

THE EDUCATIONAL RECORD.

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[Vol. II.]

RETROSPECT.

1885—1886.

THOSE who look back on the events of the past year will perhaps see nothing that calls for special notice, and yet a great work is being carried on silently in our very midst. One is almost inclined to believe that there is no such thing as an Educational Department, if we are to judge from the very scant notices of Educational affairs in the local prints. With the exception of a 'local' now and again, and an occasional 'leader,' the Department has been severely let alone.

It is true that few, if any, important changes have been introduced; but, this at least we can conscientiously say, the Department is not stagnant. From the last Report on Public Instruction in Madras, our readers will see that there are no fewer than 15,587 schools and colleges in the Presidency, and that a sum of nearly 42,30,157 Rs. is annually expended in the cause of education. Madras has stolen a march on her sister Presidencies in passing the Degree of Licentiate in Teaching. It is a significant fact in the History of Education in India, that the Madras University should institute a degree for Teachers. It is a recognition on high authority of a profession but imperfectly admitted.

- The past year has seen a number of small changes, none the less important on that account. The introduction of the new course in the B. A. and M. A. Degrees, on the principle of *multum non multa*, cannot fail to commend itself. The increased scale of grants has much in it to show that the Director spent no inconsiderable amount of pains to give a fresh stimulus to Education. British and Continental

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The death of Mr. George Duncan, a zealous and hardworking educational officer, was felt by the members of the Department as a domestic bereavement. In the death of Dr. Bower, the University lost one of its oldest examiners, and Tamil Literature her firmest supporter.

The Madrissa-i-azam has been raised to the standard of a High School, under the head mastership of Mr. Fowler, the eldest son of our Inspector of Schools. Examinations in Music, Drawing, Carpentry were for the first time held in Madras. At the suggestion of Mr. Adam, Commercial and Industrial studies are to form a part of the school curriculum for the ensuing year. The appointments of Dr. Duncan as Director of Public Instruction, and Mr. Stuart as Principal of the Presidency College, in supersession of a number of seniors, were instances of judicious selections tempered by seniority. Female education, both in general branches and in Medicine, is making rapid strides in India.

We are now entering on a new year, and appear in this issue in a little bulkier form than usual. We have every confidence that the reading public will give us their hearty support this year as in the past, and we take this opportunity of wishing Heads of Schools and Colleges the success their hard work merits. Last year's work is now nearly over, and preparations are going on for a fresh lease of work; in this, as in everything else, we trust our readers will have a prosperous New Year.

WORDS TO TEACHERS.

Education in India is making rapid strides. Schools and Colleges are multiplying fast, and the Universities, year after year, with their thousands of successful candidates, are landing at least their hundreds as new teachers in the educational world.

Education is fashionable, and teaching is becoming one of the "rages" of the day. A few thoughts, then, for those who are freshmen to an educational life will not be out of place.

The first great point that a teacher of his fellows should call to mind is the grandness of his work. Leaving out the ministry of—
together spiritual and unworldly standing,
—compare education

Compare it with the Army, and we may remark that, although it may be a grand thing to die for one's country, yet death on the field of battle comes to but few of our soldiers, and far more of them die a natural death on their beds through sickness, or through old age, as worn out pensioners at home; and surely it is a grander thing to be training up the youth of one's country to useful lives than to be vegetating in soldierly want of work, or, even, than to be shooting down the enemies of the land.

Compare it with Medicine—it is a grand thing and a very grand thing indeed, to do good to the bodies of suffering humanity, but is it not a grander thing still to do good to their minds—to teach men to think aright, and to guide them into the paths of true knowledge and understanding?

Compare it with Law—and, although it may be a grand thing to avenge the oppressor and to right the oppressed, yet it is a grander thing still to avoid the petty disputes of Law, and the wranglings about legal terms, and to be walking in useful paths of peace and truth.

There are other professions than these, without number. There is the Engineer, who makes roads and bridges and canals; there is the Clerk, who drudges all day with his pen, copying out the dry literature of the official world; there is the Banker, who takes care of our money, and his Assistant who adds up his lengthy accounts. There are these and a hundred others, all of them useful in their way, but the Teacher, at any rate, will agree that his profession is the grandest of them all.

But wherein lies the grandeur of educational work? Not merely in imparting a dry-bone smattering of second-hand knowledge to a class. A Teacher's aim should be to do everything in his power to benefit his boys in every possible way—by his conduct and by his conversation both in and out of class, by his polite bearing to them all from first to last, by his refinement and his delicacy of feeling, by his sympathy with his pupils in their joys and their sorrows, by an evident appreciation of all that is honest and true, and by an undisguised contempt for anything that is wicked and mean and low—by all these, as most important additions to his energy in filling their brains with the scholastic knowledge that they should certainly contain. In short, a Teacher should endeavour to act in such a way that "old boys" of his class may look back upon their master of by-gone days, not as a mere "grinding" or "thrashing" "machine," but as a man whose memory is to be held in respect, and whose healthy.

manly influence is still at work amid the cares of the world, guiding his old pupils into honest paths of virtue and success.

And here we may remark that the influence of a Teacher is far greater than is commonly supposed. Boys are the greatest copyists in the world; and, in some way or another they will be sure to copy their master as the most conspicuous model that they have. That is, they will follow his footsteps for good or evil if he has gained their confidence, or they will mimic and ridicule his actions and his words if, by his folly, he has reaped their scorn. Ay, yes! I have known boys to copy most diligently the very hand-writing of a teacher, whom they have respected! And then, as for their faith in a master's word! I have known them to appeal to him as an infallible oracle, whose word was an unquestionable decision on every subject of debate—on the most speculative questions of astronomy, on guesswork questions of distances in walks, on birds' eggs and butterflies, down to the best way of cooking toffee or of sharpening a penknife. "Mr. So-and-so says so" is a clencher for every dispute—*Roma loquitur, causa fit*.

Yes, a Teacher has a wonderful influence for good or for evil, and it is, therefore, of the first importance that he should be most strictly circumspect in all his dealings with his boys. Every action is noticed, every word is taken into account, and the Teacher is responsible for the results. But, if a Teacher should be so careful not to give his pupils other than the very best of examples, how dreadful it is to think that there are actually men in existence, who, not only by bad example, but positively by deliberate actions, are purposely ruining their boys both in body and soul! Yet so it is; and we ourselves, have known, not one, but several actual cases of determined agents of Satan in charge of innocent boys!

