures" says the report of last year "have been received with unlooked for promptness. The Battersea branch of the National Secular Society has invited us to its platform: a long course of lectures is to be delivered at the request of the Leicester Secular Society in their hall: and similar courses are being arranged for the Battersea Liberal Association and several other clubs." Are there any of our Hindu Freethought Societies that will have the courage to follow the example set by their English brethren? We are sure that there are many Christian advocates who would willingly comply with such an invitation.

Secularists are not the only persons who have ceased to believe in the fairness of Christians. It may be interesting to them to learn what the Guild of S. Matthew thinks of the member for Northampton and the recent prosecutions for blasphemy. "On two great questions closely related to our own work" says the Report for 1883, "your Council has felt bound to speak out. The following petitions were drawn up and signed by the whole Council, and presented on their behalf to the House of Commons by Mr. G. W. E. Russell, M. P. for Aylesbury.

I. To the Honorable the Commons of Great Britain and Ireland in Parliament Assembled.

The humble petition of the Council of the Guild of S. Matthew, Sheweth—

That your petitioners believe that the continued exclusion of the Borough of Northampton from its lawful share of representation in your Honorable House

* Principal Fairbairn; Contemporary Review for March.

on account of the opinions on religious subjects attributed to one of its duly elected representatives is not only unjust to the said Borough and foreign to the spirit and intention of the English Constitution, but is moreover in the highest degree prejudicial to the true interests of the Christian Church, by associating the defence of the Christian Faith with an act of Political Injustice, and by representing the Oath of Allegiance as a Religious Test.

Your Petitioners therefore pray that your Honorable House, with a view to prevent the repetition in the future of so great a scandal to Religion, and to remove a stumbling-block from the way of those who are labouring to reconcile the Working Classes to the Faith and the Church, will forthwith pass into law the Bill now before your Honorable House enacting that every Member of either House of Parliament may, if he thinks fit, make and subscribe a solemn Affirmation of Allegiance. And your petitioners will ever pray.

II. The humble petition, etc., Sheweth. That your petitioners view with great anxiety the recent revival of prosecutions under the Blasphemy Laws: that they believe that penal enactments against Blasphemy are not only a violation of the Law of Christ, contrary to the spirit of His Religion, and unnecessary to its defence, but also a chief obstacle to its acceptance: that the working of the said Blasphemy Laws as shewn in recent cases of prosecution thereunder, is likely to bring about a grave miscarriage of justice, seeing that writers who have not the advantage of superior education and high social position are liable to imprisonment for publishing in a cheap form opinions which are circulated widely and with impunity by cultured writers in expensive books: that the sentences of imprisonment recently passed under the said Laws, upon the Editor, Proprietor, and Publisher of the "*Freethinker*" are regarded by thousands of loyal subjects who have no sympathy with the views expressed in that paper, as unduly severe. Your petitioners therefore pray your Honorable House to repeal all penal enactments against Heresy and Blasphemy, and thus place all Her Majesty's subjects, of whatever religious opinions, in a position of equality before the Law. And your petitioners will ever pray.

At the same time a memorial was forwarded to the Home Secretary praying for the release of the three prisoners, on grounds similar to those urged in the second petition quoted above."

We express no opinion on the wisdom or otherwise of these proceedings, but we do call the attention of secularist readers to the fact that within the Christian Church there is no lack of people who appreciate the full force of their arguments against the treatment of Mr. Bradlaugh and the *Freethinker*. Several thousands of names were appended to these petitions, and the names of clergymen were conspicuous *by their presence*.

Two articles of more than ordinary interest appear in the Contemporary Review for March. The first is an appreciative estimate by Mr Llewelyn Davies of the character and work of the late Frederick Denison Maurice, whose life has recently been published by his son Colonel Maurice. To persons living less than twenty years after the events, it seems strange that this eminently saintly man should ever have been considered a dangerous heretic, too terrible to be tolerated as a theological professor in King's College,

London. This is proof of the rapidity of modern life, and of the unacknowledged yet very real change that has in recent years come over the temper of the theological world. Admirers of Mr. Maurice will go further and say that the world has come round to him, and so in great measure it has. As Mr. Llewelyn Davies well points out, the mission of Maurice was a prophetic mission, and the prophet is never understood by his own generation. He is the ancestor of the future, and the general reception of his teaching after his death is the best proof of the reality of his mission.

Maurice is an author that ought to be better known in India, but those religious thinkers that stand nearest to him in theological position will probably be the last to call attention to him. He was a convert from Unitarianism, and the Theism of the Brahmos tries to link itself on to the Unitarianism of Europe and America. Consequently they are shy to recognize Maurice. The organ of the Sadharan Samaj notices very fully the article of Principal Fairbairn that appears in the same number of the Contemporary, but it is silent as to Maurice. Perhaps there is no significance in this omission, but Maurice's inability to find what he sought for in English Unitarianism is certainly significant. His father was a learned and pious Unitarian minister, but the barrenness and religious coldness of the creed forced first his three daughters, then his gifted wife, and lastly his noble-minded son to seek spiritual nourishment elsewhere. How true is the remark of Keim quoted by Farrar in the same review that "we are not just to the greatness of Jesus if we do not take up the position that the creative action of God in regard to his origination was unique and specific." But though thus divided from our Brahmo friends in the matter of Christology, Maurice is far more at one with them than are their Unitarian *protégés* on the great question of Divine Revelation. Modern Unitarianism is sceptical of the whole matter. Brahmoism clings passionately to the truth that God *does* reveal Himself to men. Well may it cling to it, for unless it is a truth, religion is but a chimæra. Extreme orthodoxy denies it quite as much as scepticism, and it was Maurice's fortune to fight the former. "Mr. Mansel afterwards Dean of St. Paul's" says Mr. Llewelyn Davies, "delivered a course of Bampton Lectures at Oxford, in which he maintained, for the confounding of unbelievers, that the nature of God is necessarily unknowable to man, and that any reasonings about that nature are futile: but that we have in the Bible a regulative revelation given to us which we must accept for our guidance, and which it will be the worse for us if we do not follow. Mr. Mansel was so able, his knowledge so large and clear, and his argument seemed so to put philosophical infidels into a corner that the lectures were received by the religious world in general with delight and applause." Not so by Maurice however, who saw in this line of apologetic the most destructive attack upon the very being of Christianity. "It made the whole Bible a delusion and imposture; it turned the Gospel into a law more dead and more deadening than any that St. Paul had in view. It was a blow in the face to his own special testimony." That testimony is still needed, for the opposite delusion is almost the only view of Bible religion that is extant among Hindus, to their own great detriment and to their utter misunderstanding of what Christianity really is. "According to

Mr. Maurice's faith, the Eternal God, however incomprehensible, has been and is genuinely revealing himself to the spiritual apprehension of His human creatures. The Bible is not a law, delivered as an infallible document for the government of men's lives, but a series of records, describing successive stages of God's self-revelation. The Bible is a unique volume, because there was a special character attaching to the revelation of the Divine nature in Jewish History and in the Person of Jesus Christ."

The second article to which we refer is that by Principal Fairbairn of Airedale College on "the Churches and the Ideal of Religion." Starting with the admission (alas too undeniable!) that the present state of Christian society shows evils which people had a right to expect would either be mitigated or removed by Christianity, he goes on to say that the root of the evil is in the imperfect Christianization of the Churches. They fall short of the religious ideal—that of being the organized human counterparts of the divine beneficence, and so, whatever their ecclesiastical success may be, they have fallen short of what might reasonably be expected of them. No more damaging indictment could be brought against the Churches, an indictment the truth of which gives their edge to all infidel denunciations of their influence. And yet the terrible charge has its hopeful side as well. It is not Christianity that has failed; it is because of their lack of Christianity that failure can in part be attributed to the Churches. What they have to do is to live up to their calling, to attempt to exhaust the possibilities of Christianity, to give to their faith, the faith of Christ, a fair trial. The article is in no way intended to be an apologetic one; indeed Principal Fairbairn displays an impatience with the professed apologist which every honest defender of Christianity will fully sympathize with, and which certainly places him beyond the suspicion of having written *at* unbelievers. But none the less is it worthy of the attention of those persons who affect apologetic questions. For if the religious ideal of which Principal Fairbairn speaks be the ideal of Christianity, if Jesus be the teacher he represents him as being, then the world has no right to speak of that religion as effete, seeing that it has hardly as yet begun to put it to the proof.

The Anjuman-i-Islamiah of Madras is making itself ridiculous. It was founded a few years ago with a great flourish of trumpets and professed to be a body to raise in various ways the social state of the Madras Musalmáns. Beyond starting a weekly newspaper, and, lately, a small school, its efforts have been confined to singing its own praises. It has on its committee men who have been educated in English and who know something of the state of modern society, but they entirely lack the moral courage which alone can make them leaders in any progressive movement. For example, a discussion on the Fatva was commenced in the *Ittifaq*, the weekly organ of the Anjuman, but immediately some of the Triplicane Ulama took alarm, and the Committee of the Anjuman have stopped all further criticism of that document. We are sure that some of their number know full well that freedom of thought, and liberty of criticism are absolutely essential to the well-being of any community, and that it is the duty of a body like the Anjuman to encourage healthy dis-

cussion of such social questions as the Fatva raised. All reformers must suffer reproach, but this our easy going friends of the Anjuman have not the courage to bear. Let it be known then that the Anjuman, which boasts of the great work it is going to do in Madras is absolutely afraid of a few Moulavis, who show by their action that they dare not bring their ill-fated Fatva to the test of a public discussion. But according to its own account, the Anjuman is going to make a great stir in the educational world. It considers itself equal to maintaining an F. A. and even a B. A. College, if only great and rich men will give the funds! Madras Muhammadans, however, are wise in money matters and do not seem inclined to fill the coffers of the Anjuman. We are willing to give them a useful hint. It is that they should get Mr. Wilfrid Blunt to transfer to them the Rs. 30,000 he has promised to the Deccan University, for which purpose it will never be needed. It is well that the Anjuman should realize that in this practical age, societies as well as individuals are judged of by what they do and not by what they profess to be able to do. Tried by any such common sense test as this, the Anjuman is found wanting.

Mr. Wilfrid Blunt's proposal to found a Muhammadan University in the Deccan has not attracted much notice amongst the Musalmans of Southern India. The *Ittifaq* has devoted one article to the subject, but on all matters connected with higher education the Anjuman displays the greatest ignorance. It gives its approval to the scheme, but uses the subject as a text on which to appeal for funds to carry on its own operations. Mr. Blunt is very much distressed because he finds that Musalmans attend colleges and are connected with Universities in which European Professors exercise an influence. He carries his dislike of his own countrymen to such an extent that he objects to the Calcutta Madrassa and to the Muhammadan College at Aligarh, as places of instruction for Muhammadan youth, because the Principals and some of the Professors are non-Muslims. The remedy he proposes is, that the Musalmans of India should ignore the present Universities and that H. H. the Nizam of Hyderabad should found a University in which all literature and science should be looked at from a Muslim standpoint and all the professors be Muhammadans; for, says he, "Muslims see that neither history, nor philosophy, nor western literature can be taught by unbelievers in the divine mission of their Prophet, without serious risk of undermining their pupils' faith." This may be true of persons like the bigotted Triplicane Moulavis, but it is not true of intelligent Musalmans who are year by year coming forward in increasing numbers, and are seeking to keep pace with the times in which they live. Mr. Blunt's views of Islam and of the needs of the Indian Muslims seem to be based on what he has learned from the Ulama of Cairo. Had he condescended to consult such men as Syed Ahmad Khan Bahadur, Amir Ali Sahib and others who are the leaders of the progressive party amongst Indian Muslims, he would have found that there is no desire on their part to isolate their community from the other classes of the population, or to give them a one-sided education. Muhammadan gentlemen are Fellows of the various Indian Universities, and there is no Muslim whose opinion is worth considering who has ever made the least objection to the University system.

But Mr. Blunt wishes to found a "central school of religious thought such as is to be found in other lands." The two Muslim countries in which such schools flourish are Turkey and Egypt. The Ulama of Stamboul are a real power in the land, and till recently the same might be said of the Ulama of Al Azhar, in Cairo, which was, if it is not even now, probably the largest theological school to be found in any Muhammadan country. The state of these lands is a sufficient answer to Mr. Blunt's great desire to revive traditional Muhammadanism. The fact is that Muhammadan law and very much of its religion is an anachronism in the world's history. It is absolutely incompatible with social and political progress. The progressive party of Islam will flourish in India, but it pays little or no heed to the system which Mr. Blunt wishes to see revived.

The whole proposal shows the utmost ignorance of the state of education in this country. If the degrees conferred by the proposed University are to be of any value whatever, the subjects of examination must embrace modern science, history, philosophy and some knowledge of the western languages and literature. Where can Mr. Blunt get Musalman professors of these subjects? such men are not to be found. For all practical purposes, the Deccan University would be a total failure, for Muhammadan lads who want to gain a position in this country are shrewd enough to see that the only way to rise is through the Indian or the British Universities. His Highness the Nizam gave a polite reply to Mr. Blunt and there the matter will end. Here in India, Mr. Blunt can do no harm, but the British public are ready to listen to any man who talks with assurance. It is well, therefore, that they should know how ignorant Mr. Blunt is of the state of feeling amongst Indian Muslims, and how little notice they take of his theories.

SCIENCE JOTTINGS.

Many persons who have been troubled by an efflorescence on the walls or roofs or their houses will be glad to learn that the prevention, if not the cure, of this evil is probably very simple. The efflorescence having showed itself on the walls of the Public Works Offices, Chepauk, Major Morant sent specimens of it and of the materials used in the building to Dr. T. K. Rogers the Chemical Examiner. An analysis of the efflorescence showed that it consisted chiefly of carbonate of soda. This carbonate of soda was traced to the chunam and cement used, and not to the bricks. Evidently then the soda carbonate is formed from sea salt present among the shells when they are burned and so Dr. Rogers suggests the simple cure of washing the shells with soft water before burning them. He further suggests that damp-proof courses should be used in the walls to prevent water rising up the walls from the ground.

The death is announced of Dr. Isaac Todhunter, F. R. S., the well-known mathematician. He was Senior Wrangler and first Smith's Prizeman of his year (1848) and afterwards was elected a Fellow of St. John's where he became an assistant tutor and then principal lecturer on mathematics. He was known

all over the world, and not least in India as author of many mathematical text books. In several departments these books are now rather behind the age, but they were at one time far the best to be had, and are still very widely used. Amongst other honours his University conferred upon him the degree of Doctor of Science last year. He was also an honorary fellow of his College.

This year's meeting of the British Association is to be held in Canada. It meets in Montreal on August 27th, and there is every prospect of its receiving a most hearty welcome. The Right Honorable Lord Rayleigh, D. C. L., F. R. S., Professor of Experimental Physics in the University of Cambridge, is the President elect. He will be assisted by a very able body of Vice-Presidents including the Governor General of Canada. The Steam-ship Companies and the American and Canadian Railways have made most liberal arrangements in favour of members of the Association. The American Association meets at Philadelphia on September 3rd, and has invited the members of the British Association to join its meetings and excursions.

A step of considerable importance has been taken in founding a meteorological laboratory alongside of the Observatory on the Pic du Midi on the Pyrenees, at an altitude of about 9,500 feet above sea level. Very careful estimations of the amount of carbonic acid present in the air at various altitudes have been already made, and it is found that the proportion present is almost absolutely the same at all altitudes. The amount is about 2·86 ten thousandths which is considerably less than the old estimates. Of ammonia too there is nearly the same percentage at high and at low levels. On the other hand nitrous compounds were found to be entirely wanting in the rain water. This is accounted for by the circumstance that thunder storms are almost unknown above the level of the Observatory Out of 184 storms that have been observed from the top during nine years only 23 originated at an altitude of over 2,300 metres and none above 3,000 metres.

The oldest scientific society in the world is probably the "Royal Academy of Sciences" in Rome. It was founded on August 17th, 1603 for the purpose of cultivating the science of mathematics and philosophy. Its original name was the "Accademia dei Lincei" (the academy of the lynx-eyed) and after passing through a rather chequered existence, it has now been recognized as the National Scientific Society of Italy thus taking a position similar to the Royal Societies of London and Edinburgh or the French Academy. Three years ago an act was passed granting a large sum for the erection or purchase of suitable buildings. With this sum the Palazzo Corsini was purchased, into which the Academy has quite recently moved. We trust that its advance in outward prosperity will only mark a still greater advance in scientific activity.

An International Society of Electricians has been started in Paris which has already enrolled some 1200 members. Comparatively few of these are Englishmen, but amongst the "Foundation Members" we see the name of Mr. G. K. Winter of the Madras Railway.

At the meeting of the Scottish Meteorological Society on March 17th Prof. Tait read an interesting paper "on various suggestions as to the source of atmospheric electricity." He pointed out that if the particles of water vapour were electrified even to an extent quite beyond detection even by our most delicate electrometers, yet the rain drops formed by the condensation of these would be so highly electrified as readily to produce all the observed effects. He concluded by stating that satisfactory experiments would have to be carried out on a scale too large for private individuals to undertake.

Prof. Hughes has recently delivered a lecture at the Royal Institution and read a paper before the Royal Society on his new theory of Magnetism. This theory which is founded on ample experimental evidence he has now worked out very completely. He considers that magnetism like gravity is an inherent property of the molecules of all bodies and that it can be neither increased nor decreased in quantity. A bar is in a neutral or unmagnetized state not, as was formerly supposed when there is a heterogeneous arrangement of those particles, but when they form closed magnetic circuits. A bar of hard steel once magnetized retains its magnetism because the molecules are not free to rotate while in a bar of soft iron they have great freedom of rotation. When a bar is placed under magnetic influence anything that tends to assist the molecules to turn increases the apparent magnetism. Thus if a bar be held so as to be under the influence of the earth's magnetism, striking the bar or heating it or passing an electric current through it will magnetize it.

The Scottish meteorological society resolved some time ago to establish a marine station at Granton near Edinburgh. Considerable progress has now been made with the work, and it is hoped that during the next few years a pretty complete examination of the Firth of Forth in its biological, meteorological, physical and chemical relations will be prepared. A naturalist and a physicist have already been appointed, and it is hoped that before long a botanist and a geologist will also be at work.

The dust collected on the top of Ben Nevis last Christmas by Prof. Chrystal and Mr. Murray has now been analysed and has been found not to be of volcanic origin.

At the meeting of the Royal Society in Dublin in January the Rev. S. Haughton, F. R. S. read a paper on the "unusual sunrises and sunsets that characterized the close of the year 1883." He showed that the duration of twilight was not excessive and that the light was not reflected from anything at an abnormal altitude. Referring to Mr. Lockyer's theory that the reflection was from dust from Krakatao, he showed that it involved a speed of 82 miles an hour to have carried the dust to Honolulu by the 5th September. "This," he says" "is absolutely incredible."

In a letter to Sir. W. Thompson published in "*Nature*" Mr. Lewis P. Muirhead gives an account of a great fall of meteoric dust which was observed on March 1st at Portkil Kilereggan in Scotland. The ground was at the time

covered with recently fallen snow so that the exact amount of dust falling on any space could be estimated. The measurements made showed that about 4 grains per square foot had fallen. Taking the area over which it fell as 810 square miles—the best estimate that could be made—this gave a fall of no less than 5760 tons! The dust appears to be almost wholly metallic.

C. M. S.

QUERIES.

19. A. T. N., TANJORE—*Can you or any of your readers tell me how I can keep 'poochis' from my books? I have kept camphor in my book cases, but in spite of this some of my books are bored through and through.*

Neither camphor, nor what is better than camphor, Sandal wood shavings, is efficacious in keeping away these troublesome poochis without constant care and attention. Books should be taken out of their case at least once a month and examined, and then, both books and case being thoroughly dusted, should be put in again with fresh camphor. Any books which have been attacked should be separated from the rest and kept in a case by themselves, on the back of the shelves of which a little Macdougal's (Carbolic) Disinfecting Powder should be scattered, which should be removed once a fortnight. There are other preventives of this pest however more efficacious than these. Perchloride of mercury (Corrosive Sublimate) has been much recommended (see *Bombay Educational Record* for October 1883, p. 286-7) but is objectionable on many grounds. Probably the best way of using it is to dissolve half a drachm in 4 oz. of oil of Turpentine and paint with this solution a strip about two inches wide at the back of each shelf. Still better than this, because less dangerous, is kerosine oil. It does not seem to be generally known that kerosine is one of the very best vermicides we have. The least objectionable way of using it for the protection of books is to take 1 oz. of the oil and 2 oz. of fresh milk, and shake them together until they are thoroughly incorporated. Then dilute with half a pint of water and paint the inside of the back of the book-case and the under-side of each shelf. The objection to this remedy is the smell of the oil, but if the book-case have good doors and be kept closed, no inconvenience of this kind will be felt. We have known this remedy used with the best results; and one advantage of it is that it need not be repeated oftener than once in three months. On the use of kerosine oil as an insecticide in Horticulture, see a letter from Mr. R. McLachlan, F.R.S. to Sir J. D. Hooker, printed in the *Tropical Agriculturist* for December 1883, p. 455-6. We have still one other remedy to recommend. In the case of valuable books, send them to be rebound at once and instruct the binder to put half a drachm of white arsenic (or what is almost as good, a drachm of sulphate of copper) in every pound of the paste he uses. This is a perfect protection. Do not be afraid of sacrificing the handsome cloth bindings, for these are a snare usually attracting the *poochis* you wish to keep away.

CORRESPONDENCE.

MR. KRISHNA SINGH'S ARTICLE.

I

To THE EDITOR, *of the*
Christian College Magazine.

DEAR SIR,

'Indophilus' says that I have misunderstood Mr. Krishna Singh's article; certainly both you, Sir, and he have misunderstood me. Perhaps however I am myself most to blame for this, for the fact is I never once thought that my letter of remonstrance would be printed* otherwise I should have tried to express myself less ambiguously. For the '*Epiphany*,' and the Oxford Missionaries I entertain the highest respect. The *gravamen* of my letter was that the *Christian College Magazine*, with its 'avowed' and open object of advancing Christianity, did not, so fully as it should do, adopt the method of the '*Epiphany*'. In the latter paper no article adverse to Christianity appears without its reply printed below, or held over to the next number. Now Mr. Krishna Singh's article led us to think that he was at heart, if not in reality, a Christian, until we came to the last page or two, which contained to my mind a very subtle attack (I don't know what else to call it) on Christianity. The article was printed in large type in the fore-front of the magazine, and not in the small type of the queries and correspondence at the end. There was not a word of disapproval from you, Sir, as Editor, of the sentiments expressed; not a word of promised reply; and of course no one knew that even one 'Native Christian,' would feel called upon to stand up in the defence of Christianity. I may remark too in passing that it matters very little whether an article is signed or not, especially, when we are unacquainted with the author.

My impression on reading the article was simply this: Natives wavering between Hinduism and Christianity will say, "Ah, this Christian Magazine allows that the Hindu Veda is just as good as the Christian Bible." Now it is not enough, Sir, that your prospectus should have told us months ago that people were not to jump to such conclusions. They will and do. Listen to what this week's '*Epiphany*' says:—"It would be wrong to scatter broad-cast even ludicrously unfair objections without a full exposure, among readers

* Letters writen to an Editor, *as Editor*, as the one in question was, are universally understood to be intended for publication. In this case moreover—anxious, as ever, to err rather on the side of courtesy than its opposite, and regretting that a gentleman in Mr. Sharrock's position should so seriously misunderstand us—we replied privately by letter, explaining the misapprehension into which he had fallen and referring him to our original prospectus. At the same time lest we should be charged with dealing privately with what was intended as a public remonstrance, we intimated our intention of availing ourselves of his letter as a means of setting right any of our other readers who might have fallen into a similar mistake. To this letter Mr. Sharrock replied but intimated no desire either to withdraw or supplement his original communication, though there was ample time to do so. How its publication could surprise him we are therefore at a loss to imagine. Certainly we are not open to the imputation of having published a private letter.—ED. C. C. M.

whom they might puzzle and prejudice against Christianity." No one could describe Mr. Singh's objections as "ludicrously unfair;" they are just the reverse, subtle and refined and therefore more likely to puzzle and prejudice the readers. One rejoices to see Hindus expressing their opinions, for one feels as a Missionary how difficult it is to work among them when one is so often met with the cold, polite remark "If you please, Sir, we will not discuss religion." Still I will make bold to say (and pardon me if I am more warm than polite), that if the Christian College Magazine is to be merely a platform upon which the different representatives of the numerous religions of India are to come one after the other and proclaim to the world their respective tenets, with nothing but the chance of half a dozen lines of expostulation at the end of the Magazine from a stray correspondent, then, I say the Christian College Magazine will, *me judice*, do a great deal more harm than good.

2. Now suffer me to say a word about Mr. Singh's last letter. I am perfectly astounded to find him appealing for support to Bishop Caldwell. He writes, "Bishop Caldwell expressed that it is to be regretted that *no high caste educated Hindu has ever embraced Christianity* and almost all the converts are from the lower and famished classes." Two or three years ago I read very similar words in a Tamil paper, and in my reply, which the Editor very fairly printed, I shewed that he had been guilty of what looked extremely like dishonesty. I cannot however for a moment believe that Mr. Krishna Singh has done more than quote from memory some such distorted account.

The Brahman Editor copied verbatim the following sentence *as far as* the brackets and left out the rest, from the Bishop's "Reserve in communicating religious Instruction to Non-Christians in Mission Schools in India." "Let me mention then the remarkable fact that during the whole of this long period (*i. e.* 43 years) not one educated high caste Hindu, so far as I am aware has been converted to Christianity in connection with any Mission or Church [except, directly or indirectly, though the influence of the Christian teaching imparted in Mission Schools"]. A very violent tirade followed on this mutilated text but no one who had read the *whole* sentence could honestly have quoted the Bishop in his favour. Below we read *(ibid)* "such converts ... are more numerous than has been supposed". The Bishop also tells us of sixteen Brahman converts in Masulipatam, and of thirty-three high caste converts at Palamcotta. The total number of such converts must now be very considerable. I do not know what address is referred to by the writer of the article but I feel sure that there must be some mistake somewhere.* When Mr. Krishna Singh goes on to say that "almost all the converts are from the 'lower and famished classes' his insinuation about famine Christians is scarcely fair. What does he think of the 100 Native Christian graduates, and the Christian Fellows of the Madras University? Are they also to be superciliously labelled 'unenlightened,' or 'lower and famished classes'? The fact that 100,000 natives of Tinnevelly—one of the three most advanced districts in the Presidency—have joined the church proves that Hinduism must fall before Christianity when the two religions are subjected to the tests of sound reason-

* Though most intimate with Bishop Caldwell I never even heard of any 'farewell address.'

ing, and real religious vitality. It is much to be regretted that *more* of the highest caste have not yet embraced Christianity, but the fact that they have not only shews that it is not the love of truth, but their old-rooted caste prejudice that keeps them from doing what numbers, equally well educated, but not so rigidly tied down as themselves, have already done. Would that this fact, and also the fact that every 'enlightened' nation of the world is Christian, could only be faced and realised by the Hindus who still hold aloof from us!

CALDWELL COLLEGE,
TUTICORIN.
Easter Eve 1884.

I am, dear Sir,
Yours faithfully,
J. A. SHARROCK.

II.

SIR,

It is a matter of regret that Mr. Krishna Singh has raised a question as to the superiority of a system of morals universally held to be supreme over all other systems of morality. Where does Huxley, nay, where does "young India," enlightened India as typified by the Brahmo Samaj, get their respective codes of morality from? Do they not one and all rush to the fountain source of morality, as it wells out fresh from Him who is Purity itself? But this is not *the foundation* on which we raise the grand fabric of the Christian faith. It is, as *Indophilus* would say on *divine facts* and *divine facts* alone that the majestic temple of faith, of which the corner-stone is Christ, rests.

But now, as Mr. Krishna Singh in your April number seems to enjoy a self-complacent admiration of the Hindu maxims which he has adduced as equal if not superior to the sublime precepts from the Bible which your "Native Christian" adduced and as he exults over the supposed ignorance of your "Native Christian," we once more declare the superiority of the Christian morals by proceeding to show the inferiority of those which Mr. Krishna Singh has adduced. Taking these quotations *bonâ fide* to be specimens the real morality inculcated in the Vedas, let us lay them side by side with those of the Bible.

"Bless them that curse you and do good to them that hate you" is the divine precept of the Saviour. The Hindu maxims are "He shall not return anger to him who is angry; he shall speak gently to him that abuses him;" and, "To serve our neighbours is to serve ourselves; to harm our neighbours is to damn ourselves." Any plain reader can perceive the vast ocean of Love which separates the Hindu maxims from the precept of Him who is all Love. Is there not displayed in the Divine precept, a positive return of good for evil and a more than Angelic sublimity and magnanimity? It is the breath of Divine Love wafted through the Saviour's precept, that is wanting in these Hindu maxims. The quotations for the Love of God and the brotherhood of .....n, when put side by side with the text quoted by the Native Christian, show the same kind of dissimilarity.

By contrasting these together, we by no means come to the conclusion that Christianity inculcates a superior system of morals. It is an universally acknowledged *fact*. Mr. Krishna Singh can quote as much as he likes, without coming an inch nearer to the Divine precepts. This contrast is only meant to show how futile the attempt is to adduce maxims of equal if not superior moral

import to those inculcated in the Bible. Plainly can we hear the fiat of the Omnipotent in the sonorous language of the Psalmist, "For my thoughts are not your thoughts, neither are my ways your ways saith the Lord."

But one word as to the Influence of Christianity in this land. The percentage of enlightened Hindus is very low. We quite concur with him in this; neither do we dispute the authority he has quoted. Dr. Caldwell whatever may be his Indian experience, has every right to know better than any others with regard to the "famished" classes. It is perhaps on behalf of these famished classes that the famine relief fund money was spent, while the Indian newspapers were crying shame on these unholy conversions and the whole world astonished with the number of conversions; and shortly after, when plenty ensued equally surprised at the relapse columns opened in the reports. Again and again we meet with this regret in Dr. Caldwell. This is not the first time we have heard of it. We can only make him the object of our pity for his mistaken regret. We see no cause for regret in this fact, that the majority of native Christians are not from enlightened society. Francis Xavier, Henry Martyn, Schwartz—pious and noble missionaries found no cause for regret here. Nay, to go further Jesus found no cause for regret. It has always been the plan of the Christian dispensation. Slowly but silently Christianity works from the lower scale to the upper. Indian missionaries are often apt to long for the day when educated Hindus would become Christians; but the Almighty fiat has gone forth—"India shall be the Lord's." India shall be the Lord's in His own time, to which with eager heart we look forward—the time when the high and the low alike shall bow before Him who is able to make us wise unto Salvation.

A NATIVE OF CEYLON.

III.

SIR,

I thank Mr. Krishna Singh for the quotations he has favoured me with. Thanks also to "Indophilus:" I shall avoid logomachy and admit that there are many beautiful and sometimes noble sentiments expressed in the religious books of the Hindus. So long as we keep to the theoretical side of the question, Mr. Singh may perhaps maintain that the Bible teaches nothing new to the Hindus—of course, with regard to morality and the rudiments of religion—and therefore that Christianity will never displace Hinduism. But when we come to examine the practical influence exercised by the religion of the Bible and the Indian system of religion, we seem to find a vast difference between the two—a difference which will play no unimportant part in the struggle between the two religions. The reasons for this are many. In the first place, the religious books of the Hindus are not consistent in their moral teachings. For instance, although the passage quoted from the Code of Menu, apparently preaches the brotherhood of man, the same Code is notorious for the sanction it gives to the system of caste which is a direct denial of brotherhood. Menu may preach the brotherhood of Brahmins, but one can hardly believe that Menu is in earnest when he teaches the brotherhood of man. The hero of the Ramayana is represented to have cut off the head of a Sudra, named Sambuca, because he ventured to perform some devotional ceremonies which the Brahmins alone had the right to perform. Once more: very fine

attributes are sometimes given to Krishna; but mixed up with this is a good deal of rubbish which 'an educated and intelligent community will not feel proud of.' All this inconsistency not only renders null and void the practical value of the moral precepts contained in the religious books of the Hindus, but makes it impossible to put any confidence in them. Secondly, it may be observed that the morality of the Ramayana and other books is the result of philosophic speculation and not preached and exemplified in their lives by persons of Divine authority like Christ. The Roman philosophers like Seneca expressed equally noble sentiments. But the unparalleled moral dynamic of Christianity overshadowed them all. And who can say that the same fate will not befall the Vedas and other books?

No doubt many Hindus will not accept Christ before seeing that the Resurrection of Christ, &c., are historical facts explainable only by Christ's Divinity. And I would have 'raised a real issue' on this point even before Indophilus's suggestion if I had felt myself equal to the task. As it is, I shall leave it to abler hands. . . . .

Mr. Singh has misunderstood me on one point. I never denied that a small percentage of enlightened Hindus have embraced Christianity. But I only said that very few enlightened Hindus have been prevented from embracing Christianity because of their belief in Hinduism.

MASULIPATAM,
10th April, 1884.

Yours truly,
A NATIVE CHRISTIAN.

The first paragraph of Mr. Sharrock's letter demands a word or two from us as he takes exception not only to a particular article but to the whole policy of this Magazine. This policy was deliberately adopted as in our opinion the wisest, and all we intend to seek is consistency in carrying it out. We meant from the very beginning to open our pages to non-Christian writers who keep within the limits of respectable literature, and we told every body this in our first number. We have therefore only done what Mr. Sharrock ought to have been perfectly prepared for. Surely he would not ask us to break faith with the public?

We entirely object to the comparison made by 'Indophilus.' He writes as if Mr. Krishna Singh's article might be named in the same category with the blasphemies that appear in the columns of the 'Epiphany.' This Magazine will not publish brutal and offensive attacks upon any one, least of all upon Christ and His religion. Nor does its editor believe so implicitly in his own powers as to think that he could by any notes or replies of his, remove the evil effects that must always flow from such attacks. If others think differently he does not complain, but the pages of this Magazine at least shall never be open to such communications.

Suppose now that the Editor had insisted on publishing, at the end of Mr. Krishna Singh's article, a statement of all the points to which he took exception, and of what he conceived to be the orthodox positions, would the Magazine have fulfilled its purpose so effectively as it has done? Where would the communications of our correspondents have been? We claim that the thought and inquiry that have been stirred up by the article, and the correspondence about it, are of infinitely more value than any number of ready-made

pills of orthodoxy swallowed immediately after the poison had been imbibed. No man can live in a spiritual glass house now-a-days, and Mr. Sharrock will, we fear, find his young men reading literature more unsettling than the *Christian College Magazine*. The enemy against which we fight is not unsettlement but stagnation. We believe that when the torpor of death is broken up, God's spirit will lead India, and Europe too, into fuller light. To break that torpor is our aim.—[ED. *C. C. M.*]

SCHOOL FEES.

SIR,

In the April number of your Magazine you have a note upon the recent Government Notification raising the scale of school fees. You seem generally to approve of it but you criticise some of its details and in doing so you make some statements which show that you fail to grasp the broad statesmanlike principles which evidently dictated it. To me it seems that the object of this order is to effect two things: both of which I cordially approve of, first to put a check upon the spread of secondary and higher education and secondly so to raise the fee income of middle and high schools that in a very short time it may be possible to withdraw all Government grants from them. I am informed that Government has just issued orders for information to be obtained from the heads of schools as to the income of the parents of their scholars, as to their caste or creed, and as to their occupation especially the number of "coolies" and "beggars" reading in high schools and colleges, so that you see there is no doubt my inference is a correct one. Now, Mr. Editor, you say that to put a check upon the spread of middle school education is "a decided evil." Here I join issue with you and say that so far from such a check being an evil, in the interests of the country and of the taxpayer some such check is absolutely necessary.

I do not know much about these matters personally but I believe it is a fact that many of the children of the very lowest classes are found reading in the schools of Madras and I certainly was told by one who ought to know that one of the large colleges in this Presidency has always on its roll a considerable number of the sons of professional beggars reading for the degree of Bachelor of Arts. Now apart from the injustice of using public money obtained from the hard-working ryots for such a purpose as this I am persuaded that thus educating young men above their rank in society is a political and social evil. I trust the time is not far off when public money for the purposes of education will be spent only on primary education for the masses and I heartily approve of the recent Government Notification in all its details because I regard it as an important step towards that goal, and as one that will to some extent relieve the pocket of

AN INTERESTED TAXPAYER.

April 18th, 1884.

THE CHRISTIAN COLLEGE MAGAZINE.

JUNE, 1884.

AUTHORITY AND INQUIRY.

Authority, in the sense we here intend, is defined by Sir G. C. Lewis to be "the principle of adopting the belief of others, on a matter of opinion, without reference to the particular grounds on which that belief may rest." The contrasted principle may be called inquiry, personal investigation, free thought, individual judgment. It expresses the right or duty of every man to examine and decide for himself in every matter of opinion or of faith.

It is an obvious remark that sayings which we may have often read without suspecting any profound meaning in them are sometimes regarded, after some fact of experience has prepared us for them, as a sort of revelation of new truth. The poets that we make our favourites are those that have given clear voice to our own inward history. The common proverbs of speech acquire a new meaning for us when we have made a separate discovery of them; and thus it is that we come to recognise the wisdom of our ancestors. Or, to vary the illustration, this external world which on every retina casts the same image, is to a trained or gifted few full of beauty or of goodness and of wisdom; while to an unappreciative mind a "primrose by the river's brim" is a yellow primrose and no more. And so in speculative or moral truth it is not the thoughts that we may have found in books or even stored in our memories,

but only those that by the circumstances of our lives or by patient investigation have been evolved and made clear to us in the struggles and triumphs of our minds, that have such possession of us as materially to affect our spiritual being. The acquisition of knowledge does not bring wisdom; power over nature does not bring self-control; high gifts do not suffice to guide us. It may still be true, as the poet says, that

> The man of science himself is fonder of glory and vain;
> An eye well practised in nature, a spirit bounded and poor:
> The passionate heart of the poet is whirled into folly and vice.