Education, then, is a grand profession; and an earnest-minded man, who would scorn to use his influence for other than the very best purpose, is possessed of a wondrous power. But here we must remind a would-be teacher that in one special respect the profession is by no means a grand one—it is no mine of money. Many an engine-driver, begrimed with coal-dust and unconscious of grammar, receives the salary of two ordinary school Professors and more; and many a railway-guard would turn up his nose at the salary that many of our young teachers receive with delight. There are certain "plums" of the profession, of course, but, like the "plums" in a schoolboy's pudding, they are few and far between. But money is no matter of grandness at all. The true Teacher should enter on his duties with a

real love for his work and a real appreciation of his position. He is unworthy of the name if he enters the class-room only to look longingly forward to the sound of the bell that shall release him from his "daily task of servile toil," and if he thinks it enough to shuffle through his duties day by day so long as the salary is all right when pay-day comes round.

But here for the present we will stay. We have reminded our readers of the grandness of a Teacher's profession, and of the tremendous influence which a Teacher exerts upon the boys of his class. It behoves, therefore, all of us who are of this profession to watch our actions most closely, that they may be such as are fitted for imitation.

(To be continued.)

GLYN BARLOW, B.A.

ON FEELING A POEM.

ABOUT two years ago, the late Mark Pattison opened a College session with an address on *the Reading of Poetry*. "This," he said, "does not consist in merely reading the works of a poet, an account of his life, and a critical essay upon him. When all that is done, and done in the best manner, the reader may have understood the book but not the poet. Poetry is not a quantum of intelligible propositions; it is not to be apprehended through the logical understanding, but through the feelings. To him who does not feel a poem for himself, it is hopeless to explain its meaning; the most intelligent may be as dull to poetry as Dr. Johnson was to Milton's sonnets, of which he affirmed that the only thing to be said about the best was that they were not bad." The object of the following remarks is to contribute something towards pointing out what is meant by this *feeling* a poem for one's self.

Let us take a simple example—that well-known poem of Longfellow's, for instance—"Excelsior." Critics may differ in their regard for this piece, but it has taken too strong a hold on the affections of the world to be altogether put out of sight by the necessities of a ruthless criticism. This poem tells a story—an apparently sad story—of a young man climbing the Alpine heights, bearing in his hand a banner with the word *Excelsior* marked on it. He is warned of his danger, but an unconquerable determination urges him on, in spite of

warnings. At the end he is found lifeless among the mountain snows. As a descriptive or narrative poem, this is pretty enough; but the poem is not merely descriptive or narrative, it has a deeper meaning. Truth is here embodied in a tale—to speak to us of human aspiration, endeavour and suffering.

The two first stanzas form an introduction. We are taken to a village at the foot, or on the side of the snow-covered Alpine ranges. It is late in the evening, and darkness is rapidly enfolded the village in its shadows. A youth is seen passing the village with the evident intention of climbing the mountain. Thought and care have marked his brow, but the firm will, the determination to do or die, can be clearly discovered in the bright flash of his eye, in the hopeful, resolute voice with which he pronounces the inscription on his banner.—*Excelsior!*

Is this not a faithful life-picture? Youth is full of hope and promise—*Excelsior!*—higher and higher!—this is the most alluring motto for all young men of the better sort, for those who are unsatisfied with their attainments, who are anxious to learn deeper truths, to do nobler deeds. They read of the achievements of others, how great men of old have thought, have suffered, have triumphed at last; how even their failures were more honourable than the success of others. Inspired by these examples they too will fight,

“That ere they fall in scattered fire,
Their hearts may lift the world’s heart higher.”

And yet, how many of those who dream of great things are striving in earnest to realize these dreams? Such aspirations are easy to contemplate, have undoubted attractions by the cosy fireside at home; but how many are willing to carry them out faithfully through snow and ice, through the chilling atmosphere of the world’s opposition and scorn? Very few indeed; and perhaps this is what the poet means by saying that the device on the banner was a *strange* one, a device that belonged to an *unknown tongue*. Aspirations like these are only found in refined and elevated minds. They are unknown and strange to the common crowd who have abandoned themselves to the pursuit of gold, of pleasure, or of power, till their earlier instincts are stifled and destroyed; nor can they understand or appreciate them now, for the very memory of them is gone.

The next four verses of the poem describe some of the difficulties our young hero has to encounter. At first the temptation lies in the contrast between the happy homes he sees around him, and the white

glaciers that gleam with weird, ghastly brightness overhead. Within, the glowing household fires invite to comfort and repose; without, the biting snows repel him with their wild, desolate aspect. Why should he choose that which is so comfortless and chill? To what purpose, after all, is his endeavour? Will the happiness of the future recompense him for his sacrifices now? Such are the doubts that often beset the youthful aspirant after fame or virtue. Too many alas! are powerless against such temptations. But our hero does not falter. Even the groan that betrays the struggle in his breast is *Excelsior!*

But it is not alone the bleak inhospitable heights which should induce him to give up his attempts. There are actual dangers which the experienced old inhabitant of the village points out. The tempest and the torrent—emblems of open hostility—are not terrors to be despised. They are terrible enough to daunt, and powerful enough to overwhelm many a stout heart still, as they have often done before. He is not to be daunted. These obstacles have no terrors for him. The tone in which he expresses his unaltered resolve, is firm and loud like the voice of a clarion.

If open opposition cannot dissuade, there are softer allurements that may turn him from his course. According to Edwin Arnold, the sage counsellors of Buddha’s father were not blind to the fact that

“The thoughts ye cannot stay with brazen chains,
A girl’s hair lightly binds.”

Love, or what passes for it, has proved to be many a great man’s ruin. Instances will be familiar to most readers. Energy of character, force of will, high aims have not unfrequently been “melted into mere effeminacy,” and lost to the world. History is full of it. Antony might have risen to greater renown had it not been for Cleopatra. Samson had bitter cause to repent his infatuation for Dalilah. And the trial which requires men to sacrifice this pleasure is perhaps more difficult than others. In the presence of surpassing loveliness, many a man, like Sir Lancelot

“Had given all other bliss,
And all his worldly worth for this,
To waste his whole heart in one kiss
Upon her perfect lips.”

But if high achievements are to be gained, if lofty purposes are to be accomplished, even this must be surrendered. Our hero recognises it, and though the effort costs him tears, he relinquishes the prospect of this near happiness in the contemplation of another far greater if more distant.

Then the peasant adds his persuasions. The pine-tree's withered branch cannot be trusted; the sudden avalanche may at any moment cut him off. Even success we know has its dangers. But the youth is deaf to these counsels, and has already gone far up the height.