The acquisition of knowledge then is not the highest good. The aim of liberal education is the purifying and harmonising of the soul, not its outward equipment; not the imparting of knowledge but the training of faculties. And if so, if on the one hand the creating is of more importance than the furnishing of the mind, the man than the incidents of his life; and if on the other hand neither high endowment nor extensive knowledge is sufficient to invest with nobility, to deliver from passion or to make truth a living power in the soul, we are led to the conclusion that not by the due or dutiful acceptance of external authority, and not by the mere possession of second-hand materials, but by the right exercise of reason, won through self-denial and patient effort, and by the paths of persevering inquiry, do we build the philosophic mind and reach the high goal of truth.

Yet life is so wide and so varied, and from the one Spirit there is such diversity of gifts, that no one individual can in these modern days embrace the whole field of knowledge. The inheritance of the ages is becoming so vast, the products of investigation so systematised that each of us can learn from the race (which has its workers in all lands), as from a second mother and teacher, a language far richer than what we ourselves could have gathered. A little knowledge of many things is thus acquired. The student of law, for example, may learn useful facts of medicine. The student of anatomy may know also the laws of astronomy. At the present hour hand-books are showered upon us from every side that give us in brief compass the results of long investigation. More and more a little knowledge is becoming general, a real knowledge special. And while through minute study or personal investigation we obtain the knowledge which is, so to speak, the centre and the strength of our intellectual life, through authority, or the recognised and accepted labours of others, we get aids and instruments both of utility and of embellishment which save life from narrowness and enable us to extend our

vision over the whole field of nature. Authority then has, for the individual, a place subsidiary to that of inquiry, but of wider scope, varying in its binding force according to the subject in view; in matters of certainty absolute, of belief qualified; in itself often divided, and so far inferior that in the last resort our minds must decide what authority, if any, we are to accept or submit to.

But at the present day, it is sometimes thought that the two principles of rational investigation and submission to authority are at war and cannot be reconciled. Such conflict belongs to the whole range of human life. New methods have to be adopted without unanimous consent. The statesman meets vested interests and conservative instincts; nor are the just the most acceptable. Few long-standing institutions are free from the dust of ages or the hoar of centuries. But while this is so we cannot recognise a necessary antagonism. If there is truth in human nature and human history, authority and inquiry are ideally not in conflict but in union. What has won the cheerful acquiescence of the wise and good in many ages, cannot be wholly false. It must have been established by the highest wisdom of the past, and must blend in harmony with the victorious progress of the future. "The old order changeth, yielding place to new"—this is the law of our world. Ever towards the highest we must strive. But it is the same God that "fulfils Himself in many ways".

Let us seek to understand this relationship. The mind is possessed of various powers—self-consciousness, memory, intuition, reason, conscience. In various ways knowledge comes to it, contributing to its growth, furnishing materials for its usefulness, until reason in its highest exercise weighs and determines truth. Whence do we obtain knowledge? By sensation and reflection taught Locke two hundred years ago. But that stage of thought is past; and representatives of the same tendency tell the present generation that in the babe exist potentially the capacities of the entire human race. Innate, intuitive, experiential, hereditary—these words call up attempts to explain the origin and growth of the knowledge that is self-possessed or self-developed in the conflict of life. But this is not all. From the very beginning of life it is by external influences that the latent powers are called forth. The babe is in a world of life and activity by which he is moulded. A language is ready-made which controls his thoughts. And with unhesitating confidence he accepts the authority of nurse, of guardian, or of schoolmaster. Gradually subjection to these passes into subjection to

others from a wider circle, to selected masters, the spirit of the age, the voice of history, the world of thought. In the family, in society, in the world at large, authority comes to call forth and direct the native powers of the mind, to aid and develop the reasoning faculty. One class of influences passes away having unconsciously moulded the life; and in ever new forms and new tones, varying according to the subject considered, the nature of the knowledge, the probabilities of opinion and the qualifications of the judges, authority continues to speak. Thus in the acquisition of knowledge, whether we will or no, our own thought mingles with the thought of others; both investigation and authority have necessarily a place.

Now knowledge is of various kinds:—belief, sight or intuition; and, again, probable certitude, moral certitude, absolute certitude.

The ultimate facts of consciousness need no proof, have no proof. Self-existence, though we may pronounce Descartes' famous syllogism to be incomplete or even fallacious, is still a fact. Our knowledge thereof is absolute. Its discernment is the prerogative of reason, and we require neither demonstration nor authority. So of the axioms of mathematical science. It is vain to tell us that their truth depends on the uniformity of nature, or on anything else. There is, therefore, a sphere of absolute truth in which the mind can recognize no authority. The realisation of such knowledge may indeed be slow, co-ordinate with the progress of the human mind, but the truths once known cannot be questioned or denied. It is inconceivable, impossible, that anything contradictory to or at variance with them should ever be entertained. Again in the whole extent of mathematical science, the result of careful investigation or laborious demonstration, we have a work equally inviolate. Authority has no place in aiding judgment. It has however its use and purpose. It is not only that on the lines of past achievement the student's mind is trained and guided, nor yet only that every discovery is the starting point of new investigation. But the results form a material and an instrumentality by which the study of other higher sciences is prosecuted. A good instance of dependence on authority is seen in the skilful use of tables of logarithms by land-surveyors who may not know what a logarithm means.

But in other departments of thought and in the affairs of practical life, this absolute certainty has no existence. In politics and in philosophy, in morals and in religion, there is no general consent. Points of agreement exist among all. There is perhaps a deeper basis of union than we commonly imagine. That there is a fundamental difference of right and wrong is indeed an ultimate fact; and in that fact how much is involved! Yet when we look on life around us here where races meet, and compare the verdicts of nations, we are most struck by the diversity that prevails. Theoretically in the speculations of schools; practically in the customs and structure of life domestic, social, or national, we find the widest divergence. On some questions there is a general concurrence of opinion; on others, the sharpest difference. Sometimes we find a small minority and a large majority. On some questions mankind seems equally divided.

It is in acknowledgment of ignorance or of individual imperfection that we seek authority. We appeal in the first instance, if possible, to those that know, or that have the best means of knowing. In matters of history and of external fact we appeal to witnesses. Onlookers afford the testimony by which others in their own or succeeding ages, judge. In matters of investigation or of opinion we appeal to such as we deem competent judges, such as through superior culture, study, talent and impartiality, have earned the right to decide, and are therefore *experts*. Thus the physician, the lawyer or the critic has each a large sphere of his own in which to the untutored his authority is final. But in many questions, in all questions indeed that involve speculative thought, these differ from each other, and the voice of authority is the voice of the greater number of those more or less competent to judge. In practical politics judgment is given in the last resort by the overwhelming voice not of a section, but of all more or less intelligently interested in the point at issue. In scientific or speculative truth the question must await the discovery of new facts, or the dawn of clearer light; and it may remain suspended in dispute from age to age.

In connection with this appeal from the one or the few to the many, emerges another subsidiary but deeply interesting question. Is it in the one or in the many, in a single mind or in a large number of separate minds that we are to find the true and highest authority? Is there any authority at all to be recognised in the judgment of the multitude? Is it not best for us in our conduct to desire with Socrates the approbation of the wise? And may not the judgment of one man of calm and enlightened mind be of more value than the tumultuous voice of a heated assembly, or the excited prejudice of a credulous or panic-stricken people? The difficulty here is real. Let me illustrate. The saying is handed down that the House of Commons is greater and wiser than any one of its

members. It has also been observed that often one man, such as Edmund Burke, is wiser than the assembled house. These apparent contradictions are both true. On the one hand, the idiosyncrasies of the individual are corrected by the combined wisdom of the many. His impartiality may be lost in a storm of passion while the many counteract and control each other. Every single man is individual, one-sided, almost incapable of continued correctness. This was the case with Burke himself, the wisest of politicians. Many sidedness and harmony result from the combination of a large number and the clash of divers opinions. Yet it is equally true, on the other hand that the judgment of the one may at times be better than the judgment of the many, the one alone may have the mind trained or gifted to decide a question of real difficulty. The mass may be a self-regulating machine, acting according to custom and in a narrow sphere. The individual may have the ear and the eye to know the lessons of the past, to realise the meaning of the present, to weigh a multitude of conflicting arguments or complicated details, and to penetrate the future.

Whether it is in the few or in the many that we should seek our highest authority depends on the nature of the subject in dispute. On such a question as the solar system and the orbit of our earth the ordinary man, by his natural faculties, man that is untaught by science, is not competent to judge. His senses are formed in correspondence with the appearances of things. Only by cunning methods do we get, as it were outside these to criticise ourselves and our situation. In many matters of speculative thought and in intricate problems of fact or life, where general principles do not suffice to guide us, the competent judges are indeed few. Yet on great questions of politics, of morals and of religion, it is doubtful whether science and philosophy bring with them a real authority. On the errors, incongruities and follies of different religions the judgment of a man of science would be clear and unanswerable. On the questions whether there is a God, a future life, a standard of morality, or redemption from sin, his ordinary methods of proof are ineffectual; the peculiar mental training of his life helps him not; his decision may be of less value than that of thousands in the humblest ranks of his fellowmen.

General consent is practically authoritative; in matters of science, the consent of experts, in matters appealing to all, the consent of one's contemporaries. The consent of history, traditional acceptance through long ages is still stronger authority. If our age

agrees with past ages, its opinion is thereby confirmed; if there is variance we must ask, have we means of judging unknown to our ancestors? Thus only can we determine to which the higher belongs. The strongest case of authority is the universal consent of the race.

The Founder of the Inductive Philosophy has sketched in four divisions the main errors to which our judgments are liable. He calls them the *idols*—by which he means the fallacies or illusions—of the Tribe, the Cave, the Market-place, and the Theatre. The idols of the tribe are such as all men are liable to; errors of the race belonging to our common nature, for the human understanding is as a false mirror which mingles something of its own with the rays it receives; errors due to the restlessness of the mind or the power of passions; to the dulness, limitations and incompetency of the senses, and to the effect on the imagination of the mode of impression. The idols of the cave, or the individual, vary in each according to constitution, training, temperament, habit, and accidental circumstances; according to devotion to particular fancies or theories, to love of antiquity or of novelty, or to any form of one-sidedness. The idols of the market-place, due to intercourse and association, are imposed on us by language, by the wrong use of words and of names; names given to things that are fictitious, or to things of which a clear and correct conception has not been formed. Lastly, the idols of the theatre (for to Bacon all the systems of philosophy that had existed were but stage-plays, unreal creations) belong to systems of which there are three main divisions, the rational or sophistical, the empirical, and the superstitions.*

Since there are errors of the cave over and above those of the tribe, of the individual besides what is common to all, the presumption, when one differs from the many is that it is because of an individual illusion; the presumption of truth is on the side of authority. And since there are fallacies of the theatre over and above those of the market-place, the presumption is in favour of what is common to all systems while what is distinctive of each is less probably true, and possesses less authority. But let us not forget that the idols of the tribe and of the market-place are the illusions of mankind. And the trained mind is ever entitled to ask itself whether, if long purified and richly furnished, it does not stand on a higher platform, seeing the general error, its roots and its

* Novum Organum, Book I. Aph. xxxiii—lxv.

supports, seeing also the new path which the torch of truth is beginning to cast its light on. One may live in the opening dawn of a new revelation, and be the first to catch the beams of the rising sun over the mountains that lie behind; or, in a day of agitation, may be the calm spectator who with equal vision scans the field of controversy while the belligerents in the heat of passion and of battle see but a short tract of ground around them. It may be that such a one is the teacher of a better faith, when a vain hereditary tradition is satisfying his fellows, and wielding the sceptre of authority. Paul alone at Athens, confronting the philosophers of Greece, and surrounded by the highest monuments of human learning and art, preaching a new strange doctrine; Martin Luther a single monk at the diet of Worms, summoned to answer before legate and emperor, the ruthless representatives of all power sacred and secular; or Henry Martyn a solitary Englishman in Persia a few years before a senior wrangler at Cambridge and now a missionary with the one weapon of the Bible, unable to refrain from challenging the skill, from defying alike the learning and the fanaticism that could be brought against him—these are sublime instances in which we cannot but sympathise with the one against the many, with reason against the authority of might or multitude. Authority, it is said, represents the wisdom of the 'ancients.' But we, replied Bacon in his day, *we* are the true ancients. The fact that any system has a large number of adherents implies that it has in it some kernel of truth; that it has the sanction of time strengthens its moral claim; its tradition growth implies more than the silent acquiescence of its followers—implies an intellectual play manifested in continued adjustment or accretion. But all along it may be losing energy and life. Error may be creeping over it, crushing it. Some inward poison may be corrupting it. Human philosophies and religions pass away or change. Only the eternal truth abides. "Our little systems have their day." At best they are mingled truth and error. At last their "broken lights" go out, or pass into a new and fuller light from the eternal source of knowledge.

We have now gone over the general principles that connect submission to authority with the spirit of free-thought or rational investigation. The bearing thereof on the questions that press upon us we must individually determine. Of the many questions that divide humanity only some are of importance to all. Those of politics, for example, that divide men into conservatives and radicals, reactionaries and revolutionists, may or may not concern us. But the questions of religion, and many involved therein of family or social and moral life, are or ought to be to all of the deepest interest and importance. It is the love of knowledge and of truth—a love in which are involved both a regard for authority and a large faith in the power of the individual mind—that draws students to our universities and crowds our class rooms. Youth is the heyday of rational inquiry—of expanding thought and of insatiable thirst for knowledge. The period of authority comes when disappointed efforts bring home to us the finitude and imperfection of our faculties. It is well if through life the early love remains. By our knowledge it is our duty to live. In the search for knowledge the inquirer has to study the thoughts of the wise, to weigh contending arguments and claims. In the highest matters of life each is called upon to decide for himself. A faith that is merely second-hand is valueless.

In India, at this hour, it must be confessed that the earnest inquirer is in a trying and difficult position. The far-reaching past of his country lies behind, discredited. Hinduism, his natural authority, has lost its high place. For the progress of knowledge and of thought has revealed mountains of error, and has borne the educated into new regions of intellectual life. If Christianity comes from Europe with the authority of the west, still it is an authority without, it has never been known with sympathy, never wound itself round the heart, never been regarded but with the repulsion that exists where there is no attraction. And the student not unnaturally prejudges that all religions are the same; that others have no more real authority than his own. Hence the too common tendency to reject all authority, to decline serious inquiry, and to abide in scepticism and unbelief. But the questions of religion are of too great importance to be summarily set aside. "If Christianity is true," said a great preacher, "it is tremendously true;" and to one that has known its power and consolation the loss of it would be an infinite calamity. The exercise of reason is, indeed, at once the prerogative and the duty of man. "Beloved, believe not every spirit, but try the spirits whether they are of God"—these are the words of an Apostle. Do not rashly bow to religious pretension. Inquire into the credentials. Test the doctrine. Try the spirits. "Prove all things, hold fast that which is good." What is contrary to ascertained truth, what is immoral, opposed to the good and the noble, what is contrary to reason or to conscience, reject. To trutl

alone do homage. Yet when error is discovered it may not be well to act with rashness. There is often a kernel of truth where there is much that is false, mistaken, repulsive or grotesque. And the discovery of the kernel may well repay the patience of research, the labour of inquiry. It is a grave error to part at once with the experience of the past. Let me quote the words of a man as eminent in wisdom as illustrious in public life. "There is something noble in a jealousy of authority when the intention is to substitute for it a strong persistent course of mental labour. Such labour involves sacrifice, and sacrifice dignifies much error. But unhappily the rejection of authority is too often a cover for indolence as well as wantonness of mind; and the rejection of solid and venerable authority is avenged by lapse into the most ignoble servitude."* These words of Mr. Gladstone may well be pondered. Only the resolve to consecrate one's self to long and patient study, to a thorough investigation, as far as in one lies, of the great problems of life, can justify a complete separation from the thought which has been moulded by the highest wisdom and experience known to us. To know that highest wisdom is indeed no easy task. Not only are knowledge and discernment needed, but the bias of early training, the strong instincts of nationality or race, have to fade away before one becomes a fully enfranchised citizen in the one republic of thought.

And even in laborious inquiry there is danger. The intellect is not the whole man; and an undue exercise thereof, without proportionate development of the whole being, may break the harmony of the soul. Knowledge may come without wisdom. In the passionate controversies of life one may cease to behold the tokens of God that to others abound in nature. But true and broad culture rarely separates from the collective voice of humanity, from the truths of natural religion that have found embodiment among all races in all ages. Tennyson tells us that what he found not in controversies and subtle investigations, nor even in the outward universe, he found by a warmth within the breast answering "I have felt." Mind and soul must make "one music." They that divorce the head from the heart, that separate intellect, emotion, conscience, too often suffer the consequence in moral shipwreck. Doubt and faith have both their functions,—the one in enlarging, correcting, purifying our knowledge; the other in concentrating our efforts and uniting us with the higher life. Doubt, rightly understood, as it was

* Nineteenth Century, Vol. I., p. 22.

understood *e.g.* by Descartes, is the spirit of true inquiry. But such a spirit should protect as much from the flippant scepticism that abounds, as from the incubus of an enslaving superstition. Nothing is more at variance with this spirit than to seek shelter under a few names of men eminent in science that are known to have discarded faith. Eminence in one department is no proof of wide culture, of moral strength, or of spiritual vision. Notoriety is not greatness, is often the reverse. A distinguished scientist has recently shown that to-day as much as in the past the greatest philosophers are on the side of religion. And if we seek the judgment not of the brilliant but of the good, of the men who have been the ornaments and the benefactors of their kind, we shall find a vast preponderance on the same side. Can we then pass from the opinions and the life that have sustained the mightiest and the purest spirits of our race? Let us search till our feet are on solid ground, till light has arisen in the darkness. Truth is no trivial possession. It is a pearl of great price. "Truth, which only doth judge itself teacheth, that the inquiry of truth which is the love-making or wooing of it; the knowledge of truth, which is the presence of it; and the belief of truth, which is the enjoying of it, is the sovereign good of human nature."

But it must be sought with the right spirit. "There is little chance of truth at the goal" said Coleridge, "if there is not humility at the starting point." And let us not lack reverence—reverence for the traditions of the ages; reverence for the heart of man, and the instincts of humanity; for goodness, truth and beauty, and for the unseen source of life and beauty and truth, self-denial, patient effort, and persevering inquiry—these, as we said above, are imposed upon us. It is only where the eyesight is purged, the heart purified and the passions in control that Reason sits supreme upon her throne. The truth, said Christ, shall make you free. The mind that is seeking truth is strengthened and ennobled both by the search and the discovery. And thought thus clear and free, finds itself in harmony with the whole spiritual nature of man, his instincts, his aspirations, and his faith; finds in the inner conscience a voice as of another authority to which it bows; finds in the wisdom of the wise an authority under which it serves; here and there discovers amid the hoarser murmurs of discordant ages a voice that seems in celestial music to come from the Eternal; and, no longer ill at ease or at war with its environment, rejoices to be found in the front ranks of those that fight for the great cause of truth, of freedom and of humanity.

ROBERT SCOTT.

ON THE PEDIGREE OF ENGLISH.

One of the earliest monuments of English literature is the story of Beowulf. This heroic legend, the original scene of which is laid in the island where the capital of Denmark now stands, was imported by Teutonic settlers and rendered by a Northumbrian christian into English verse about the seventh century. A reader, acquainted only with modern English, would at first sight perhaps doubt whether the Beowulf were English at all, so different is it in structure from the language of Shakespear or Ruskin. But the changes that have been made in our language throughout the centuries of its development no more destroy its identity than the changes which physiologists show to be going on in the human body, destroy the personal identity of the individual. The man of seventy summers is one and the same person he was at seven; the language of the Beowulf and the language of Macbeth are both the same. The differences are doubtless very great, but the essence is unchanged. The hands are the hands of Esau but the voice is Jacob's.

The fact is that old English belongs to that class of languages which are called, according to their structure, inflectional or synthetic languages; while modern English, having lost by far the greater number of its inflections, is said to be analytic in structure: it uses, instead of inflections, prepositions and auxiliary verbs. This great morphological class of inflectional languages, which form the speech of nations that have done more than any other for the progress of mankind, includes the two families of Semitic and Aryan or Indo-European; and, in discussing the rise and progress of English, we have to do only with the second of these families.

It is now upwards of a century since the scientific method was applied to language; and, as the attention of scholars was first and for a long time mainly directed towards the Aryan or Indo-European languages, the state of knowledge concerning them is further advanced than in the case of any other, so that it will be easy for the student to verify for himself the canons of classification by which this great Aryan family may be subdivided. It will be found that Sanscrit, Persian and the languages derived from these, belong to it; so also do all the languages of Europe with the exception of Turkish, Hungarian or Magyar, Basque, Lappic, Finnic and Esthonian. To prove this, the first test of kinship to be applied is that of grammar; and where there is no similarity of grammar, it is vain to pursue enquiries along other lines of research, with the view of discovering genealogical connection. A moderate acquaintance with two or more of the languages in question will enable the student to trace the similarity of inflections that prevail in the declension of substantives and the conjugation of verbs throughout all the members of the Aryan family. This was the work that Bopp was the first to accomplish; and other workers in the same field have made the result of his labours easily accessible. When the similarity of grammar has been established, it will be easy for the student to collect and compare for himself lists of words including names of family relationships, the personal pronouns, the numerals and some of the more common verbs; and he will find that, with not a little diversity, there is throughout the family a fundamental identity of roots. Even the superficial diversities which exist in these fundamentally identical roots, so far at least as the permutation of consonants is concerned, have been reduced to law; and the labours of Rask and Jacob Grimm have added an important canon to the apparatus by means of which the classification of the languages of the Aryan family may be verified.

Inductive labours such as these have brought out for us the distinguishing marks of each separate group within the family; and every student of language now knows the geographical distribution of these groups and the manner in which they came to be so distributed. We all know that, ages before the beginning of recorded history, the ancestors of the Hindus, the Persians, and the prinicipal European nations dwelt in one place and spoke the same language—that, when the place became too narrow for their numbers and the sustenance it afforded was insufficient, large companies migrated, some to the East and some to the West, forming distinct nations and distinct languages—that one nation thus migrating would remain for a time undivided and then separate as before into two or more distinct nationalities and languages—that the Greeks and Latins, for example, thus lived together for a long time and then branched off from each other to do independent work and to frame each a distinct speech for its own purposes—that in this way the oldest Aryan nation of the west, the Celtic, was divided into Cymric (Welsh, Cornish and Armorican) and Gadhelic (Gaelic, Erse and Manx)—that in Eastern Europe we have the Slavonic and Lettic languages—while in Central and North-western Europe we have the Teutonic; which within historical times have pushed back their Letto-Slavic neigh-

bours, so that now old Prussian, like the Slavonic tongues of German Austria, is extinct, and both the capitals of modern Germany—Berlin and Vienna—stand on ground that was once Slavonic. Our canons of classification thus divide the principal languages of Europe into six family-groups, *viz* :—Celtic, Italic (including the languages of all the Latin races), Hellenic, Slavonic, Lettic and Teutonic ; to which has been added Thrako-Illyrian.

In the prescientific age there prevailed a much simpler classification of languages according to which all forms of speech were divided into two classes. The Teutons, for example, looked on all outside the charmed circle of their own nationality—by whatsoever name known, by whatsoever intellectual or moral qualities distinguished—as *wealhas* or strangers. They were accustomed to call all foreigners with whom they came in contact—whether Celts or Slavs, Italians or French—by this one levelling epithet which was their equivalent for the Greek ' barbarian' or the Hindu 'Mlechcha.' This is the reason why our forefathers, when they settled in Britain called the Celtic language *Wylse* and the people who spoke it *Walas*, which we have modernised into Wales and Welsh ; this is why the French who were such unwelcome visitors and settlers in England in the reign of Edward the Confessor, are called by the contemporary annalist, the ' Welisce men ' ; this is why, when Edward himself came from the life of an exile in France, he was said by the chronicler to have come ' hider to land of weallande ' ; this is why, as late as the days of good Queen Bess, Sir Thomas Smith, in his book on the Government of England, speaks of " such as be *walsh* or foreign", not meaning Britons in particular, but any people whose tongue cannot be understood. The Teutons on the continent have precisely the same usage ; for we are told that, in the Swiss chronicles, the war between the Swiss and Charles of Burgundy is always spoken of as a war between the Dutch and the Welsh ; and in the Acts of the Apostles, x. 1., where the Englishman reads " the Italian band ", the German, in Luther's version, reads " die da heisst die Welsche." In like manner an old English translator might have rendered St. Paul's words, " If I know not the meaning of the voice, I shall be to him that speaketh a Welshman and he that speaketh will be a Welshman to me."* But though readers of history and geography are still familiar with the root in such names as Cornwall, Wallachia, the Walloons of Belgium, and the Canton Wallis of

* 1 Corinthians, xiv. 2.

Switzerland, the name in any form as an equivalent for ' stranger' has now sunk below the horizon of modern English ; and ' Welsh ' is limited in its application to the speech and the inhabitants of the ancient principality annexed to England by Edward I.

As there has been a narrowing in the application of ' Welsh ' as a term of race and language, so there has been a corresponding narrowing of its ancient correlative ' Dutch ', which it is not easy to account for. In our forefathers' way of speaking, whatever they could understand was Dutch, whatever they could not understand they called Welsh, the tongue of the strangers. ' All lands Dutch and Welsh ', says Freeman, is a common phrase to express the whole world. Dutch and Welsh, like Jew and Gentile, might have stood for all mankind. ' Dutch ' was thus used as equivalent to ' Teuton. ' Writers began however to use the word as equivalent to Germans, including Hollanders, Saxons, Swabians, Bavarians, and so forth, altogether. In this way it is used down to the seventeenth century. It is frequently so used, for instance, by Thomas Fuller [*ob.* 1661] ; and in many parts of the United States this, with so many other old usages, is still retained, so that English travellers in America have sometimes been puzzled at hearing men, whom they would have called Germans, spoken of as Dutchmen. It need hardly be stated that the Germans call themselves and their tongue Deutsch to this day ; only a little confusion now and then arises from their using the word ' Deutsch ', sometimes to express the Teutonic race in general, and sometimes to express their own particular nation and language. Within the last two hundred years, however, we have got into the strange way of using the word ' Dutch ' to mean only one particular class of Dutchmen, namely our own kinsmen in Holland and the other provinces which make up the kingdom of the Netherlands.

The Teutonic group must itself be subdivided in order that we may get more exactly at the position of English. It is usually divided into Gothic, Scandinavian, Low Dutch and High Dutch ; and the common feature which characterises these four classes—connecting them with each other and differentiating them from all other groups—is their adaptation of the *Ablaut* or change of vowel in the conjugation of verbs to express the distinction between present, past and participle (as in *sing, sang, sung*)* To set forth the peculiarities of each of these sub-divisions, the marks by which they are mutually distinguished, would require far too minute an ex-

* Sayce's Introduction to the Science of Language, Vol. II, p. 83.

amination for our present purpose. Interesting as it would be to trace the effects produced on our own civilization and language by contact and admixture with the Scandinavian race, we must forego what in other circumstances would be a pleasant task. We cannot even speak with any measure of fulness on that most ancient specimen of Teutonic literature, the translation of the Scriptures by the Arian bishop Ulphilas [*ob.* 388 A. D.]—which has been preserved for us in a MS. of the fifth century known as the *Codex Argenteus* which lies in the royal library at Upsala. However Gothic and Scandinavian many differ in respect to grammar from each other and from the rest of the Teutonic tongues, let it be sufficient to remark that in their phonetic elements, they correspond, according to Grimm's law, rather with Low Dutch than with High Dutch, and we must therefore endeavour to distinguish as clearly as possible the latter from the former.

The most important to us is certainly the Low Dutch. It covers northern Germany and something more. In one shape or another —for of course it has its local dialects like other tongues—it stretches from Flanders to the Elbe and the Eyder. It is the tongue of Northern, Lower or Nether Germany, the lands near the sea and at the mouths of the rivers, the speech of what we specially call the Netherlands or Low Countries and of the great plains stretching away eastward till we get out of the reach of Teutonic and Aryan languages altogether. High Dutch, the speech of the south or the highlands of Germany, is now the classical, polite, book German. It was in this dialect that Luther translated the Bible and from that time it was destined to become the standard and dominant speech of the Fatherland. But it is with Low Dutch we have henceforth exclusively to do. "Our relation to the other Aryan tongues is that of distant clanship; our relation to the High Dutch is that of real kindred, of cousinhood; but our relation to the Low Dutch is one of actual brotherhood. They are our bone and our flesh; their blood is our blood; their speech is our speech; modified only by the different influences which have, in the nature of things, affected the two severed branches of the race during a separation of fourteen hundred years."*

Of the Low Dutch languages, there are but two that are literary and national. These are English and Dutch or the language of the kingdom of Holland. If we cast our eyes over those parts of

* Freeman, Macmillan's Magazine, Vol. 21.

Europe where people of Low-Dutch blood still dwell, we shall find that, with these exceptions, their speech maintains an unequal struggle for existence side by side with that of their more vigorous neighbours. In districts within the north-eastern boundary of France, Flemish is still the language of the people; but it has been, within historical times, so largely superseded by French, that it is not doubtful it will share the fate that Cornish met with ere the close of the Tudor period, when it was superseded by English. Flemish was in the sixteenth century the language of the court of Flanders and Brabant, but it has since then been considerably encroached on though not yet extinguished, by the official languages of Holland and Belgium. Within free Belgium, French has in the course of ages made such progress as to become the polite and classical language, the language of books, of government and of the coin. Though Flemish has of late been striving for recognition and has gained a place in literature through the pen of Hendrik Conscience, it is in danger of being swallowed up by French on the one side and Dutch on the other.

Of all the Low Dutch tribes, the Frisians are the most nearly related to us in blood and speech. It would hardly be too much to say that they are the Englishmen who stayed at home and did not emigrate into Britain. Their oldest literary remains are some legal documents of the thirteenth century, but the speakers of Frisian are now greatly reduced in numbers and confined within a small area, extending along the coasts and islands from Holland up to Holstein and Sleswick. "Who can explain by what process this language has maintained itself so far and no farther, a language with which one cannot travel above eight or ten square miles? Why should not these few thousand people have surrendered long ago 'this useless remnant of an unschooled dialect?'" The language holds its place, however; and, in spite of the smallness of the population, is spoken in a large number of sub-dialects which have suddenly sprung into notoriety of late in consequence of the curious forgery known as 'The Oera Linda Book' which professes to have been composed in the year 559 B. C.* It may linger long as a provincial and colloquial speech; but for literary and national purposes it cannot compete with Danish on the one side and Dutch on the other.

Behind the Frisians, we have the great nation of the Saxons,

* Sayce's Introduction to the science of language, Vol. II, p. 92.

stretching much further inland. The old Saxony is all that part of north-western Germany, including Westphalia, the late kingdom of Hanover and other states, reaching as far as the Elbe, and taking in the Duchy of Holstein beyond it, up to the Eyder. All this is naturally Low Dutch but, surrounded as it is by High Dutch, which has ever since the translation of the Bible by Luther been the standard and literary language of the Fatherland, it has no more chance of making head against its powerful rival, than the Provencal could hold its own with 'the French of Paris' or the Anglian of Dunbar (the Lowland Scotch) could with standard English. The oldest specimen of old Saxon literature is the Christian poem of the *Heljand* (= *Heiland*, Healer or Saviour), which is preserved in two MSS. of the ninth century; and was written at that time for the benefit of the newly converted Saxons. Its modern representative is put down as unfashionable, as 'bad German;' just as the so-called Scotch is set down as if it were 'bad English'. High-Dutch is slowly but surely making its way against the Platt-Deutsch, the fate of which has long been sealed.

These Low Dutch tongues, on the continent—Flemish, Frisian and Saxon—are all giving way before their more vigorous neighbours; and, if Dutch is an illustration of the law of the survival of the fittest, it is worth considering what causes account for its survival and pre-eminence. Its oldest literary documents carry us no farther back than the sixteenth century; but it was just then that the civilization of the people blossomed out with a glory which has since distinguished it above all the other Low Dutch tongues on the continent. The language of the people, being the reflex and exponent of their civilization, owes its vitality and force to two great scenes in their history. Like the Greeks, the Dutch had to contend with the difficulties that nature had imposed on their situation. Exposed to the inroads of the sea and destined, if inactive and quiescent, to live in a perpetual slough of despond, they made the bold resolve to shut the sea out of their dominions. By means of the famous dykes they showed how far it might come without venturing to come farther. By this great public work they found, what every overcomer of difficulty finds, a great accession of vigorous independence, a vast increase of self-respect. But this did not end their troubles or shut the door to the incoming of new vital forces. They were in danger of political slavery under the tyranny of Spain, until they roused themselves to fill one of the most

splendid chapters of political history that the annals of Europe contain. They expelled the Spaniard and called themselves once more free; and the fruit of their well won freedom showed itself in the new vigour of their political and social and literary life. The literature of Greece burst forth into a new development after the Persian wars and the new-won freedom of the Dutch found a similar expression and moulded itself into a shape and vitality which it will not soon, if over, lose.

The records of English as a cultivated speech carry us much farther back than those of Dutch. But we must go farther back even than that seventh-century monument—the Beowulf—to catch the spirit and tone with which the first English planted itself on British soil and assumed a character so different from what prevailed in various quarters of the continent where other Teutons conquered and settled. The Teutons were attracted to Britain at a time when their brethren further south were being attracted to wider and richer lands. The coming of the Jutes, Angles and Saxons into Britain was part of a great movement that affected the whole of Europe. The Roman Empire was the natural prey of the barbarians of the north; for, where the carcase is, there the vultures gather together. The Goths, the Vandals and the Franks are the best known federations that crossed the great Alpine backbone of Europe to swoop down on the richer fields of the sunny south; and they variously conquered and colonised Italy, Spain and Gaul. But the difference of policy between those who invaded on the continent by land, as compared with those who invaded the island by sea, is one of the most instructive facts in Teutonic history. In the middle of the fifth century, the Teutons—who had previously come to Britain only as plunderers—began to settle and colonise. The Roman legions had left the island on hearing the far-off echoes of Alaric's war-trumpet, to repel the ruthless barbarians. The Celtic Britons were once more their own masters.

How far Britain was romanised, we cannot, from lack of records, exactly tell. The dwellers in towns would probably use for the most part the Roman language, while the inhabitants of the rural parts would know only their mother tongue; and as regards religion we may conceive of native Britain as not more Christian than native India is at the present time. But, however that may be, the national spirit of the Celts was roused and they were prepared to resist to the death the sway of another oppressor. The Teutons on their part were ready for such a challenge. With all their heredi-

tary hatred of the foreigner, with all their love of adventure and spoil, they would make no compromise. Their terms were banishment, slavery or death. The war was, as far as any war can be, a war of extermination. No quarter was given save perhaps to women and such as consented to become slaves. Most fled to take refuge among the mountains of the west—in Cumberland, Wales and Cornwall,—while some found on the other side of the channel a home in Brittany.

How different was the result of the conquests by the Teutons on the continent. There the drama was re-enacted, which Horace in a well known couplet has described as the sequel to the Roman conquest of Greece.

> Græcia capta ferum victorem cepit, et artes
> Intulit agresti Latio. *Epist.* ii 1.

Though Greece was conquered by the Roman sword, yet she in her turn conquered Rome by means of her literature and those liberal arts which had not before been cultivated amongst the Latins. In the same manner the Teutons who conquered Italy, Spain and Gaul were in due time amalgamated with the conquered, and adopted their language, their manners and their religion. The speech of these countries was a corrupt Latin and when the Teutons adopted it, they imported into it a certain infusion of Teutonic elements. The compound thus formed is called Romance. The languages of Italy, Spain, France and of all countries where the Latin races have settled, are so called because, however much the inflections may be attenuated and reduced, the grammar is essentially Roman, not Teutonic. What happened with respect to language, happened also with respect to religion. For Christianity had become the religion of the Empire and was destined to embrace the whole of Europe. The Teutons, wherever they settled on the continent, became Christians; or, if they happened, like the Goths, to have adopted Christianity in its Arian form before they conquered the Romans, they thereafter became orthodox or catholic.

The causes of this remarkable difference in policy on the part of the Teutonic conquerors of Britain as compared with that of their continental brethren are to be found mainly in the fact that the latter had long been familiar with the Romans. Their territories were conterminous; they had often met in war; sometimes the Teutons fought against the Romans, sometimes they fought as mercenaries in their service. The result was that they had learnt to

understand and respect Roman ideas and Roman institutions. They entered Roman territory, not as destroyers like Attila and his Huns, but in the double capacity of conquerors and disciples. "No vulgar error," says Freeman,* "is more utterly groundless than that which looks on the Goths and other Teutonic settlers as wilful destroyers of Roman buildings or of other works of Roman skill."

But the Teutons who conquered in Britain were so situated geographically in their continental home that they never came into contact with the Romans or any other race whose civilization commanded their respect. They never attained to that breadth of view which could recognise the excellence of what did not grow within their own nationality. The Celts they knew only as a people that might be plundered; but, for the rest, they were simply *walas* and as *walas* they were treated. The old hatred of the foreigner was in their breasts still in all its primitive intensity.