Now we reach the conclusion. At daybreak the monks of St. Bernard are at their usual devotions; but through the stillness of the dawn there rings a sharp cry through the hushed air—*Excelsior!* It is the cry of the youth who had been toiling upwards all the night, and who had reached a serener height than they. A search is made, and the faithful hounds find him lifeless indeed, but beautiful, half buried in the snow, but still grasping in his hand the banner with the strange device—*Excelsior!*

It will be noticed that throughout the poem there is not a word of direct teaching; not a word to tell us even the purpose of the poem. Ordinary readers will read it as a touching story, and pity or ridicule the hero according to their understandings. But those who are accustomed to think, who are themselves toiling up some steep and dangerous height, will find in it some encouragement and comfort. They will hear what others may be deaf to—the voice that falls thro' the cold, gray twilight like a falling star, bidding them let no difficulties daunt, no enticements allure them from their upward way; directing them to look above mere forms and ceremonies and customs, to the spirit of devotion and truth which is apt to be so rudely neglected; teaching them that virtue is its own reward, that happiness may be found elsewhere than in mere material pleasures; and finally pointing out that those who seem to fail have not always failed in reality, that the world's estimate of failure and success is as deceitful as are its views of lofty and genuine enjoyment.

There are other poems, forming possibly a more numerous class, where the teaching is given directly and in plain words; where the parable is closely followed by its interpretation. Even in these cases it is necessary to *feel* the sentiments of the poet, if we would enjoy the full beauty and significance of what is said. A great deal more is suggested by a poem than is directly expressed; and what is suggested has often greater influence over us than what is expressed. It is true that the suggestions that occur to one reader may not be exactly the same as those that occur to another. Many may take a very different view of Longfellow's poem from that which I have offered above. But however that may be, the essential point is that some feeling should be exercised, some effort made to get behind the story as it were, and to realise what impulses give rise to the wonderful creation

of poetry. It is this evidently which Mark Pattison means by *feeling a poem*. It is trying to read the mind of the poet through his work; trying to place ourselves as nearly as possible in his point of view and to see with the same sympathy and clearness.

Nor is it likely that all the feelings awakened by a poem can be expressed in words. Strange, indefinable sensations are roused, within us, which we cannot explain. We are conscious of them, for they stir our minds with a delightful unrest, they urge us on to action, or at least they excite in us the desire to act. Such sensations defy analysis.

Often a word or a line startles the fancy, or kindles the imagination of one reader, even though no similar effect is produced in another. For instance, Shakespeare tells us of a fair vestal, who defied the shafts of Cupid, and passed on "in maiden meditation, fancy-free." This line seems to be one of the most exquisitely beautiful even in Shakespeare. Why, it is not easy to explain, nor is it necessary to attempt any explanation. It is sufficient that the mind perceives a beautiful picture. If to some minds there is in it nothing unusual, nothing more picturesque than ordinary, that is their misfortune; it is no reason why the privilege should be denied of drinking deeper and sweeter draught from the pure fountains of poetic pleasure.

CORRESPONDENCE.

PAYMENT BY RESULTS.

To

THE EDITOR,
"Educational Record."

SIR,

Apropos of your Leader on this subject there are two points which I should like to mention—one for, and the other against, the system.

(1.) In many of our Indian village schools there is no over-pressure but there is an amount of apathy in both teacher and taught that the Result Grant only can remove: in these cases it acts as a healthy stimulus and brings the school up to, but not beyond, its natural and requisite pitch of efficiency. In large schools in towns the case is different; the machine there is in danger of being spoiled by its powers being overtaxed.

(2.) There is a very unpleasant feeling gaining ground that things are not being carried on as fairly as they ought to be by some of the subordinates of the department. I do not wish to assert that such is undoubtedly the case; but it may be well to point out what unlimited scope there is for fraud, with scarcely a possibility of detection, if an unscrupulous man wishes to feather his own nest. This then is the *modus operandi* which may be adopted. The school is examined for results, and to everybody's surprise may gain three times as large a grant as it ought to do. The manager cashes the bill—sends one half to the examiner who gave him so large a grant, retains the other half himself, and so nets his proper grant (considering the merits of the scholars) plus fifty per cent. for making his little arrangement with the examiner. It is to the interest of all concerned to keep this transaction a dead secret; and it is only when the conscientious manager finds his own grant so comparatively insignificant, and hears rumours of the wealth of some of the educational subordinates that his suspicions are aroused. If there is any truth at all in the ugly stories afloat, either the result grant must be entirely abolished, or else some effectual system of checking the results must be rigorously adopted by the Director and his Inspectors.

CAVE.

NOTES ON TENNYSON'S "ENOCH ARDEN."

Selected portions of the English course prescribed for the Calcutta University F. A. Examination and Roorkee Entrance Examination of 1886.

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ARGUMENT.

In a quiet port (presumably on the coast of England) lived three children of three houses

"Annie Lee

The prettiest little damsel in the port,
And Philip Ray, the Miller's only son,
And Enoch Arden, a rough Sailor's lad."

In youth and manhood both paid court to the girl, but the girl's affections were fixed on Enoch whom she married. One day Enoch fell from the mast of his vessel and while suffering from the effects of his fall, his trade was taken from him by somebody else and starvation seem-

ed to, be the sole issue of his troubles. But a captain of a vessel hearing of Enoch's misfortunes and knowing Enoch's value as a seaman offered him the post of boatswain on his vessel. The offer was closed with and Enoch after selling his "old sea-friend" (his boat) and buying with the money realised, sundry wares for a shop to support Annie and her children during his absence, sailed away into unknown seas. But Annie had not the will nor the shrewdness of a trader, and her affairs went from bad to worse. She buried her youngest child, who had been very sickly. Philip who had not visited Annie since her marriage, was smitten with sympathy at her misfortunes, and put her children to school. Years passed over their heads and Philip urged her to marry him, until, weary with waiting for Enoch and with putting Philip off, she married him. Meanwhile what had become of Enoch. The ship *Good Fortune* tossing over the Bay of Biscay and tumbled round the Cape reached its port of destination. But on its return home, she was wrecked and all her crew, except Enoch, and two others, perished, and were set upon some land in the tropics. His companions dying, Enoch passed many a year alone until rescued by a ship which like the *Good Fortune* had been driven out of its course. Landing in England Enoch makes himself known to an old woman in his native village named Miriam Lane, who tells him the story of Annie's marriage to Philip. But yearning to look again on the face of his wife he pays a clandestine visit to Philip's homestead, and after being a spectator of the happiness of his wife and family, he returns to Miriam, he passes away,

"And when they buried him, the little port
Had seldom seen a costlier funeral."

Long lines of cliff breaking have left a chasm.—In a long line of cliffs there is a break, *chasm* from the Gr. *chaino* to open, Lat. *chasma*.

Wharf—A landing place; a perpendicular bank or mound of stone or timber raised on the coast of a harbour to enable ships to land goods. Sax. *hwarf*, Dan. *werven*, to raise.