How hostile to the interests of the science of language the evil distinction of 'Greek and barbarian,' of 'Dutch and Welsh,' was, students of the subject only too well know; but there are few forms of evil that are not sometimes providentially overruled for good. This was an occasion in history on which evil was so overruled. Cruel and barbarous as the policy of our forefathers was, it was the means of preserving pure and entire their Teutonic speech, without any considerable admixture of foreign influences. Had our forefathers acted as their brethren on the continent did, the English language would have been like so many others lost to the world. As it is, only a few words of Celtic origin are to be found in our vocabulary, traceable to that period. These are mostly names of such things (*basket* for example) as women and slaves were conversant with; and it is an illustration of the servile condition to which the old inhabitants were reduced, that the words *wealh* and *wylen* were used to signify male and female slaves. The vocabulary was thus affected in an infinitesimally small measure, the grammar not at all.

But the insular Teutons could not long escape Roman influence. It came to them within a century and a half after their first landing in Kent, not by war but in the peaceful form of religion. The spot which witnessed the landing of Hengest, is yet better known as the landing place of Augustine, and 'strangers from Rome' stood before the English king with the same old story as the fishermen

* MacMillan's Magazine, Vol. 21.

of Galilee proclaimed, so that the whole country became Christian in a century. The coming of Christianity—not to speak of its moral and spiritual results—had an important bearing on language. It fostered, if it did not create, the idea of national unity, and, though it was long before political unity, free from the trammels of the so-called Heptarchy was realized, and longer still before a standard national speech, freed from dialectic multiplicity, was attained, it cannot be doubted that the new faith affected the language and literature of England as powerfully as it affected for good all the literatures of the west. Intercourse being opened up between England and the continent, pilgrimages and commerce being common, wide doors were thrown open for the introduction of many new things, as well as new ideas, and consequently for the introduction of names of things, which means additions to the vocabulary.

But the day for a revolution in the grammar was not yet. That came later, in the wake of the Danish and Norman conquests. The former it is needless at this stage to do more than mention. Danish (or Scandinavian) and English being allied tongues and consequently possessing identity of roots, it is not easy to detect the Danish words that found their way into English. But the case is different with the Norman conquest. For, though the Normans were of Scandinavian blood, yet when they settled in Neustria in the ninth century and called the new land after their own name, they too, like the Franks, adopted the speech of the conquered people. When they conquered England therefore they brought with them a Romance speech ; and, although they did not carry on a war of extermination against the English, as the English had carried on against the Celts, they tried as hard as possible to make their language the speech of the country. With this view, it became the language of the government, of the law courts, of the churches and of the schools. Boys were required to translate Latin, not into their mother-tongue, but into Norman-French; and questions were put by teachers not in vernacular English, but in the foreign tongue, just as a question-paper on the Tamil language used to be set in English by the Madras University examiners. If it had been possible by Government-order or any similar exercise of authority to replace English by French it would have been done by the Conqueror; but attempts to direct speech by authority have generally met with as little success as Cnut's reluctant orders to the waves.

The march of events was very different from the programme which

the conqueror and his advisers would have drafted. The English people and the Norman-French did not at first settle down to live together on the best of terms. But as time went on circumstances occurred which brought about an amalgamation of the races in blood and feeling. The marriage of Henry I to Matilda of Scotland, a prince of Norman blood to a princess with the blood of Cerdic in her veins, may probably be taken as a proof that unions of the kind had begun to be made and that many more were made in consequence of the good example set by the royal house. Towards the close of the same reign, and throughout that of Stephen—the people being so largely left as ' sheep without shepherds '—there was a great revival of religion, the first of that great series of revivals, which English history records, in the preaching of the Friars, the Lollardism of Wyclif, the Reformation, the Puritan enthusiasm and the mission work of the Wesleys. The effect of this was to bind the people more firmly together in ties of the strongest and tenderest kind. These bonds of union were strengthened by the loss of Normandy in King John's days—a circumstance which helped to make the Norman lords feel that they were no longer strangers and foreigners, whose convenience might be served by a sojourn in the island, while their home and the head-quarters of power lay on the continent. They were now perforce obliged to feel that they had no home save England ; and that, even if they disliked it, the best thing they could do was to reconcile themselves to the idea of living with their English brethren in amity and making the best of their adopted country. Nothing serves more powerfully to unite contentious parties then having a common foe to fight against. Both English and Normans found such a foe in King John, whose tyrannical oppression was so intolerable, that lords and commons stood shoulder to shoulder till they wrung out of him the Magna Charta of 1815. A strong national feeling had thus been created which received its final touch from the French wars of Edward III which made the gulf that separated the mixed population of England from that of France as wide as possible. All this tended powerfully to unite the people in their political organization, in their social relations, in their religious sentiments and therefore in their speech. For three centuries the conflict went on and often it seemed doubtful whether French or English would win the day; but the triumph of the vernacular at length came and was officially declared in 1362 when an Act of Parliament was passed ordaining that the business of the law-courts should thereafter be

conducted in English, for the reason stated in the preamble of the bill, namely that French was become much unknown in the realm.

The most patent result of the conquest on the language is that a large number of French words found admission into the English vocabulary. But the vast infusion of words that came in with the Norman Conquest did not change the classification of the language any more than the infusion of Teutonic words changed the classification of the French. The former infusion is certainly greater than the latter; but still its character is the same. They are but infusions; and the substance remains intact. For the general principle must here be kept in view that it is the grammar and not the vocabulary of a language that decides the class to which it belongs; and, amid all the changes in the vocabulary, the grammar has ever remained Teutonic; while the grammar of French has as really remained Latin or Romance. When new words are imported into the vocabulary, they must take their place in sentences according to the laws which regulate the rank and file of vernacular words. In dress and general behaviour they must conform to the fashion and spirit of the language. In other words they become naturalized. Hence it comes to pass that even though at this day a majority of the words used by English writers are Romance, we may not call the language a Romance language. It is as it has always been Teutonic because it has always preserved a Teutonic grammar.

Amid all the changes of that changeful time, not the least important, as regards the language, was that which was begun by the Danish conquest, the change in the grammar. The language of the Beowulf, Caedmon and King Alfred was, like Sanscrit or Latin, a highly inflected language; but the language that rose phoenix-like from the fire of persecution, to which for three centuries after the conquest it was subjected,—the language of Chaucer and Spenser, Shakespear and Milton—was no longer an inflected speech. It is perhaps doubtful whether the loss of the inflections was wholly due to the conquest; whether the change to an analytical form of speech would not have taken place though the conquest had never happened. But there can be no doubt whatever that, if the work of William and his successors was not the sole cause of this change, it greatly accelerated the result. Without the conquest the change would not have been so rapid or so complete.

It is not difficult to see how in such circumstances such a change would be wrought. In their attempts to be mutually understood Englishmen and Normans, with a very imperfect command of each,

other's grammar, would use what words they had *minus* the superfluities of inflection. They would eke out their meaning by the aid of position, and gestures; and gradually a usage would get established which would not lay much stress upon the inflections; which would dispense with them altogether. In times of prosperity men are prone to use many things which in times of adversity they are equally prone to lay aside, and so it is with a language. When it has to struggle, for existence, when its apparatus is hard for many that must speak it, it will be prone to lay aside everything that it can possibly dispense with. In a Madras bazaar it were no uncommon phenomenon to hear an English buyer and a Tamil seller negotiating a bargain to the satisfaction of both parties, but with very small regard on either side to the requirements of the grammar of the other's language. And if phenomena of this kind were to become very general, it would not be difficult to forecast the result, if some more powerful influence did not prevent. But what tended more than anything else to destroy the inflections or to let them slip was the fact that for a long time after the conquest there was no literary cultivation of the language. Times of civil commotion are not favourable to the cultivation of literature. Only one chronicler goes on beyond 1066 and one stops abruptly at that point as if, after that disastrous year, the annals of the nation had no further interest for him. The supply of religious literature ceased because the native clergy were deposed or removed; and, the English landowners being dispossessed, who should patronize the gleeman and welcome the man of song in the halls of mirth?

English still remained the vernacular speech of the great mass of the people, though first Latin and afterwards French were used for all documentary purposes. When at length, in the days of King John, English poetry again began to be written, the language was broken up into dialects. Layamon's Brut represents one dialect, the Ormulum another. When there was no king in Israel, every man did what was right in his own eyes; when there was no national standard language in England, every community spoke what suited its own local convenience. As the railway, the telegraph, the steamboat and our cheap literature all have the effect of destroying dialectic differences, by disseminating in every corner of the kingdom the knowledge of a standard language, so the absence of all these unifying forces tends to disintegrate speech and causes dialectic differences to multiply. After the Conquest the differences of dialect were more numerous and more marked than they were before it. It can be shown, on the basis of grammatical differences,

that three dialects can be distinguished as belonging to this period, *viz.*, the northern, the southern and the midland and that the last of these should be still further divided into a west-midland and an east-midland dialect. The latter was the language of the metropolis, of the surrounding shires and of the court ; it was the language used by Orm and Robert of Brunne ; it was the language of Wyclif, Gower and Chaucer ; and by the influence of Chaucer it was raised to the dignity of a standard language.

We have thus seen how the language in which the Beowulf is written may be traced back through the Low Dutch Teutonic to the old Aryan home by the sources of the Oxus ; we have watched its progress through warfare and oppression in the island of its adoption, till it rose plastic and powerful in the hands of Chaucer, to become in a few centuries the literary language of a hundred millions of people ; we have followed English militant down through many generations, until we behold, in the Canterbury Tales, English triumphant.

GEORGE MILNE RAE.

INDIA UNDER HER NATIVE PRINCES.

(*Continued from page* 670).

The chief source of revenue then as now was a portion of the produce of the soil. The prosperity of India and the happiness of her people depend upon the degree of exactitude with which the State demand upon the land adjusts itself to the harvest of the year. Anterior to our rule, although money payments were the rule in Bengal proper, the more general practice was to take each year a proportion of the standing crop in satisfaction of the State dues. This practice was stigmatised as barbarous by our English administrators, and we substituted money payments with fixed assessments extending over a period of thirty years. Lord Cornwallis's permanent settlement was an exception to this rule, but it affects only a small part of British India. The argument urged in support of the new practice was that by fixing the assessment for a period of thirty years, we delivered the cultivators from the constant intervention and tyranny of subordinate revenue officials, and created rights of property in land, which could not grow up so long as the

State demand was varied from year to year. This reasoning, however sound in theory, has been woefully falsified in practice. Barbarous, no doubt, appears to be the practice of levying a tax in kind, but it was a practice exactly suited to the condition of the agricultural classes in India ; the grain was, in fact, the currency of the time, the chief medium of exchange. Wages of domestic servants and agricultural labourers were paid in grain. Grain, also, was the common medium of exchange for effecting petty purchases in country towns. The farmer's or labourer's wife took a basket of grain on her head to market, instead of a purse of money, and therewith purchased her week's supplies. There was so little coin in circulation among the people that the State demand could not have been levied in that form except with extreme difficulty, and the infliction of much suffering upon the people. The practice, however, possessed this signal advantage. It caused the State demand to adjust itself, with perfect ease and spontaneity, to good and bad seasons. The Government profited by a good season, and had to bear its share of loss in a bad season. The admirable working of the system was apparent in the condition of the people in parts of India such as Jhansi and the Deccan, when first they came under our rule. In both these provinces, the soil is infertile, and the crops are dependent upon the rainfall which is precarious and uncertain. None the less such was the elasticity of the native system of land assessment that the agricultural classes enjoyed a high measure of comfort and prosperity. Since these provinces were incorporated with our Empire, their former prosperity has vanished, and in no part of India are the people in a more depressed and miserable condition. Our rigid system of assessment has proved ruinous in a country where the yield of the land cannot be calculated upon beforehand. Lastly, the practice of levy in kind preserved the State from entanglement in the labyrinth of the infinite variety of tenures which prevail in an Indian village. These could never be made a subject of dispute in the civil courts, because, for all official purposes, the Government looked upon the village as embodied, so to speak, in its harvest for the year. It took its proportion of that, but had no occasion to interfere further. When we came into possession of the country, these things were hid from our eyes ; and, with the best intentions in the world, we introduced at one bound new methods of collecting and assessing the land revenue which have converted a once flourishing class into a huge horde of paupers. Our first act, in a newly acquired district, was to decree that the land

revenue should henceforth be paid in coin, without having previously ascertained if there was sufficient coin in circulation to allow of such a sudden and drastic change. There was not, and the consequence of our ill-judged and precipitate action was a ruinous derangement of values. A pressing demand for specie, glutted the markets with an immense quantity of produce, which had to be sold for whatever it would bring. And, although the space at my disposal will not allow me to do so, it would be easy to prove that the first effects of British rule in an Indian Province, owing to this violent change in the method of collecting the taxes, was to reduce the incomes of the agricultural classes by about 50 per cent. Again, the assessment being now levied in money, in the event of the revenue falling into arrears—a thing impossible under the old practice—it became necessary to proceed against individual defaulters in the civil courts. This at once entangled the State in the intricate labyrinth of the Indian land tenures, and it became necessary that for each Indian village there should be a record in which the names of all occupants together with the number of their fields and their rights of property therein should be enumerated. This was officially described as conferring an important privilege upon the ryot, by giving him a transferable right of property in the soil. Actually it transferred the guardianship of his rights from his own keeping, into that of the keeper of the village record. It never occurred to our revenue officers that a record of rights of property is of value only upon the assumption that it is correct, but that if liable to be tampered with, it must become a frightful engine of oppression—utterly destructive of all rights and all sense of security. Obviously the English officer at the head of the revenue affairs of a district does not and cannot possess the minute local knowledge required to preserve the accuracy of these records. Those chiefly interested, the ryots, are as helpless, for the records are kept in a language which they cannot read; and even if they could, they have no means of preventing or knowing whether or not the records have been secretly tampered with. In short, these all important records had to be lett in the custody of those very native officials, to emancipate the ryots from whose tyranny, the change had originally been effected. These men were underpaid, without supervision, and therefore specially liable to succumb to bribery and corruption, and under their supervision, the records became, in the course of a few years, a mass of grand confusion, and imposture. Among the many causes which combined to produce the insurrection of 1857 none were more

potent than the fraudulent sales of land effected by means of these falsified records, by which ancient landholders were converted by hundreds into the rack-rented tenants of some grasping and unscrupulous usurer. The difference, in short, between our land revenue system and that of our predecessors was this. They were content to levy the State demand by a simple process which had superficially, a barbarous appearance but which was adjusted with nicety to the social and climatic conditions of the country. We aimed at an impossible perfection, and realised our conception so imperfectly that we achieved nothing but the general ruin of the people. Since then we have continually but impotently striven to protect the ryots from the destructive effects of our own revenue. And in this year of grace 1884, Lord Ripon is still busy attempting to solve the distressing problem.

Lastly, the foundation, as it was of the entire social and political fabric was the organisation of the village communities which contained in miniature all the elements of a State, and was well nigh sufficient to protect its members, when all other protection was withdrawn. The inhabitants of an Indian village, in the old days, formed a sort of petty republic the affairs of which were managed by hereditary officers. The chief of these were the headman who had a general superintendence over the affairs of the village, settled the disputes of the villagers, attended to the police, and collected the Government taxes; the village accountant, whose duty it was to register the names of proprietors of land, to note down all changes among them, to attest all deeds of sale, transfer or assignment, and to keep an account of the cultivation and the produce; and, lastly, the boundary man who was expected to know the limits of the different fields and to measure and allot the lands. Whatever disputes or doubtful matters there were which could not be settled offhand by one or other of the abovementioned functionaries were referred for decision to a tribunal known as the 'Punchayet' which was a committee of five men chosen on account of their ability and integrity from the inhabitants of the village. If this machinery failed in the detection of wrong-doing, recourse was had to the aid of religion. The peepul tree in every Indian village is supposed to be tenanted by one or other of the Hindoo triad—the God of Creation, Preservation, or Destruction. He sits among the branches, and his ear is soothed by the music of the rustling leaves. The large cotton-tree is the abode of Gods even more terrible. These are local deities, invested with a special superintendence ove- the

particular village in whose neighbourhood their leafy habitation is located, and not having such extensive duties as any of the supreme triad, they can, of course, exercise a minuter supervision over the thoughts and actions of the mortals around them. To one or other of these trees a suspected offender was led by the elders of the village. The inhabitants stood round, while he gathered a leaf and crushed it in his hand, saying—'May the God who sits in that tree so crush me and mine if I speak not the truth!' With the aid of these supernatural terrors, the detection of crime under native rule was easy, certain, and altogether inexpensive; and when we have come into possession of a province, the civil officers have found it difficult to prevent a prisoner from forthwith testifying against himself. "I have had before me" writes Colonel Sleeman "hundreds of cases in which a man's property, liberty, or life depended upon his telling a lie, and he has refused to save either by telling it!"

The indestructibleness of the corporate life of these village communities is strikingly illustrated by an incident related by Sir John Malcolm in his Report upon Central India. During the long period of trouble which closed with the extermination of the Pindarees, numerous villages situated in the valley of the Nerbudda were abandoned by their inhabitants, and the fields remained uncultivated for upwards of thirty years. The inhabitants were scattered abroad in every direction; many of the head-men became plunderers; many of the villagers cultivated lands at a distance of many hundred miles from their homes; the majority of them had found refuge in the large towns, and were earning a subsistence as gardeners. Nevertheless they never abandoned the hope of returning to their old homes. The inhabitants of each village kept up constant communication, intermarriages were made, and the feeling of connection seemed only to become stronger in adversity. When convinced that tranquillity was restored they flocked back to their roofless homes. Infant headmen, in some cases the third in descent from the first emigrants were carried at the head of these parties; and when they reached their villages, every wall of a house, every field was taken possession of by the owner or cultivator, without dispute or litigation among themselves or with Government; and in a few days everything was in progress as if the ancient routine had never been disturbed.