Down—Sax. *dun*, French *dune*. In Fr. *dunette*, a dim. of *dune*, is the highest part of the poop of a ship. The primary sense is therefore a hill or elevation. A term applied in England to a poor, naked, hilly track of land only used for pasturing sheep.

Nutters—People searching for nuts.

Barrow—Sax. *leorg*, a hill or hillock. An artificial mound raised to commemorate some battle, or to enclose the remains of warriors. They correspond to the *tumuli* of the Latins, the *cromlechs* of the Druids and the *cairns* of the Celts.

Houses—Families.

Damsel—Fr. *Demoiselle*, Ital. *domigilla*, a dim. of *dama*.

Lumber—From Sax. *lerna*, utensils, or allied to *lump*, *clump*, a mass.

Cordage—Here *age* denotes a collection. According to the Welsh, the word *cord* signifies a twist, from the root *cor* from *chorus*. The English word *choir* comes from the same root, and means originally a *circle*.

Swarthy—Of a dark colour. Sax. *Swart*, black.

Fluke—The curvature of the anchor. The straight part is called the shank. *Fluke* is supposed to be from Gr. *phlug*, a plough.

Breaker—Wave.

Still—Always.

Enoch was host—Scan as follows:—

Enōch | wās hōst—ōne dāy | P̄hīlīp | the nēxt.

His blue eyes flooded, &c.—"His blue eyes flooded with tears caused by anger which lent him no assistance." Philip was the weaker of the two, and his wrath was useless as it lent him no assistance against Enoch.

Quarrel—Lat. *querela*, *queror*, I complain. *Quarrel* in the time of Shakespeare and Bacon meant *pretext*.

But when—was felt by either—But when the childhood of both had passed and they began to grow into manhood.

To hoard his own savings—for Annie—Infinitive phrases in apposition to purpose.

Breaker-beaten—Beaten by breakers, i.e., waves.

Had he served—He had served. The poet's expression is more elegant and perhaps more grammatical.

Full sailor—The common expression is *able bodied* sailor. Note the difference between *Sailor* and *Sailer*. The former means one who *sails on board a ship*, the latter the *ship* itself.

And thrice had plucked a life, &c.—And had thrice saved people from drowning.

Hazels—Hazelnut trees—See line 7.

Just when the prone edge of the wood, &c.—Just when the trees of the hazelwood, covered with foliage descended in sloping lines towards the hollow—See line 9.

Weather-beaten—Literally beaten or marked by the weather or by time, hence rough, bronzed.

All-kindled—*All* here signifies altogether, totally. The fire alluded to in these lines is that of love.

Like a wounded life—Like some creature that had been wounded:

Dark hour—Hour of sadness.

Bearing a life long hunger in his heart—Carrying in his heart a desire that was never to be appeased through the length of his life.

Bells—Wedding bells.

The rosy idol of her solitudes—A rosy boy whom she idolised when she was alone.

Ocean-smelling Osier—Baskets made of osier, smelling of the Sea. Osier is a species of water willow.

Rough-redden'd—Made rough and red.

Market-cross—A cross set up where a market is held.

Portal-warding lion-whelp—The lion-whelps in stone flanking the gateway at the entrance to the grounds of the Hall.

Peacock-yewtree—The yew-tree tenanted by peacocks. Gentlemen in England living in the country possess mansions to which the name *Hall* is often applied. Cf. Locksley Hall, Bracebridge Hall. Among the poultry may often be found peacocks. Cf. the reference to peacocks in Washington Irving's *Christmas Dinner* (*Sketch Book*).

Friday fare—Fish eaten on Friday. Many Christians and especially Catholics eat only fish on Friday. Fare from Sax. *faran*, (to go).

Haven—Harbour—From the same root as *heaven*.

Clamber—From *to climb*. To climb with hands and feet.

Mischance—The prefix *mis* is derived from the verb *miss*, to go wrong.

Another hand crept too across his trade—Somebody else took his trade from him.

Nightmare—Literally the spirit of the night, Swedish *mara*, spirit.

Hand-to-mouth—Want; had to go begging for their livelihood.

Boatswain—Pronounced *bosn*—From Sax. *bat* (boat) and *swein* (servant.) An officer on board a ship who has charge of the boats, sails, rigging, anchors, colours and cordage.

So now that shadow of mischance—*offing*. As a cloud obscures on the land the fiery pathway of the sun in the heavens and allows the sun to cast its light upon the sea at a distance from the shore, so did this mishap that occurred to Enoch for the time plunge him in gloom but shortly after prove of advantage to him.

Craft—Vessel. The word has also two other meanings, cunning and trade.

Appraised his weight—Guessed how heavy he was, or how much he weighed. The word *appraised* comes from the Ital. *apprezzare*. The more desirable orthography is *apprized* from Fr. *appriser*, (to prize).

Brawling opposition.—Her opposition was not noisome.

Held his will—Adhered to his resolution.

Sea-friend—His boat.

Set his hand to fit—Set about furnishing, or began to furnish.

Streetward—Facing the street.

Auger—It is probable that this word is *nauegar* corrupted, from Sax. *nafe-gar* or *nauegar*, from *nafu*, the nave of a wheel, and *gar*, a tool or a borer. An auger is a tool for boring large holes.

Having ordered all—Having put all in order.

Who needs would work—Who was determined to work—*Needs* is an adverb. Sax. *nedes*.

All his Annie's fears—*to him*. He was amused at Annie's fears and felt concerned only in that they were the fears of his wife.

Save—a preposition governing the phrase *as his Annie's*.

Mystery—Lat. *mysterium*, Gr. *mysterion*, *myo* (to shut, to conceal).

In that mystery where God-in-man is one with man-in-God—Probably means in secret prayer in which God and man are alone together.

Voyage—Fr. *voyage*, Lat. *via* (way).

Will bring fair weather yet to all of us—A term borrowed from the Sea, Enoch being a Sailor. It means *will bring us prosperity yet*.

Hearth—Sax. *heorth*. Perhaps the word has some connection with *earth* which must have been the primitive *hearth* or fire place.

For it—Viz. for being a pretty, puny, weakly, little one.

Almost hoped herself—Almost felt hopeful herself.

But when he turned the current of his talk to graver things—When he began to speak more seriously. Another expression borrowed from the Sea.

She heard and not heard him—She gave what he said a listless attention.

Keep every thing shipshape—Lit. after the manner of a ship, in a seaman-like manner, i.e., tidy, proper.

Cast all your cares on God; that anchor holds. As the anchor when cast gives the ship firm support, so does Enoch counsel his wife to look for support from God in all her troubles.

Uttermost parts of the morning—The far East.

(To be continued.)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"
Educational Record, Madras.

L A T I N .

SALLUSTII CATILINA.

SHORT TEST PAPER FOR—CALCUTTA ENTRANCE EXAMINATION, 1886.

1. TRANSLATE :—His rebus *comparatis*, Catilina nihilo minus in proximum annum consulatum petebat; sperans, si designatus foret, facile se ex voluntate Antonio usurum. Neque interea quietus erat, sed omnibus modis insidias parabat Ciceroni. Neque illi tamen ad cavendum dolus aut astutiae deerant. Namque a principio consulatus sui, multa pollicendo, per Fulviam effecerat, ut Q. Curius, de quo paullo ante memoravi, consilia Catilinæ sibi proderet. Ad hoc collegam suum Antonium pactione provinciæ perpulerat, ne contra rempublicam sentiret; circum se præsidia amicorum atque clientium occulte habebat. Postquam dies comitiorum venit, et Catilinæ neque petitio neque, insidiæ quas consulibus in campo fecerat, prospere cessere; constituit bellum facere et omnia extrema experiri, quoniam, quæ occulte tentaverat, aspera foedaque evenerant.

- (a) Explain the construction of the words underlined:—
2. TRANSLATE:—*Injuriis contumeliisque concitatus, quod, fructu laboris industriæque meæ privatus, statum dignitatis non obtinebam, publicam miserorum causam pro mea consuetudine suscepi, non quin aes alienum meis nominibus ex possessionibus solvere possem, cum alienis nominibus liberalitas Orestillæ suis filiæque copiis, persolveret; sed quod non dignos homines honore honestatos videbam, meque falsa suspitione alienatum sentiebam.*
- (a) Give the principal parts of the verbs in this extract.
- (b) Turn the passage into oblique narration:—
3. Give a brief outline of Catiline, his conspiracy, and its defeat.
4. Explain:—*L. Catilina Q. Catulo S.—Ædilis—Kalendas—Junias—Colonia—Fidem publicam dare—Municipium—Duas Hispanias—Citerior Gallia.*
5. Write out all the parts of the verbs *ait* and *inquit*.
6. Decline *vir* and *jusjurandum*. Mention anything peculiar about the following nouns:—*Locus, vis, ædes, dies, carcer, litera, ludus, domus.*
7. Mention all the ways in which a purpose may be expressed in Latin. Translate the following sentence in each way:—
Cæsar sends messengers to Rome to ask for help.
8. Explain fully the way of comparing adjectives in Latin.
9. What verbs govern a genitive, a dative, and an ablative case respectively.
10. Translate into Latin:—
- (a) Who doubts that the sun is larger than the moon.
- (b) Having heard these things, he led his army to the banks of the river.
- (c) They built a wall thirty feet high and three feet broad.
- (d) He lived eighteen years at Rome and three months at Corinth.
- (e) I will strive that you may be able to think me a friend.
- (f) We must not believe all men.
- (g) We are preparing arms that we may attack others.
- (h) A good citizen ought to obey the laws of his country.

ENGLISH AND INDIAN HISTORY.

1. Write out a list of the Tudor line of sovereigns, with dates.
2. Draw a historical chart showing the respective claims of the Houses of York and Lancaster to the English throne in the fourteenth century, and the rival claim of the Earl of March.
3. Say what you know of the Treaties of Bretigny, Troyes, Pecquigny and Utrecht respectively.
4. What were the chief events of the reign of Edward I.
5. Narrate the events which successively estranged Charles I. from his people and led to his eventual ruin.
6. Describe the various attempts of James II. and his descendants to re-gain possession of the English throne after the Revolution.
7. Divide the people of India into as many race divisions and subdivisions as you can.
8. Give a list of the Muhammadan Dynasties that successively bore sway in India.
9. Give a short account of the life and reign of Akbar.
10. Say what you know of—Chancer, Chandragupta, Sedgemoor, Prithvi Raja, Sacheverell, William Caxton, Edmund Spenser, Talikot.

GEOGRAPHY.

1. What are the boundaries of Germany and of India?
2. What continents are washed by the Pacific Ocean?
3. What islands lie in the Mediterranean Sea? Mention any towns that you know of in these islands.
4. What rivers empty themselves into the Caspian Sea, the Black Sea, the Baltic Sea, and the Bay of Bengal.
5. Mention the chief rivers of France, with any important towns on their banks.
6. Say what you know about the Desert of Sahara, as regards its supposed origin and its present state. How is it supposed that the climate of Africa could be improved?
7. Describe the principle and the use of the Barometer.
8. Explain the phenomena of the seasons and of the tides. What are spring tides and neap tides?

LOGIC.

NOTE.—The references in these questions are to the 'People's edition' of Mill's *Logic*, dated 1884.

1. There is a great diversity of opinion regarding the definition of Logic. How does this diversity arise? p. 1.
2. By whom has Logic been called the Art of Reasoning? p. 1.
3. What do the words Art and Science respectively denote when applied to Logic? p. 2.
4. Why does the word Reasoning abound in ambiguities? p. 2.
5. What signification have most writers attached to the word Reasoning? What meaning does Mill assign to this word? p. 2.
6. From whom is the employment of the word Logic to denote the theory of Argumentation derived? p. 2.
7. How does Mill define Logic? p. 3.
8. How are truths known to us? p. 3.
9. How can truths known to us by *intuition*, by *immediate consciousness*, and by *inference* be distinguished? p. 3.
10. To what science do inquiries into the nature of Conception, Perception, Memory and Belief belong? p. 5.
11. Why is Logic *not* the science of Belief? p. 5.
12. Why is Logic not the same thing as Knowledge? p. 5.
13. Why was Logic called the *ars artium* by Bacon? p. 6.
14. What does Logic include? p. 7.

(To be continued.)

ENGLISH.

1. Analyse and paraphrase the following passage, and parse the words in italics:—

The worthy gentleman who has been snatched from us in the middle of the contest, *while* his desires were *as warm*, and his hopes as eager *as ours*, has feelingly told us *what shadows we are*, and what shadows we pursue,

ANALYSIS.