This vigorous corporate life was not peculiar to the agricultural classes. It knit together with hardly less strength, the trading,

manufacturing and banking classes. Its effects were manifold. It created in each class a force of social opinion which was an efficient restraint upon individual greed. It awakened a spirit of brotherhood, which without a compulsory poor-law, provided the means of subsistence for the infirm and indigent of every class. It produced a spirit of trust and strict honour in the carrying out of commercial engagements which have never been surpassed in any country. It taught the individual to identify himself and his private gain with that of the class to which he belonged, thereby creating that abundant stream of private munificence of which I made mention in an earlier part of this lecture. But, above all things, this corporate life, as it existed without the aid of government and beyond the cognizance of the laws, continued to discharge its functions in a healthy and orderly manner, when both government and laws had been replaced by anarchy and chaos. And so it was, that as one province after another came into our possession, our English officials were surprised to discover behind the turbulence and disorder consequent upon the breaking up of the once magnificent Moslem Empire, an inner social order hardly affected by the tumult and struggle around it, but busy, active and prosperous. Did time permit I could produce abundant evidence of this, as it is, I will limit myself to a single authority but he shall be a very competent one. Sir John Malcolm writes as follows. "With respect to Malwa, I saw it in a state of ruin caused by the occupancy for a period of more than half a century by the Mahratta armies, the Pindarees, and indeed the assembled predatory hordes of all India, yet even at this period, I was perfectly surprised at the difference that exists between a distant view of such countries, and a nearer examination of their actual condition. I had ample means afforded to me, as the person appointed to occupy that territory, and to conduct its civil, military and political administration, to learn all that the Government records could teach, and to obtain from other sources full information of this country; and I certainly entered upon my duties with the complete conviction that commerce would be unknown and that credit could not exist in a province which had long possessed, from its position, the transit trade between the rich provinces of Western India, and the whole of the North-west Provinces of Hindostan, as well as the more eastern ones of Saugor and Bundelkund. I found to my surprise, that in correspondence with the first commercial and monied men of Rajpootana, Bundelkund and Hindustan, as well as with those of Gujerat, dealings in money to a large

extent had continually taken place at Oojein and other cities, where bankers of character and credit were in a flourishing state, and that goods to a great amount had not only continually passed through the province, but that the Insurance Offices which exist through all parts of India, and include the principal monied men, had never stopped their operations, though premiums rose, at a period of danger, to a high amount. The native governments of Malwa, when tranquillity was established through our arms, wanted nothing but that which the attachment of the natives of India to their native soil soon supplied them with —the return of the inhabitants. And I do not believe that in that country, the introduction of our direct rule could have contributed more, nor indeed so much to the prosperity of the commercial and agricultural interests, as the re-establishment of the efficient rule of its former chiefs and princes ..... With regard to the Southern Mahratta States, I most unhesitatingly state that the provinces belonging to the family of 'Putwurden' and some other chiefs on the banks of the Kistna, present a greater agricultural and commercial prosperity than any I know in India. I refer this to their system of administration which, though there may be at periods exactions, is on the whole, mild and paternal; to the knowledge and almost devotion of the Hindoos to all agricultural pursuits; to their better understanding, or at least better practice than ours in many parts of the administration, particularly in raising towns and villages to prosperity from the encouragement given to monied men, and to the introduction of capital; and above all, to Jagheerdars residing on their estates, and these provinces being administered by men of rank who live and die on the soil, and are usually surrounded in office by their sons or near relatives. If these men exact money at times in an arbitrary manner, all their expenditure, as well as all they receive, is limited to their own provinces: but above all causes which promote prosperity is the invariable support given to the village and other native institutions, and to the employment, far beyond what our system admits of, of all classes of the population."

A few words in conclusion. Brief and superficial as is the foregoing sketch of the state of India under her Native Princes, it has, I think, been sufficiently detailed to show that the laws and customs which then regulated the lives of her inhabitants were not laws and customs which have been arbitrarily imposed upon them by the fiat of a conqueror. They were the natural and genuine pro-

duct of the national character and the national faith, and because they were so they possesed that flexibility and adaptive power which are characteristic of all natural growths. This or that military adventurer might establish his supremacy in this or that portion of the continent, but he had not the means, even had he felt the desire, to interfere with the working of those institutions already in existence among the people. But he was conscious of no such desire. He was himself a native of the country in which he had risen to power. He had grown from infancy to manhood under the shelter, so to speak, and protection of these immemorial institutions, until he, not less than the meanest of his followers, had come to regard them as part of the natural order of the universe. He knew of no other way of carrying on the business of the country, and no native of India would have entertained so wild a project—so it would have presented itself to him—as that of devising a new system out of his own head, and then forcing it upon his subjects. The dynastic revolutions in India, anterior to our arrival in the country, were caused by contests for a particular position in the political order; they did not aim at the subversion of that order, or to produce any change in the constitution of society. And the wealth-producing classes—thanks to their admirable capacity for self-government, and the strong corporate life that knit them together—were but little affected by them. But all this was changed when we appeared upon the scene. We were the products of a civilisation differing in every possible way from that which had wrought with such beneficence in India, and we regarded what we did not understand with the contempt and scepticism which are usually the concomitants of ignorance. Unhappily, too, for the people of India, we differed from our predecessors in power in another very important particular. We did not, like them, depend for the preservation of our power, upon the loyalty of our subjects, but upon the might of a great nation at the other side of the globe. This consciousness of an independent reserve of strength operated to make our English officials far less tender and considerate of the popular feelings, affections and prejudices than their predecessors had been. Strong in the conviction of their own intellectual and moral superiority, strong, also, in the knowledge of an irresistible material force existing behind them, they fell into the error of supposing that whatever they did, or attempted to do, was, as a matter of course, a vast improvement upon anything which the people had experienced before. I do not know of any sadder reading than that of an Indian province during the first half century of

British domination. The same story is repeated in province after province with heart-breaking uniformity. A number of British officials charged to overflowing with ignorance and philanthropy are let loose upon the devoted province. They set to work under the impression that the material to be operated upon is a population reduced to anarchy, and upon which, consequently, they can impress any shape that is most pleasing to them. They are the potter; and the population are to be as passive clay in their hands. Actually, they have before them, not only a very complex social organisation, but one of extraordinary toughness and endurance. A desperate conflict at once begins between this social order and the judicial and administrative system which obstinately ignores its existence. In this conflict the prosperity of the country, both agricultural and manufacturing, is rapidly and completely destroyed. The heaven-sent English administrators are much at a loss to account for this grievous result. It cannot be from any lack of wisdom in themselves, for are they not the products and the evangelists of a higher civilization? And they set it down to the "cussedness" of the native character—to the inborn depravity of the "oriental mind"—which refuses to be prosperous and happy although provided with all the appliances requisite for achieving such a condition of life. But at last, the upper classes having been destroyed and the lower sunk in indebtedness, the revenue begins to fall off. This is serious, and investigations are then set on foot to ascertain the cause of this most appalling phenomenon. Then, but not till then, the discovery is made that our own precipitate and unthinking ignorance has been the cause, and an attempt is made to reconstruct the things that we in our blindness, have destroyed. Of course the old order cannot be, and never has been restored in its integrity, but, as in the case of Mr. R. M. Bird's village settlement in the N. W. Provinces, a superficial semblance of it is laboriously patched together and this lame and impotent result is trumpeted abroad as an evidence of the superior wisdom and beneficence of our rule. But the principle of gradual evolution cannot be ignored with impunity in India, any more than in any other quarter of the globe, and our work in India, so far, has been almost wholly destructive socially, religiously, politically. The effect of our presence in India has been to throw down the ancient land marks, and reduce the lives and the minds of the people to a condition of anarchy. There are no traces yet apparent of a new order arising out of the ruins the past. We preserve the public peace and that is

all, and even this order, more by our *prestige*, than by the possession of a strength adequate for its preservation. As for what we call "British rule in India," it tends more and more to lose 'touch' of the people, and to become a soulless machinery revolving in obedience, not to the wants or wishes of the people, but to fixed departmental routine.

ROBERT D. OSBORN,
Lieutenant Colonel.

[It is instructive to read side-by-side with Col. Osborn's lecture the following sentences from a recent issue of *The Hindu*—the leader of Native thought in Southern India. They occur in a leader on Sir Mahdava Rao's exhortation to loyalty which we print on another page:—

"It must be a spurious and mischievous education that government now so assiduously endeavours to spread among us, if those who have received it cannot see and act on the conviction that they can hardly place their destinies at the disposal of a more safe and benevolent rule than that of the English nation. If their general knowledge or knowledge of history do not teach that, we should not value much the education that fails to produce that effect."

Or take the following paragraph from a review of the last *Report on the Moral and Material Progress of India*, which *The Hindu* adopts (we are sorry to say *without any acknowledgment*) from the *Times*:—

"The administrative reports which supply the basis of this statement show the working of a vigorous, vigilant, and beneficent government in all its manifold employments. They supply a picture of affairs for a certain period, but the exact meaning of the lesson which it seeks to convey can only be gathered by comparison between several of these annual statements. There should, then, be no difficulty in deciding as to the exact truth, and as little need of official apologists as of official accusers. We are sometimes told of the shortcomings of English rule and of the need of improvement. If an opinion may be formed from the accounts of those who do the work on the spot, no one is better aware of the fact than the Government itself, and it is engaged in one ceaseless effort to improve the condition and well-being of the population. But very few say anything of its vast superiority over every other system of government ever established in India before, or of the utter impossibility of supplying its place. Some evidence of this is furnished even in the report under notice, by the meagre and unsatisfactory returns from the states which are still in what is very erroneously termed the enjoyment of native rule. One or two of the larger, which feel themselves exposed to the searching glances of English criticism, have indeed made some progress; but from so important a state as Cashmere there is absolutely no information whatever, a sufficiently sure indication that there is nothing pleasant or creditable to report. It is in the smaller states, where the petty chiefs, secure in their insignificance, and mindful, perhaps, that the saying *de minimis non curat lex* applies to over-occupied governments as well as law courts, enjoy to the fullest their brief hour of authority and debauchery, that the worst scenes of tyranny are enacted, and that misrule decides everything in its own bad way. From

these the report is almost unanimous that the treasury is more or less hopelessly insolvent, and that the mismanagement of the chief could not be worse. Far more practical good would be done by those solicitous as to the condition of India if they would turn some of the criticism they now so unsparingly confer upon their fellow-countrymen to what is daily happening in the states, big and little, whose rulers, by the generosity of England and the scrupulous adherence of the Queen to the terms of her proclamation, enjoy for a little space longer the privilege of considering their own personal pleasures as of far greater importance than the happiness and prosperity of their subjects."

The opinions expressed in these extracts are the direct opposite of Colonel Osborn's, but it is only by paying attention to both sides of a question that we can ever arrive at truth.—ED. *C. C. M.*]

FUJI-SAN OR FUJI-YAMA.

FUJI-YAMA,* or, as it is more properly called by the Japanese, FUJI-SAN,* is the highest mountain in Japan, and is admitted by all travellers to be one of the most beautiful mountains in the world. It is the mountain so frequently represented in Japanese works of art. The reverence of the Japanese for their king of mountains is quite romantic. As the British, French, or American steamer nears the port of YOKOHAMA, at the first view of the snowy peak, the passengers are surprised by seeing a few of their fellows doff their hats. These are Japanese, who, after travelling in Europe or America, have returned to their native land and thus greet it by saluting its most revered spot. The mountain is a dormant volcano and like many other mountains of that character is in form a truncated cone. It is situated on the South-east side of the main island, about seventy-three miles by road westward from the capital, and lies in a hollow entirely surrounded by mountains of much less height, except on one side where it makes a grand sweep to the SURUGA Gulf. Over these surrounding mountains its snowy peak can be seen from all sides. From TOKIO, the capital (formerly called YEDO,) it appears a beautiful regular cone and one of the principal things to be attended to in building a house is to secure a view of FUJI. In almost all gardens a miniature FUJI is sure to be found from which to view the grand mountain. FUJIMI-CHO, Fuji view street, all along which the mountain can be seen, is one of the

* Yama and San both mean "mountain." The most probable meaning of FUJI is "not two" so that FUJI-SAN means "the peerless mountain."

best known streets of the capital. The first eruption of this princely peak is said to have taken place in 285-6 B. C. when, as is recorded in Japanese books, FUJI was raised and Lake BIWA* sunk in one and the same night. The last eruption was that of 1707—the fourth year of the period HOYEI. Just as a great earthquake shook the provinces of SURUGA and TOTOMI, a fire was seen between the SUMOTO and ASHITAKA YAMA, (the two ridges which mar the very regular shape of FUJI), which spread hot ashes like rain. The sound of this eruption was heard at YEDO, whilst the ashes were carried as far as the provinces of SHIMOSA, KADZUSA, and AWA, one hundred miles from the mountain. It was then that the hump HOYEI-ZAN on the south side of the mountain was formed and it was so named after the period in which the eruption took place. In the autumn of 1877, I found its height to be 9,400 ft. Just below it, FUJI curves more gracefully, and smoothly than at any other part, and the view of this portion from the summit is very much admired by the natives. The base of FUJI is cultivated to a height of from 1,000 to 2,000 ft. On the south-west side I have seen growing at a height of 1,000 ft., tea, tobacco, rice, millet, maize, beans of different kinds, sweet-potatoes, and several other plants which have no English names. Above the cultivated portion there is a belt of varying breadth of what might be described as prairie ground, and above this is the vast belt of forest which encircles the mountain for half its height. In the forest there is a great variety of trees including cryptomeria, pine, fir, chestnut, elm, maple, willow, boxwood, &c. Above the forest is the bare lava cone where no plant is found except the curious NIKUJI which grows amid the sand and rocks and is supposed to cure many diseases.

A stranger travelling in Japan during the months of July and August is struck by the numerous bands of men and women whom he meets clothed in white with broad sun hats and a straw cloak about their shoulders, each band having the same Chinese symbol on their hats. These are pilgrims who are making the round of the sacred mountains of the 'Land of the Gods' and are sometimes known as FUJI-KO or FUJI's children. They have a choice of four roads to the summit of FUJI, each road passing about ten mountain-huts, where they can rest during the day or sleep, if night overtakes them. One of the most interesting sights to the foreigner

* Lake BIWA is the largest lake in the country and is situated near the ancient capital KIYOTO, in the south of the main island, about three hundred miles from FUJI-SAN.

who has reached the summit is the praying of these pilgrims to the rising sun. I have seen two hundred or three hundred of these white-robed devotees turn out of the numerous sheds on the summit and chant their prayers most melodiously to the rising ruler of the day. Is it possible that they have instinctively imbibed the lesson which modern science has taught us that life on earth is but a part of that bright orb? The collection of huts on the summit is situated chiefly on the east side of the crater, and might be said to form for two months in the year a little village with ever-changing inhabitants. Indeed, the last time I was there with some friends, to our utter amazement, our passports were asked for by a most respectable officer of the law, an unusual incident at a height of over 12,000 feet above the level of the sea.

The height of FUJI has been carefully determined by means of an omnimeter to be 12,365 ft., above the high water mark at Rumadzu (a small city at the base of FUJI,)—a number easily remembered when we consider that 12 is the number of months, and 365 the number of days in the year.

The crater is of enormous size and takes about an hour to walk round it; it has been found to be from five hundred to six hundred feet deep. From the summit on a clear day the view of rather more than one seven-thousandth part of the earth's surface, including mountains, lakes rivers, valleys, plains and seas is really superb. Away to the west is the lofty ON-TAKE in SHINANO, second in height only to FUJI itself amongst the mountains of Japan, towering as it does to the height of ten thousand feet: to the E. of N is the grand active volcano Asama-yama, belching forth constantly a cloud of smoke, while to the N. W. are seen the lofty, rugged, and evidently volcanic peaks of YATSU-GA-TAKE and KOMA-GA-TAKE. Sometimes these high mountains with all below are hidden by stormy seas of snow-white cloud, but even then the mountaineer feels the splendour of the scene ample reward for the labour.

But it is not on a summer pilgrimage that we are bent now. Our Christmas holidays are approaching and we intend to spend New Year's Day on the slope of FUJI-YAMA. This even exceeds the enthusiasm of the natives. To them, my colleague and self seem anxious to have a snowy grave on the sacred soil of the gods. Noble ambition for foreigners! We mount our steeds and away we dash direct to the noble peak. The road we take is known as the KOSHIU-KAIDO, so-called from its leading to the chief town of the Province KOSHIU. Our grooms are sent twelve miles ahead, for we wish a good trot with

which to commence our romatic trip. Our cook also has gone ahead with our baggage, consisting of extra clothes and provisions, in a JIN-RIKI-SHA, a perambulator with shafts, drawn by a man,—the common kind of conveyance on level roads. After the first twelve miles our journey was performed almost entirely on foot. The first day's journey took us to HACHIOJI, one of the great silk centres. From this we plunged right into the midst of the mountains, and our road followed more or less the valley of the river KATSURA, which is the outlet of a large lake at the base of FUJI. On we go, through mountains high and low, peak rising over peak, FUJI ever sitting majestically above all covered with his snowy crown. We were much struck with the wintry appearance of the country as compared with the surrounding of the capital which we had left. Entire hills were covered with leafless trees, for the region being a silk one, had many mulberry plantations, all the trees of which were bare. Even the cryptomerices were brown, although the pines and bamboos were green. In the villages, however, we found small evergreens, such as holly, camellias, &c., and on the mountain plateaux were occasional fields of young barley, which relieved the bareness of the surroundings. How different the same country appeared in the month of July when all the people were apparently engaged in feeding the silk-worms or winding the fine fibre from the cocoons! Now they seem to be engaged principally in weaving cotton, and whilst we were struck with the poverty in summer, we could not detect the same in winter.' It was pleasing as we came in sight of the mountain-villages to see the pretty school-houses conspicuous by their neat spires. At SARU-HASHI (monkey bridge) we crossed the KATSURA by a bridge 100 feet high, just where the river flows through a most romantic ravine; and about ten miles further on we re-crossed it at a beautiful waterfall known as SHIRA-TAKI or the white fall. The last five miles of our walk to the mountain was by moonlight and then we reached the inn of KAMI-YOSHIDA, where we were most hospitably received. At the last station, as there was no horse ready to take our baggage we had foolishly left it to be brought on as soon as possible. The result of this was that we had to be content with a Japanese supper and to go to bed, so intense was the cold, with our clothes on, even to our overcoats and hats! We were so delighted with our mountain hosts that next morning, our luggage having arrived we presented them with a box of red herrings, a gift of fish being the most complimentary and acceptable present that can be given to a Japanese.

We are now at the base of the mountain which we have come to walk round, and this, we calculate, will take us just four days. And such a walk! Now through moorland, then through forest and everywhere over snow. At SHITO-ANA, a hamlet wherein we slept, it was indeed a weird sight to see the keepers of the inn and two foreign professors from the capital, with their servant, all squatting around the blazing hearth, talking of the customs of different countries and finding that, after all, the same joys and sorrows, the same hopes and regrets stir the breasts of mankind, whether it be in the east or the west, in the city or on the mountain. Here, to our surprise, we got clean and most comfortable beds. A Japanese bed usually consists of cotton wool quilts, laid down on the clean, thickly-matted floor for the sleeper to lie on, and similar quilts to cover him. The national politeness, we found, penetrated to the very mountains, for men, and women, boys, or girls that we met greeted us in the same graceful fashion to which we were accustomed in the city. The views of FUJI from every side were most interesting. We noted how isolated it was although surrounded closely with high hills, which prevented it from appearing isolated when viewed from a distance. On the south-west side alone the encircling chain of mountains is broken for there it boldly slopes to the very ocean in one continuous curve. As we look at its summit the clouds of snow blown off by the wind gives it all the appearance of having once again asserted its fiery nature.

New Year's night we spent at GOTEMBA, where we put up at the charmingly situated house of OMIZA SHOZAIMON. GOTEMBA might be compared to an oasis in the desert so fresh and green is it when compared with everything around. Here one would think was the birth-place of the dark-leaved camellia, so abundant was it. Next morning we rose before seven, and on opening the sliding windows of our bedroom, were greeted on this New Year's morn with the most enchanting view we had yet had on our journey—loveliest perhaps we had seen in our lives. There was FUJI, covered with snow, made pink from the rays of the rising sun, the moon shining overhead,—night enveloped in day—whilst in the foreground the rich green camellia trees and waving bamboos gave all the appearance of summer laid down in the midst of winter.