Sentence.	Kind of Sentence.	Con- nec- tive.	Subject	Predi- cate.	Object.	Exten. of Pred.
(a) The worthy gentleman has feelingly told us.	Princ. Sent.		The worthy gentleman	has told	us	feelingly (manner)
(b) who has been snatched from us in the mid- dle of the contest.	Adj. Sent. to gentle- man in (a)	In rel.	who	has been snatch'd		from us (place) in the middle of the con- test (time)
(c) while his desires were as warm	Adv. to (b)	while	his desires	were as warm		
(d) and his hopes as eager	Adv. to (b)	and	his hopes	[were] as eager		
(e) as ours	Adv. to (d)	as	ours	[are] eager		
(f) what shadows we are	Nom. Sent. obj. to (a).		we	are what shadows		
(g) and what shadows we pursue.	Nom. Sent. obj. to (a)	and	we	pursue	what shadows	

We have been told by the honourable gentleman who has so suddenly been removed from us in the midst of the conflict, whose wishes were as fervent, and whose expectations were as bright as our own, how frail we are and how fleeting are the objects we pursue.

While—advl. conj., joining the sents., 'Who has been snatched' and 'His desires were as warm.'

as—adv. of deg., qualg. *warm*.

warm—adj. of quality, qualg. *desires*.

as—cop. conj., joining the sents., 'His hopes were as eager' and 'Ours are eager.'

ours—pers. pro, com. gen., plur., 1st, poss., gov. by 'hopes.'

or—poss. pro., plur., com. nom to *are*.

what—rel. pro., used as adj., qualg. 'shadows.'

shadows—com. noun. neut., plur., nom. after *are*.

we—pers. pro., com., plur., 1st. nom. to *are*.

are—irreg. int. verb, act., ind., pres., 1st plur., agreeing with *we*.

2. How do you account for the presence of many French words in the English language?

In 1066 England was invaded from Normandy, and the Norman kings, their nobles and soldiers, and a large body of churchmen who filled all the ecclesiastical offices, all spoke Norman-French, and all of whom were probably entirely ignorant of English. French, therefore, came to be used freely. The laws were written in French, the same language was used in the law courts, in the schools, and universities. It was at this time, therefore (1066—1400), that large numbers of French words were introduced into our language?

4. Give the derivation and meaning of the following words:—

Succession, sanctify, felicity, visible, derivation, conjugation, glorious, privacy.

Words.	Roots	Prefixes and Affixes.	Meaning.
succession	<i>cedo</i> , to go	<i>sub</i> , under; <i>ion</i> , denoting action	Act of succeeding or following after.
sanctify	<i>sanctus</i> , holy; <i>facere</i> , to make		To make holy.
felicity	<i>felix</i> , happy	<i>-ty</i> , denoting abstract idea	Happiness.
visible	<i>video</i> , to see	<i>-ble</i> , possibility of action	That which can be seen.
derivation	<i>rivus</i> , a river	<i>de</i> , down; <i>ion</i> , denoting action	The act of deriving; tracing a word to its original root.
conjugation	<i>jungo</i> , to join	<i>con</i> , together— <i>ion</i>	Act of joining; inflection of verbs.
glorious	<i>gloria</i> , brightness; prob. from <i>clarus</i> , clear	<i>-ous</i> , full of	Full of glory.
privacy	<i>privo</i> , to separate	<i>-y</i> , state	State of being alone.

CHEMISTRY.

HYDROGEN.

(Continued from Page 257 of 1885.)

This gas, when pure, is tasteless, colorless, and invisible. It is not met with naturally pure or uncombined, but constituting as it does volumetrically the principal constituent of water, it may be regarded as one of the most widely diffused of all the elements. Hydrogen, in a condition of tolerable purity, may be

Attributes of hydrogen.

all the elements.

obtained by a process the exact nature of which we are not yet in a position to explain, but which we will do under the head of Nitrogen, when speaking of acids and salts. For this purpose the following apparatus is required: a Woolf's bottle, is three parts filled with water and a certain quantity

of zinc shavings or granulated zinc. Sulphuric acid is now gradually introduced through the upright tube.

Preparation of hydrogen.

Another bent glass tube conveys the gas, as fast as it is formed, into a bell-jar filled with water, and having its open end plunged below the surface of that liquid contained in any suitable vessel. The hydrogen gas will gradually displace the water in the bell-jar. In the case of a gas that is soluble in water we have to employ the liquid metal mercury instead of that fluid when collecting it.

This gas, if burnt, gives rise, as has already been explained, to water by its union with the oxygen of the air. It burns with a pale blue flame, giving forth considerable heat and but little light. Balloons are filled with H on account of its extreme lightness, being $14\frac{1}{2}$ times as light as ordinary atmospheric air.

A balloon rises in the air just as a bottle does in water, because it is filled with a fluid much lighter than the surrounding medium. Balloons in practice are generally inflated with coal gas, which contains a large proportion of hydrogen, and which, although not so light as this gas in a pure and uncombined state, is nevertheless employed on account of its being much less expensive. Of H_2O ,* hydrogen monoxide, or water,

Specific gravity of hydrogen.

we have already spoken. Another compound, hydrogen dioxide, H_2O_2 , can be produced by the art of the chemist, but is not met with in nature. This, which is sometimes

known as "oxygenated water," is a very unstable compound, parting readily with its surplus of O, and reverting to the condition of the monoxide or water. In consequence of its giving off O thus freely, it acts as a powerful bleaching agent. In the presence of ozone the monoxide is resolved into water and ordinary O. H unites with many of the other elements to form a number of highly important compounds, of which we shall speak in due course. H is not only the lightest of all known bodies, but its combining weight corresponds with its specific gravity. The

Hydrogen the standard of weight.

weight, therefore, of a given volume of H affords a standard whereby to ascertain the weight of a similar volume of any other gas at the same temperature and under

similar conditions of atmospheric pressure. It has been proposed to take the weight of a cubic decimetre of H as the standard, calling it the Krith,

from the Greek word for a barleycorn. The cubic decilitre is a cube of rather less than four inches, and its contents constitute the French measure of capacity known as a litre, which is rather more than a pint and three-quarters.

Ascertaining the weights of gases.

* O_2H signifies that there are two atoms of H to one of O. Figures placed below the symbols denote the number when more than two.

A litre of H weighs 0.08936 of a gramme, or less than a grain and a half—the weight of the gramme being about $15\frac{1}{2}$ grains. Knowing, as we do, that the weight of N is fourteen times that of H, and that of O sixteen times that of H, we have only to multiply the weight of the litre of H to obtain that of the corresponding volume of either of the latter thus: $0.08936 \times 16 = 1.430$ grammes, the weight of a litre of O; and $0.08936 \times 14 = 1.251$ grammes, or the weight of a litre of N; and so on for any other gas, whether elementary or compound.

OXYGEN.

This gas is perhaps entitled to be considered the most important of all the elements, on account of the infinite variety of its compounds, both organic and inorganic. It has already been shown to be the great supporter of combustion and vitality. It exists not only in the air we breathe, in the water we drink, and in the substance of our own bodies, but forms, in combination with other elements, the greater portion of the solid materials of which this world is built up. O under normal conditions presents itself to our senses as an invisible, tasteless gas. If breathed pure, it accelerates the action of the heart, quickens the circulation of the blood, and stimulates vital action generally. It is occasionally administered medicinally with good effect, but should only be employed by an experienced practitioner, as its incautious use may be attended with danger and even death. O may be obtained by the decomposition of any compound containing it. If a small quantity of the red oxide of mercury be introduced into a test tube and held over the flame of a spirit lamp, it will be decomposed, O will be given off, and the liquid metal will be deposited, in small globules, on the cooler portions of the sides of the test tube. The substance which is generally employed, however, to obtain pure O, is the salt known as potassium-chlorate. This substance, mixed with a certain quantity of the black oxide of manganese, is introduced into a retort, and subjected to a degree of heat sufficient to effect its decomposition. The gas may be collected in a stoppered bell-jar in the same manner as H. The apparatus employed for the purpose is very simple, and may be easily put together.

A chip of glowing wood, or a recently extinguished taper, if introduced into this gas, at once bursts into a flame. An iron nail or piece of steel watch-spring, if rendered incandescent, or white-hot, and plunged into a jar of O, is rapidly burnt away with brilliant scintillations: this is a very pretty experiment. The result is the formation of oxide of iron.

A piece of phosphorus, the size of a pea, if placed in a deflagrating spoon and kindled by being touched with a red-hot iron wire, burns in O, with intense brilliancy. Phosphorus having a strong affinity for O, cannot be kept in contact with the free O of the atmosphere, as it would unite with it

and enter into slow combustion. It must therefore be preserved under water, and care must be taken thoroughly to dry the portion intended to be burnt in O. Owing to the intensity of the combustion, the water would be instantly converted into steam, giving rise to an explosion whereby small portions of the glowing phosphorus are impelled against the sides of a glass jar and crack it. Care must likewise be taken in handling phosphorus not to let it come into contact with the fingers, as the heat of the hand is often sufficient to determine its combustion, and it inflicts a very severe burn, which heals with difficulty. O forms compounds with every known element, with the single exception of fluorine, of which no compound with O has as yet been discovered, although we are not justified in asserting that none exists. The different compounds of O will be treated of under the head of the various elements, as they present themselves for our consideration.

NITROGEN.

This gas has already been described as singularly inert and destitute of special characteristics. Although not possessing any strong affinity for O, N forms, nevertheless, no fewer than five distinct chemical compounds with that gas, each of which exhibits very marked and striking attributes one of them giving rise to the powerful acid known as nitric acid or aqua fortis. The proportion of O in each of these compounds is as the numbers 1, 2, 3, 4, 5, to a quantity of N which does not vary—that is to say, is the same in each. They illustrate, therefore, in a very striking manner, the truth of the law of chemical combination in multiple proportion on which the atomic theory is founded. Taking the combining weight of H as 1, those of N and O will be found to be as 14 and 16—that is, they will combine in exactly that proportion by weight with every other element with which they enter into chemical union. Let us suppose the compound to be one containing a greater quantity than this of O, then the quantity will be found to be $16 \times 2 = 32$, $16 \times 3 = 48$, or some higher multiple of 16; two parts of N will be represented by $14 \times 2 = 28$, and so on for all the other elements, but no intermediate combinations are ever found to exist. It is impossible, for instance, for any compound to contain an atom and a quarter or an atom and a half of O, quantities that would be represented respectively by the figures 20 and 24. Let us see how this is illustrated, in the nitrogen series of oxides or compounds with O.

1. Nitrogen monoxide, containing 28 N. + 16 O.
2. Nitrogen dioxide „ 28 N. + 32 O.
3. Nitrogen trioxide „ 28 N. + 48 O.
4. Nitrogen tetroxide „ 28 N. + 64 O.
5. Nitrogen pentoxide „ 28 N. + 80 O.

Here it will be seen that we have in each case two volumes or, atoms of N combined with 1, 2, 3, 4, and 5 atoms of O. If we were justified in assuming the divisibility of the ultimate particle or atom, we might consider the first of this series of compounds as 1 atom of N united to $\frac{1}{2}$ atom of O, and the pentoxide as 1 of N united to $2\frac{1}{2}$ of O; but knowing, as we do, that no such combinations are possible, and that every increase in the quantity of any element, entering into chemical union with another, is an increase in the ratio of a multiple of its combining weight, and that we have exactly twice or three times or four times as much that weight, of course we are not justified in any such assumption.

Nitrogen and oxygen do not readily combine. They may nevertheless be made to do so by causing a series of electric discharges to pass through a glass vessel containing dry atmospheric air. The presence of these compounds, the tri-and-tetra-oxides of N and O, will be manifested by the appearance of red-coloured vapours in the vessel. Similar combinations of N and O, are frequently determined by the passage of the electricity through the air during a thunderstorm; and if an alkali be present, the result will be the formation of a salt exercising a fertilizing influence on vegetation when brought to the earth by the drops of rain.

Nitrogen enters into combination with various metals, as mercury, copper, titanium, molybdenum, and vanadium, forming a class of compounds to which the term *Nitrides* is applied. Their most marked characteristic is that they are highly explosive, resolving themselves when struck or at a high temperature, into their constituent elements.

(To be continued.)

EXTRACT FROM THE REPORT OF THE DIRECTOR OF PUBLIC INSTRUCTION IN CEYLON FOR 1884.

PROPOSED REMEDIES, AND REMEDY ADOPTED, FOR BAD ENGLISH-TEACHING.

14. In my report for the year 1883 I wrote very strongly concerning the harm done by bad English-teaching on the part of incompetent native schoolmasters.

As regards Government English schools, at the end of the year almost all, good or bad, had been closed in pursuance of Mr. Bruce's scheme for handing over our Town Government English schools to the Municipalities or Local Boards of such towns, while at the time that I now write the Government has not a single English school left, whether in town or

village, excepting only the Royal College and the Colombo School of Agriculture; and indeed neither of these can properly be called an English school, except in so far as this, that the medium of instruction is English. The one is a classical and mathematical school, and the other is a technical school.

2. And here I would note my very strong personal opinion, that, except in the few High schools where Latin, Greek, Higher Mathematics, French and German are taught (instruction in which must be through the medium of English), English should be taught distinctly *as a language only*, and that it should not (with the above exceptions) be the medium of instruction.

For instance, in an ordinary English school, arithmetic, history and geography should not be taught in English, but in the vernacular, while English should be taught as a language only.

In some English schools it would appear to be assumed that the native boys know English already, and they are taught arithmetic or other subjects in English, as if they thoroughly understood that language like an English-born schoolboy. The result is (as I have myself tested) that a boy in an English school will often fail in working an easy arithmetic sum because, being set in English, he does not properly understand it, while if the same sum is set to the same boy in the vernacular he will at once work it correctly.