"O! FUJISAN! O! FUJISAN!
Thy snowy top can I forget?
Though distant, hidden from my view,
In mind's dark eye I see thee yet."

Our kind old landlady gave each of us for a New Year's present a large hot potato! a usual custom of that romantic country. Just as our walk round the mountain was completed, the snow began to fall in rather a threatening way, and so we hastened our descent lest we should be kept longer in the mountains than we desired. We returned by the historic road called the Tokaido, and as we passed through the long villages found everybody making holiday, men and women, boys and girls playing at battle-door and shuttlecock, whilst before each door were the usual pine branches and bamboos with strings of cut paper stretching between them to keep evil spirits away. So ended our delightful Christmas pilgrimage.

D. H. MARSHALL.

THE WANDERER.

(From the German.)

When from the hills I seek the plain
Tame grows the scene and moans the main;
I wander on with clouded brow
And still my heart says "whither now?"
To me the sun seems dim and cold,
The flowers seem faded, life seems old,
And folk's speech tuneless poor and small
For I'm a stranger 'midst them all.
Where art thou my beloved land,
Yearned for so long but never scanned?
The land, the land with hope aglow,
The land, wherein my roses blow,
The land where I my friends may see,
And where my dead come back to me,
The land that speaks my native speech—
The land—
O Land where art thou?
I wander on with clouded brow
And still my heart says "whither now?"
In ghostly voice comes back the sound
"Where thou art not there joy is found."

M. R. WELD.

LITERARY NOTICES.

THE PARABLES OF JESUS: *A Methodical Exposition. By* SIEGFRID GOEBEL. *Translated by Professor Banks of Headingley. Edinburgh T. & T. Clark* 1883.

The companion volume to the second volume of Weiss's Life of Christ, issued by Messrs. Clark for the latter half of 1883, is Goebel's Parables of Jesus. It is, so far as we know, the first elaborate work on the Parables that has been translated. Considering the number of works already written on the subject in our own language, the readiness to receive another from the continent is a proof of the great interest in the teaching of Christ that accompanies the modern study of his Life and Person. In point of style Goebel's work reminds us occasionally of Weiss. But the differences are as marked as the similarities. There is here none of the critical spirit of which the other is so fully possessed. It is true that in the parables more than in perhaps any other branch of biblical study historical criticism can be dispensed with. Each parable is an incident in itself, and when rightly translated may often be fully appreciated apart from a true conception of the historical circumstances of its utterance. But we do not mean that this work is uncritical. The rules of interpretation given by the author are, if not complete, correct as far as they go, and he has besides a large amount of sound sense and sobriety of judgment to rely on. The work is free from ordinary errors of method and fallacies of exposition. Yet it is in some degree impaired by the extent of its traditionalism, and we notice further an apparently opposite but really kindred defect, viz., the minuteness of the textual investigation. Nearly every page bristles with Greek words. An undue importance is sometimes attached to the discussion of a particle. It seems to us that writers, who are deficient in historical, sometimes lose themselves in textual criticism. The lower criticism belongs properly to commentaries; and its large combination with a general exposition will necessarily limit the circle of readers.

This work suggests comparison with the still larger and, we think, more successful work on *the Parabolic Teaching of Christ* published by Dr. Bruce a year ago. Both aim at being complete systematic expositions rather than sermons or discourses. The work of Dr. Bruce has of course an immense superiority in respect of style. In method too he is more truly critical, though in his results he is often unexpectedly conservative. Both will be valuable aids to the expositor, though with neither will he always agree. Dr. Bruce has aimed more at scientific treatment and completeness, yet he leaves parables undiscussed, and suggests rather than carries out new lines of study along which a more perfect if not a permanent work may yet be written.

In the first place it is not clear what is meant by a parable. Goebel recognises a certain number as usually so styled, and in what is common to these he seeks a definition. In the New Testament the term parable is applied to almost any figure of speech, and to some utterances that are not strictly figurative. Sometimes it is nearly equivalent to proverb: sometimes it denotes

only the unexpected. In the parables usually so called Goebel finds the distinctive element to be figurative history expressly imagined; and his definition is as follows;—*a narrative moving within the sphere of physical or human life, not professing to communicate an event which really took place, but expressly imagined for the purpose of representing in pictorial figure a truth belonging to the sphere of religion, and therefore referring to the relation of man or mankind to God.* Yet of the select parables at least four are contained in a single sentence, while of the unrecognised several are richer in suggestion and fuller in detail. In our opinion it is impossible to distinguish those that are narrative from those that are descriptive; and again to distinguish the longer story from the brief metaphor or apophthegm in which a similar lesson is embodied. No distinction was conceived by the evangelist, and we find all gradations in length and variety of incident. Dr. Bruce therefore marks an advance when he selects for discussion some of those briefer sayings which he calls parabolic germs. Thus the saying, "they that are whole need not a physician, but they that are sick" is treated as a germ which could be expanded into a parable representing Christ as the Healer of the Soul. But the number selected by Dr. Bruce could be largely increased, and a full examination of such would reveal more fully the method of the great Teacher and largely enhance the value of any study of the Parables.

A characteristic of recent works on the subject is an attempt to classify the parables. This is so far natural, but the more full the examination is the less likely is the method to be successful. Goebel recognising the difficulty treats the subject in three groups that are supposed to be formed chronologically—the first series (Matt. XIII.), the later parables according to Luke, and the parables of the last period. But this plan has no critical recommendation except convenience. In the introduction however a division according to subject matter is sketched thus, I. The nature and development of the kingdom—its (1) founding (2) development, and (3) completion, II Right conduct of members of the kingdom, towards (1) God (2) man and (3) worldly goods. With regard to this division it may be said that no parable was uttered to describe the *nature* of the kingdom. In no earthly illustration could that divine idea be expressed. The second division refers simply to human conduct—a subject as wide and varied as human life. But a closer examination of the arrangement shows its futility. In conduct towards God, e.g. are placed side by side the parable contrasting the self-righteous Pharisee and the penitent publican with its lesson of humility, and the two parables of the treasure and the pearl that teach the value of divine truth or the worth of the spiritual life. Again in conduct towards man, the parable of the prodigal son, which we thought was a revelation of divine love, is placed along side of the parable of the Samaritan, which teaches that in a merciful character, and not in birth or priestly office, are true sanctity and nobility to be found. The classification of Dr. Bruce into theoretic parables, parables of grace, and parables of judgment, is put forth with more confidence. And much may be said in its favour, though in our opinion he separates parables with the closest affinity of thought, and does not clearly distinguish the first and third divisions. It may be doubted if any classification can be satisfactory. No subdivision is correct that does not apply to the whole teaching of Christ. The parabolic belongs to every

aspect of that teaching. Dr Bruce sees this and maintains that Christ taught as Master, as Evangelist and as Prophet of righteousness, and that with this three-fold character his classification corresponds. Yet these three departments can scarcely be called distinct. Truth and righteousness are in the N. T. nearly the same; and it was the privilege of the prophets to speak words not only of winged wrath but also of tender grace. The difficulty is more manifest when we go over the parables individually. They give us glimpses into the character of God, explanations of Christ's mission and work, lessons of conduct in life and of service in the church. Sometimes in a single parable are various lessons, as in the Prodigal Son we are taught the eternal love, the degradation of sin, forgiveness and the welcome of the penitent, the duty of philanthropy, besides the special lesson it contained for the Pharisees.

What is wanted in a work on the parables is, first, an explanation of this mode of teaching, its simplicity, its beauty and its power; its ground and purpose and fitness and the view thereby afforded of the mind and heart of Christ; and secondly, such explanation of the habits and circumstances of life in Palestine as will make these sayings readily intelligible in our day. This latter purpose is not easily fulfilled by European scholars. They read one another's works and they supplement by books of travel. But the value of their study is oftener in the meditation than in the exposition. The East is different from the West. It is not indeed a changeless East either as regards time or place. The customs of India are not those of Palestine, as the customs of Italy are not those of Denmark. But there is a sameness in the climes of the sun as there is a sameness in the countries of modern Europe; while the differences of East and West are (as a shrewd statesman observed) as the differences of two planets. It is scarcely creditable to missionaries with such means at their disposal that they should leave it to the untravelled students of the West to grope after the meaning of these sweet and matchless utterances.

WITNESSES TO TRUTH *by the Rev.* EDWARD HOARE, M.A. *Honorary Canon of Canterbury. London: the Church of England Book Society.* 1884.

Canon Hoare is well known as a writer of booklets for 'the million' on the essentials of Christianity. He is never ambitious of a learned audience and makes no attempt to traverse the higher walks of Biblical criticism or historical research. As an earnest parish priest his work is with the plain unlearned men and women who form nine-tenths of every flock, and it is for them—that he may bring home to their consciences such truth as will strengthen and guide them in the difficulties that beset both thought and life—that he always writes. Judged by this standard the little book before us is excellent. It contains in six chapters—or, shall we say, addresses?—a large amount of sound matter in plain straightforward language. The author's object is to show that as the ages pass on they bear increasing witness to the truth and inspiration of the Holy Scriptures. The headings of the six chapters—or the six witnesses that he impresses into his service—are (1) Difficulties; (2) The Races; (3) The Jews; (4) Palestine; (5) Scoffers, and (6) The Sacraments. The argument in the first and fifth Chapters is decidedly strained:—

"The Bible says, plainly and repeatedly that there are things 'hard to be understood,' and, therefore, if I were to meet with nothing of the kind, and if everything contained in St Paul's Epistles and the other Scriptures were perfectly plain, the only conclusion at which I could arrive would be that those Scriptures had not given a *true* description of the fact. Now, however, I find them in this most important matter perfectly true. The objection of the sceptic only leads me to trust my Bible. If there were no difficulties then I should begin to be afraid that my Bible could not be from God. But now the infidel himself is one of the best 'witnesses' that I can *put into the witness box*,....."

A similar argument is built up from 2 Peter iii. 3 "*knowing this first, that* there shall come in the last days scoffers." We do not admire either of these arguments; they are misleading and open to a very simple *reductio ad absurdum*. Our author would have done better to confine himself to the safer ground that "things hard to be understood" yield no argument against the truth of the Scriptures, that Eternal Truth is not measured by the human intellect.

The other chapters in which the Author deals chiefly with the witness of Ethnology and History are not open to any such objections. The argument is sound and simple, and, on the whole, excellently put. Prophecy is however difficult and dangerous ground and Canon Hoare does not escape every pitfall. Occasionally too there are pieces of exegesis, suggestive perhaps and harmless but nevertheless far-fetched and fanciful. Take the following extract as a specimen. He is speaking of the prophecy 'Japhet shall dwell in the tents of Shem':—

But . . . I cannot help thinking that in these words the Spirit of God referred to something higher. When St. James was speaking of the call of the Gentiles, at what has been termed the council of Jerusalem, as recorded, Acts xv. 15, he quoted the words 'I will build again the tabernacle of David.' The conversion of the Gentiles was compared, therefore, to their admission into the tabernacle of David. . . . . Now bearing in mind the great fact that Jehovah is the God of Shem, and that the predicted Redeemer came from Shem, may we not believe that the tent, or the tabernacle, of Shem was a prophetic figure of the safety provided in the promised Son of God? The word Shem means 'name' and there may be something in the passage not unlike those other words, 'the name of the Lord is a strong tower; the righteous runneth into it, and is safe.' Now if the passage were so understood, it would lead to the conclusion that Japheth would shelter himself under the Jehovah of Shem, and so dwell, as it were, in his tent or under his tabernacle. It would lead us to expect a salvation through the Jehovah of Shem, bestowed on Japheth in such a way that Japheth should become possessor of Shem's inheritance."

THE RUSSIAN ANNEXATION OF MERV, *what it means and what it must lead to. By* CHARLES MARVIN. *London: W. H. Allen and Co.*, 1884.

Mr. Charles Marvin has already published nine works on the Central Asian question and two more are in the press. He is thus by far the most voluminous writer on the subject. And although his books are so many we know of none that is not well worth reading. That there is a certain amount of repetition in them goes without saying, but each book is so stored with facts, for the most part well attested, and so clear and graphic in style, that they are full of interest to all who attend to the great and perplexing question with which they deal.

The great lesson which Mr. Marvin has set himself to teach the British Public is that Russia is utterly untrustworthy—almost more so if possible than the Gladstone Government; that under the disguise of friendly profes-

sions she is creeping nearer and nearer the northern outposts of our Indian Empire, and that if we remain inactive, she will soon be ready and able at any outbreak of hostilities, (in the words of Skobeleff) to "organize masses of Asiatic Cavalry, and hurling them on India as her Van-guard under the banner of 'Blood and Rapine' thus bring back the times of Tamerlane." He finds however—as many have found before him—that the British Public is an obtuse pupil. John Bull is careless and apathetic and his government are wilfully blind. Mr. Marvin seems at last ready to give up his work in despair. He lays down his pen with an angry sigh arising from a deep conviction that it is all of no use.

"What power on earth can prevent those Russians from meddling with the key of India? It is a question I have been asking for years; it is a question I am sick of asking. Not without reason did a great continental writer point out to me in 1880, after a brief stay in London, the inutility of writing political works: . . . 'I have not met any statesman yet with a grasp of the Central Asia question based upon clear and accurate information. It is no use advising; your statesmen will not listen. It is no use writing books; your statesmen will not read them. The future of your Empire seems lost in the conflict of party—public opinion is of no avail. English Statesmen never read, but always pass opinions; the public always read, but possess no opinion to pass'?"

Mr. Marvin is certainly doing all he can to destroy this universal indifference. In the preface to the little book before us we are informed that he has distributed 500 copies gratuitously to Parliament and the press. For the moment, he tells us, he can do no more. But as there may be others anxious to assist in the "sacred task" of rousing England to a recognition of the real issues of the case, he invites them to send subscriptions to his publishers to be devoted to a wide gratuitous circulation of the book. We give Mr. Marvin the honour due to all earnest men, but we confess to a lingering sympathy with the British public, and shall not subscribe. We do not think that British interests will be best served by working England into a Russophobia that would lead, as Mr. Marvin evidently wishes it should, to diplomatic acts scarcely less than a declaration of war. So far Russian agression in Central Asia has been an undoubted—we had almost said unmixed—benefit to the tribes concerned. A fairly good government has been substituted for oppression or anarchy, vast fields have been opened out for commerce by the construction of roads and railways, and property and life have been secured. Whatever may be her ultimate designs Russia has so far acted with prudence, moderation and benevolence, and whether England and she would be more likely to cross swords if they were next door neighbours than they are at present is a point on which there may well be a difference of opinion.

In spite of its inflammatory character however we can recommend '*The Annexation of Merv*' as a very clear and concise account of Russian progress in Central Asia. Mr. Marvin shows that the annexation of the Merv oasis involves also the annexation of the Tejend oasis, the Atak oasis as far as Sarakhs, the Sarik settlements to within 140 miles of Herat, and all the steppe and desert lying between Merv and Persia on the S. West and Merv and Khiva on the N. West. The total area thus annexed is over 200,000 sq. miles and contains a population of 600,000 for the most part massed in oases within 250 miles of Herat. Merv by the Murghab road is 240 miles from Herat, while Quetta our present English outpost is 514 miles from Herat. But Merv is not the Russian outpost. By the annexation of the territory of the Sarik Turcomans Russia is brought along the valley of the Murghab to Pendjdeh at the foot of the Paropamisus range of hills or within 140 miles of Herat. At the same time Russia is straining every nerve to improve her means of communication with these distant provinces. Already her railways run from the south of the Caspian to Kizil Arvat, 533 miles from Herat, while the Indian railway system stops at Sibi, 599 miles from Herat. The road between Kizil Arvat and Herat is easy, and is passable for heavy wheeled traffic the whole way, which certainly cannot be said of the road from Sibi. The Caspian sea is traversed by over 50 steamers, which have been built in Sweeden and conveyed across Russia by canal and river, and is connected with the central depôts of Russia by two good lines of rail, and a service of 700 steamers on the Volga. These are all facts which cannot be disputed, and that they are pregnant with good or evil to Central Asia and India at no very distant date few will deny.

MODERN PHYSICS: *Studies Historical and Philosophical. By* EARNEST NAVILLE. *Translated by* H. DOWNTON, M.A., *Edinburgh: T. and T. Clark.* 1884.

This is a book which we would strongly recommend to the attention of our 'freethinking' friends. The freethought of this country, and indeed of all countries, bolsters itself up with the idea that science is on its side. Faith in a Divine Maker and Ruler of the Universe involves a cosmology that science will not hear of and therefore if we would be 'believers' we must be content to lag a hundred years behind the age. A few prominent scientific men have abjured all faith in the supernatural. From this basis 'freethought' assures us that science is inimical to faith, thereby justifying the definition given some-time ago by the *Contemporary*—"Freethought means much freedom and little thought." It is necessary sometimes to remind our friends that the greatest scientists of the past have been devout believers, that the greatest scientists of to-day are devout believers, and that therefore the presumption is that the greatest scientists of the future will be devout believers too. This is one thing that is done in the book before us, in which the examples of Copernicus, Kepler, Bacon, Descartes, Galileo, Newton, Leibnitz, Laplace, Ampére, Liebig, Fresnel, Faraday and Mayer are adduced and dwelt upon. But M. Navelle does more than this. He is not content with the merely historical view of the case. It is not enough that almost all sound scientists *have been* believers, he endeavours to show that sound science tends to faith, and that the union of the scientific spirit with the spirit of devotion is not a mere accident, but is a union brought about by the affinity of like for like. To reject faith in God, as the continual source and sustainer of that energy into which science is gradually resolving all the forces and phenomena of nature, is to part company at the outset with the law of causality in which the freethinker makes his boast. This *à prior* argument is worked out with a directness and cogency which it will be found hard indeed to rebut.

We have dwelt so far on the third chapter only, on the Philosophy of Modern Physics. But the other chapters on the Characters of Modern Physics, the Origin of Modern Physics, Physics and Morals and the Philosophical conse-

quences of Modern Physics are all equally excellent. The whole work deserves careful perusal and Mr. Downton deserves thanks for his excellent translation.

THE GOLD TREASURE OF INDIA, *an inquiry into its amount, the cause of its accumulation and the proper means of using it as money, by* CLARMONT DANIELL B.C.S. *Fellow of the Calcutta University. London Kegan Paul, Trench and Co.*

Mr. Daniell is already well-known as a writer on all questions connected with the currency of India and the intricate problems of exchange. By the essays which have appeared in some of the leading English magazines and Reviews he has shown himself to be both a clear thinker and a sound economist, and therefore the attention which the little book before us is receiving in mercantile circles at home is not surprising. Mr. Daniell has, however, hardly done himself justice. Though most of his arguments are sound and many of them exceedingly lucid, yet we fear not a few of them will fail to carry conviction to the general reader unversed in economical questions. Mr. Daniell presupposes too much knowledge of the fundamental principles underlying the question of currency, and hence he often begins at a point beyond the attainments of those who are likely to turn to his book for guidance and instruction. Had he aimed more at popularity and paid more attention to the illustration and exposition of the ground-work of his argument, even at the cost of increasing his volume by another hundred pages, he would in our opinion have done well. Still, to those who will take the trouble to study his chapters carefully, reading them if necessary again and again until they thoroughly grasp his argument, we may safely promise much new light on this interesting and important subject.

Mr. Daniell's object is to show that a gold coinage is the great desideratum of India at the present time, that there would be no great difficulty in its introduction as the people are anxious for it, and the gold is in the country, and that it would be a remedy—indeed is the only available remedy—for many of the difficulties which now beset Indian trade. He formulates a scheme for the introduction into India of a gold coin of the value of the British Sovereign and then proceeds to argue out its details in order. We give his scheme in his own words:—

"The first question that will be asked is, How is a gold currency to be established in the Indian Empire? As an answer to this inquiry, the following plan is suggested.

"(1) That the Government of India shall coin a gold coin in all respects identical with the £1 sterling of the currency of the realm, out of the stock of gold now to be found in India, to any amount in which the metal may be brought by its owners to the mints for that purpose.

"(2) That these gold coins shall be declared *legal tender* for the payment of *any sum of money due to the Government of India, at the option of the party making the payment*; and in other cases that they should be legal tender for the discharge of any obligation *amounting* to Rs. 5,000 and upwards, at the *option of the party making the payment.*

"(3) That the government of India shall from time to time declare (but not more frequently than may be necessary and convenient) the rate at which the gold coin of its currency shall be accepted as legal payment of sums contracted to be paid in silver coin; and this state rate of conversion shall be strictly regulated by the market value of the silver rupees of the British Indian currency in these gold Sovereigns.

"(4) That the silver rupee shall still continue to be legal tender for all kinds of payments, and in any amount, at the option of the party making the payment."

"(5.) That no person (the Government excepted) shall be obliged to take payment in gold of a debt due to be paid in silver, which may be less in amount than Rs. 5,000 unless he shall previously have agreed with his debtor to do so." pp. (104-5.)

To the cursory reader it may at first sight appear that the carrying out of this scheme would leave things pretty much where they are at present. The old rupee would still remain of variable value, and it must continue to be the only medium by which the vast majority of petty transactions are carried on. Now it is perfectly true that the rupee would continue probably for a couple of generations the dominant coin in India, but it is not true that it would remain as variable in value as it is at present. It must be borne in mind that there are two senses in which we may speak of *the value* of silver. (1) Its actual or normal value as determined by cost of production. This is steadily though slowly declining. Silver, as set over against human labour and sacrifice, is of less actual intrinsic worth than it used to be, and will be still less in the future. There was a time when one tola of pure silver was worth the tenth part of a sovereign. Now it is only worth a twelfth or less. The difference between the 2s. which the rupee used to represent and the 1s. 7½d. which it represents now is often—though very erroneously—spoken of as "loss" or "gain" by exchange. It is neither the one nor the other. The real loss by exchange is quite another matter. This gradual depreciation in the value of silver is absolutely inevitable. But it is slow and steady, and with the present conveniences for trade communication, could never give rise to anything more than temporary inconvenience. (2) Its value in any given place at any given time. This is determined by the law of supply and demand and may vary to a very considerable extent. If here in India we could ensure the rupee always being at its true intrinsic value—say if it could be kept stable at 1s. 7d., only varying in a downward direction along with the slow but inevitable depreciation of silver as a commodity, then trade would be practically unaffected. But this cannot be so long as silver is the standard, for the import and export of silver specie is so enormous that its market value is liable to constant fluctuations, making the trade dependent upon it difficult and precarious. But it may be asked would that not be so with gold? It would but to a very much smaller extent, for it must be remembered (1) that the market fluctuations of the precious metals are in an inverse ratio to their intrinsic worth, and (2) that England and India having the same gold sovereign as their standard any specie payments between them would naturally be made in these, and the value of gold would probably be thus kept pretty even in both countries. In the case of all Government remittances, which constitute the most important item to be considered, the Secretary of State for India instead of selling rupees in the English market would sell gold.

It may be asked would gold be taken to the Indian *mints* in any considerable quantities to be exchanged for a gold legal tender? In answer to this Mr. Daniell reminds his readers of the immense quantities of gold at present in the country. From the year 1835 onwards statistics compiled by the Indian Government and brought up to April 1882 show that the excess of gold imported

into India over that exported has been no less than £112,000,000. From various data which we cannot particularize, Mr. Daniell estimates that the gold in the country prior to 1835 was considerably over £100,000,000. If these figures be correct there must now be £212,000,000 of gold in India, or more than two and a half times the amount in circulation in the British Isles. Now there can be no doubt that if this enormous hoard—and a hoard it for the most part is and must be so long as gold is not a legal tender—could be transmuted into wealth by being set in circulation, many problems presented by the 'poverty' of India would be solved. But there is in this country on all hands an insatiable desire for gold in any form for the purpose of hoarding and whether any considerable effect would be produced upon this unhealthy desire by making gold a legal tender will on many hands be doubted. Some will doubtless go so far as to say that if any gold coinage were introduced into India it would soon disappear—being hidden away or melted down. Whether this would be so or not experiment only can determine. Mr. Daniell believes that the very opposite would occur and that the gold now in hoard would be gladly exchanged for coin.

Mr. Daniell is, we think, too sanguine as to the good results the adoption of his scheme would have. We cannot agree with him when he says:—

"If in the course of a few years the Indian Government could obtain a revenue of only £10,000,000 or £15,000,000 paid in its own gold currency, its principal financial difficulties would disappear." (p. 214).

But we do entirely agree with his closing remarks that:—

"Nothing in the fiscal or commercial condition of India offers any serious difficulty to the circulation of money on the terms herein discussed. Against the public advantage and the removal of the restraints on trade which this reform of the currency effects, there is no set-off in any way mischievous or injurious which it is likely to originate. For all the evils arising out of the 'Silver question,' it is the single remedy which can be applied to India."

Mr. Daniell's scheme is well worthy of attention, and we are glad to observe that no less an authority in such matters than Professor Bonami Price has pronounced in its favour.

NOTES AND EXTRACTS.

The Annual Meeting of the Senate of the University of Madras was held in the Senate House on Tuesday, April 29th. There was the largest gathering of Fellows that has ever been known in the history of the University. The chief business was the adoption of the Report of the Syndicate, the election of the various Faculties and of the Syndicate for the ensuing year, and the consideration of the recommendation of the Syndicate that the fees for the Matriculation, F. A. and B. A. examinations should be increased twenty per cent. We take the following extracts from the Syndicate's Report.

"During the past academical year there have been twelve Meetings of the Senate, fifteen of the Syndicate, two of the Faculty of Law, and four of the Faculty of Medicine.

"The Senate having passed a series of Resolutions regarding the institution of a Convocation of Graduates, a Draft Bill embodying these Resolutions to

amend Act XXVII of 1857 was adopted by the Senate and forwarded on the 7th September 1883 to Government, with a statement of Objects and Reasons and all papers connected with the proposal. Copy of the Minutes of the Meetings of Senate at which the matter was discussed was also forwarded at the request of Government. Orders have not yet been passed by Government on the subject.

"The Report of the Committee appointed to draw up a scheme of Studies and Examinations for the proposed B. Sc. Degree Examination was also discussed by the Senate at several Meetings. The final consideration of the subject was, however, postponed pending the submission of a supplementary Report which was called for. This supplementary Report has been sent in, and will be laid before the Senate at an early opportunity.

"The Report of the Faculty of Medicine revising the Bye-laws and Regulations for Medical Degrees, which was referred to in last year's Annual Report, was brought before the Senate, but the discussion was adjourned for the purpose of giving the Faculty an opportunity of considering certain suggestions made by Dr. Wilson, chiefly with respect to the Chemistry portions of the curricula. The Faculty's supplementary Report is now being printed, and will also be laid before the Senate at an early date.

"A Committee was appointed by the Senate at the last Annual Meeting to draw up rules of procedure and debate. Their Report was considered at several Meetings, and a body of rules was finally adopted, which will, it is to be hoped, facilitate the conduct of the business of the Senate. These new rules will first come into operation in connexion with the Annual Meeting of April 1884.

"A Sub-Committee of the Syndicate has been engaged in investigating the financial position of the University. An elaborate Report has been drawn up and carefully considered by the Syndicate, and certain recommendations based upon it will at an early date be laid before the Senate."

The recommendation referred to in the last paragraph involving the raising of the examination fees met with general approval and passed the Senate almost unanimously. The necessity for this step is found in the fact that the Government has given notice that it will no longer hold itself responsible for any deficits that may occur in the future in the University accounts. It is necessary therefore to make provision, by the establishment of a reserve fund, for such extraordinary items of expenditure as will be entailed by the repairs of the Senate House, &c. The Syndicate also finds it necessary to go back to the old plan of paying Superintendents of examination, and with the introduction of the new curricula for the Arts course a much larger number of examiners will be required than heretofore. Further the work of the Registrar is so rapidly increasing that it is necessary to give to that officer some additional help either by appointing an Assistant Registrar or securing the services of a gentleman with no other occupation. To meet these new charges an increase in the fee income was absolutely required. The increase determined upon will, it is anticipated, augment the revenue of the University by about Rs. 17,000 per annum.

Respecting the malpractises at the last Matriculation examination the Syndicate remarks:—

"There has been about the usual number of cases of candidates violating some of the rules laid down for the conduct of the examinations. But the Syndicate regrets to have to report a more serious matter in connexion with the Matriculation and F. A. Examinations. The general English paper for Matriculation and the Telugu papers for both Matriculation and F. A., were known to some of the candidates before the examination. A lengthened investi-

gation was carried on by the Commissioner of Police with the result that the misdemeanour has been traced to certain employés in the Government Press. The Syndicate has carefully considered the whole case, and after investigating the degrees of guilt of the different candidates inculpated, has dealt out such measures of punishment as seemed necessary to act as a warning to others, and to maintain the purity of the University Examinations.

"The Syndicate regrets the delay that took place in the publication of the results of the Matriculation Examination. The delay was entirely owing to the fact that one of the Examiners was nearly three weeks beyond the allotted time in sending in his marks."

The Anniversary of the Presidency College was celebrated in the hall of the College on Thursday the 1st ultimo. The Principal, Dr. Duncan, read an interesting report showing very satisfactory progress in every department. The number of students at present in attendance is, in the High School 94, and in the College 380; 115 of the latter being Law students. In the course of his report Dr. Duncan paid the following graceful and well deserved tribute to Mr. Thompson his predecessor in office.

"Mr. Thompson's connexion with the College terminated on the 5th March of this year. Appointed Principal in 1862, Mr. Thompson has held the office for twenty-one and a half years—a period covering nearly the whole of the time during which this Institution has been preparing candidates for the University Examinations. With the exception of about twenty who were educated under Mr. Powell all the graduates who look to this College as their *Alma Mater* have been pupils of Mr. Thompson. And thus it comes about that of the twelve hundred graduates of the University scattered throughout the Presidency, Mr. Thompson can probably claim a larger number than any other educationist in Southern India. To say that his name will be held in enduring remembrance by them will appear like a truism to those who knew Mr. Thompson's devotion to his work and the warm interest which he took in his pupils, not merely while they were members of the College, but throughout their after life. It is in contemplation, I believe, to perpetuate his name in a way which will be most gratifying to himself, by connecting it with something that will be either useful or ornamental to the College he loves so well and in which he spent the best years of his life. By the College staff generally Mr. Thompson is remembered as a straightforward, considerate chief, who ever set the example of conscientiousness in the discharge of duty. His name will long be cherished with affectionate esteem by the Professors, to each of whom he was known as a warm friend, a judicious adviser, and a genial companion."

At the close of the ceremony the chairman, Sir T. Madhava Rao, K.C.S.I. addressed the students. After reminding them of the position which, as educated Hindu gentlemen, they will occupy, a position combining "something of isolation and something of prominence," and causing them to be regarded by their fellow-countrymen "with curiosity—even with a shade of suspicion or jealousy" he went on to say—

"The English people, under a lofty sense of duty, have inaugurated a system of liberal education in India. They are naturally most anxious to know what the exact result of this noble and unparalleled experiment will be. Will it be good—pure and simple? Or will it be a mixture of good and evil? And, if the latter, will good or evil preponderate? With a view to determine this, the eyes of the dominant race are upon the educated native gentleman. He is accordingly being examined both telescopically and microscopically. Is he loyal at heart to the Government which has rescued India from the most hopeless anarchy and misrule? Will he make a better citizen? Will he make a better public servant? Will his moral as well as his intellectual standard be raised to the extent desired? It

entirely rests with the educated class to furnish satisfactory answers to these questions. I have every hope that everything in these respects will turn out as well as may be wished. This hope is the result of observation and study better than superficial. Yet, it cannot be denied that some doubt survives in some quarters. I fervently pray that the educated class may be able, ere long, to put an end to all doubt in this direction. This is no light matter to be treated with indifference. It is a matter which will affect important native interests and important native destinies. I have tried to show how the educated native gentleman is keenly watched, above, below, and around. To this fact, we must be always alive. There is every need for his conducting himself with circumspection, care and thoughtfulness. The quality most required of him at this critical period is—judgment. Life consists of a succession of innumerable acts; and excepting those of mere routine, every act has to be more or less directed by judgment in order that the right path may be steadily kept and all deviation prevented. Judgment to every man is like the compass to the mariner. I wish to impress upon the educated native gentleman the great importance of cultivating the faculty of judgment. In given circumstances, you must be able readily to decide what is right and what is wrong what is proper and what is improper; what is becoming and what is not becoming; in short what is best to do, and what is not so. And remember that the circumstances in which you have to form a judgment, constantly vary like the figures in a kaleidoscope. The power of judgment, like many other intellectual powers, can be acquired only by attention, by study, by exercise, and by deference to the suggestions of those who have already acquired the power. I am afraid that the scholastic career, as at present arranged with reference to the necessity of passing examinations, is not favourable to the development of the faculty of judgment. You have to read so much, you have to remember so much, in short you have to cram so much, that you have no time to think, to collect and compare facts; to weigh them and to strike the balance—processes so essential to the formation of a sound judgment. It is no wonder, then, that, in too large a proportion of instances, young men come out of the colleges, fraught indeed with facts, but with judgment more or less imperfectly developed. The sooner the defect is supplied after leaving college, the better will it be in the interests of the individual, of the community and of the Government. The power of judgment will be of great use in its bearing on the affairs of Government. Every Government like the one which rules India requires to be looked after in behalf of the governed. A constant and vigilant watch has to be maintained over its motives, its objects and its actions. I say this though it is my strong conviction that the British Government is the very best that India can have. Human nature is so constituted that the most exalted political virtues have an inherent tendency to deteriorate unless public opinion acts as a constant corrective. The most admirable feature of the British Government is that it fully recognizes this tendency to deterioration, and deliberately provides a check by granting the utmost possible useful freedom to the press. I repeat, then, that a constant and vigilant watch has to be maintained over the motives, the objects, and the action of the Government. But, this is a high order of work requiring special qualifications for its performance, and the qualification most essential is the possession of a sound judgment. When such judgment is wanting in, for instance, the Editor of a newspaper, his criticisms can carry little or no weight. Sensible people soon find out that the Editor has made up his mind to oppose Government indiscriminately at all times and at every point; that he regards it as his fixed function to abuse Government and all its measures; and that, therefore, he is not a safe guide to follow. His lucubrations are read with contemptuous indifference, if read at all. It is in proportion to the power of correct judgment developed in a community, that the community becomes fit for self-government of any kind. Habits of calm and correct judgment being diffused, the internal differences of the community diminish, greater unanimity is attained, and consequently greater strength and greater influence. This is a most important political truth which deserves to be kept constantly in view, especially by those who are more than ordinarily interested in promoting political progress. It may be somewhat useful to notice here one or two peculiarities of disposition, which are calculated to

impede the development of judging power. Some young men dissent from the opinion of their friends and neighbours, more or less unconsciously influenced by a mere desire to assert their intellectual superiority or intellectual independence. They express hasty judgments without doubt and without hesitation; they express themselves with an emphasis of language and tone, which deeply commits them and makes it difficult for them to recede. This is an error which ought to be avoided. Again, some young men think it derogatory to th intellectual dignity to consult others in order to secure correction or corrobor tion. They thus lose the immense benefit of consultation. They lose the m valuable opportunity to improve their own power of judgment by comparis with that of others, who may be their betters. Again, some young men valu themselves too much on their consistency. They rejoice in saying, "I hav always been of such an opinion, and I am not going to change it." Th thus affect a consistency which belongs to men of far maturer judgment This reminds me of a little incident which occurred to me a great many year ago. A number of pen-knives were placed before me by a hawker to choose from. Every one of these bore a proverb on its handle. I happened to take up one and immediately encountered a proverb which I can never forge The proverb was,—"A wise man sometimes changes his opinions; a fo never." Again, some young men are rather too fond of saying "I hate com promises—I will never accept a compromise—I am an uncompromising man Of course principles of justice and virtue should not be sacrificed in co promises. But the great majority of compromises required in life are of a harmless character. With respect to these when a man says "I will nev make a compromise," he says in fact, "I am an obstinate man. I will m no concessions to others. I insist on having everything I want." Su this cannot be right. In practical life individuals, high and low, and Gov ments, great and small, have often to forego something of what they wan order to secure the rest. It is continually necessary to give and take. W there is a serious difference of opinion, matters must not be brought to a s still. Each side has to make some concession to the other and thus bring a an agreement and smooth over difficulties. Even in the family circle one ca long afford to be uncompromising without creating for himself an exquisite b thorns. The principle has wider application in the social and political sphe may venture to say that no strong social or political organization for any u purpose would be possible, unless a spirit of compromise eliminates r differences—differences all the more numerous because of the heteroge elements which compose the population of India. Another weakness in y people, which I would strongly deprecate is too great a readiness to im the motives of men. We ought to be just and even generous in estim motives. We should presume that men of position and character are actu by good motives until such presumption is fairly rebutted. If we do not low this general course, we shall often incur the risk of misjudging men measures. I will mention one more weak point before concluding. Yo men here are often a little too apt to confine themselves to the legal as of matters. The legal aspect is, indeed, an important one. But matters require to be guarded in other aspects also. The legal standard is not the standard to judge by. A thing may be perfectly legal, yet it does not nec sarily follow that therefore it is right and proper. A thing may be perfect legal, yet it may be uncivil, it may be unbecoming, it may be offensive, it m be injudicious, it may be indiscreet, it may be unwise. Having reached limit of time assigned to me I must now conclude. Let me, in all kindne exhort you to think over some of these topics at your leisure and to disc them among yourselves. I am sure you will not be the worse for it."

These are wise and honest words. Sir Madhava speaks from an experie wider perhaps than that enjoyed by any other Native of India, and to such an audience as he had at the Presidency College his words should carry weight. He is himself a bright example of the lessons he seeks to teach. Through a long and honourable career he has exercised that sound and patient judgment, the absence of which in the rising generation evidently pains him. We trust