I should have hesitated to write this last year, in view of my recent appointment as Director, and I write now, not necessarily with a view to any near change in the system of teaching in English schools in Ceylon, but for the present I give it as my personal opinion only; I am aware that many people agree with me; I am also aware that many, whose opinion is entitled to respect, differ from me. It is a question to be thought out and tested quietly and carefully, with no undue hurry; and, when this report is published, the matter will doubtless be criticised by school managers and others with a criticism which will be useful and instructive.

I feel my conviction, however, much strengthened by the resolution of the Government of India (dated 23rd October, 1884,) upon the report of the Indian Education Commission, from which I quote as follows:—

"There is one matter regarding which no specific recommendation is made, but to which attention is drawn in the resolution appointing the Commission, and which is discussed in paragraphs 249-50 of their report, viz:—the place which should be occupied by English and the vernacular in Middle schools. The Governor-General in Council is disposed to agree with the Commission that, for boys whose education terminates with the middle course, instruction through the vernacular is likely to be the most effective and satisfactory. The experience of Bengal goes indeed to show that even for lads pursuing their studies in High schools a thorough grounding conveyed through their own vernacular leads to satisfactory after-results.

It is urged by those who take this view that many of the complaints of the unsatisfactory quality of the training given in the middle and high schools of the country are accounted for by the attempt to convey instruction through a foreign tongue. The boys, it is said, learn a smattering of very indifferent English, while their minds receive no development by the imparting to them of useful knowledge in a shape comprehensible to their intellect, since they never really assimilate the instruction imparted to them. It has been proposed to meet this difficulty by providing that English shall only be taught in middle schools as a language, and even then only as an extra subject where there is a real demand for it and a readiness to pay for such instruction. His Excellency in Council commends this matter to the careful consideration of Local Governments and Educational authorities."

3. Now, the proposal here referred to by the Viceroy of India is very much what is in Ceylon already done in our Government Anglo-vernacular schools, wherein English is only taught as an extra to such boys as not only desire it, but pay for it, while the bulk of the school is instructed in the vernacular only. And even those children who learn English in these schools are taught all their arithmetic, &c., in the vernacular, a system which experience has proved makes the *general* education given in a Government Anglo-vernacular school very thorough.

The question is, Ought this system to be extended to our English schools? I think, 'Yes'; but I invite discussion, as I have said before.

And if the answer be 'Yes,' at what standard should the teaching of English commence?

In our Government Anglo-vernacular schools (as organised by Mr. Bruce) only children above the IVth standard are allowed to be taught English, the object being to ground them thoroughly in the Vernacular before the foreign language of English is attempted.

It is, however, objected by some that this is too late to begin to learn English, if it is to be learnt thoroughly. This is, I think, true.

On the other hand, the English taught in an Anglo-vernacular school is not at present necessarily intended to be more than is required by a lad who is destined to be a house servant, a peon, or such like.

But, if the English schools (where a higher standard of English is aimed at) are ever to be re-organised in this country on the principle of teaching English as a language only, I am inclined to hold that the teaching of English should in them begin at, or almost at the beginning, hand in hand with the vernacular; and, as an experiment, I have re-organised the only three Government English schools which remained to the Department in January, 1885.—viz., the Ratnapura and Galagedara boys' schools, and the Pánaduré girl's school—on this principle. Temporarily they are classified as Anglo-vernacular, but they are more than this in reality. They are English schools on a vernacular basis. I shall watch with interest the

experiment, and until the results are there well-defined, I shall make no recommendation on this point as regards grant-in-aid English schools.

• 4. Concerning steps actually taken with a view to improving the *existing* system of English-teaching in grant-in-aid English schools, I endeavoured to provide for the bad teaching in those of them which were taught by incompetent native teachers who did not themselves know English properly, by proposing a scheme requiring teachers in English schools to pass an examination and take out a certificate, as is already required in the case of vernacular and Anglo-vernacular teachers.

From this requirement I proposed to exempt European or American clergymen, and persons holding degrees from any University in the United Kingdom or in America, or from the Universities of Calcutta or Madras; I also proposed to exempt persons holding a certificate from any recognised Training Institution in the United Kingdom or America.

Subsequently, I added an exemption in favour of the members of any "Teaching Body," so as to include the "Christian Brothers" and Missionary ladies engaged in Teaching, whom I had by no means intended to exclude from the exemptions from examination, but who upon consideration were found not to come under any of the original heads of exemption.

These certificate requirements I proposed to bring into force *gradually*, so as not to violently disturb existing arrangements, and so as to give time for masters at present employed to pass if they could, or, if they could not, so as to allow for their places being supplied by others.

The dates which I proposed were as follows:—

- (a) After the 1st January, 1886, no *new* English school was to be taken on to the grant-in-aid list unless its *head* teacher were certificated.
- (b) After the 1st January, 1888, no *new head* teacher was to be appointed in a now existing grant-in-aid English school, unless he or she were certificated.
- (c) After the 1st January, 1889, no grant was to be continued to a grant-in-aid English school, unless its head teacher were certificated.

The examinations for certificates were to be the same as those required for certificates for Government English schoolmasters (the certificate system having already been for some time in force in the case of Government English schools.)

It will be observed that the whole of my scheme was directed entirely against *inefficient native* teachers of English. I exempted everybody not a native, and all native teachers with any degree, while all others who had any pretensions to be considered English scholars could presumably have passed the examination as easily as did our Government native English schoolmasters.

5. But on this scheme being communicated by circular to grant-in-aid school managers early in 1884, five of them protested vehemently against it.

The remaining school managers mostly did not reply, while five replied approving of the scheme.

Some of the principal objectors urged most forcibly (amongst many other details) that there was no need for any interference by the Department with grant-in-aid English schools, because, if the Department were to withhold grants from schools where bad English is taught, school managers would, in their own interest, employ good teachers without the interference of certificates.

In reporting upon the matter to the Government, I stated that undoubtedly the evil of bad teaching of English in grant-in-aid schools might be met upon the lines proposed by these objectors, if Inspectors of Schools were to examine more strictly—(heretofore a weak village English school had been examined more leniently than a good town English school); but I ventured to point out that I believed this course would cause a greater outcry than my original scheme, as I was already assailed with complaints of examinations being too hard, and I noted that my scheme of certificates appeared to me to be the more lenient, and that it would, if rightly used, help managers to overcome difficulties of examinations, and to obtain better grants by having a better class of native teachers.

The Government, however, very naturally decided for the present against the certificate scheme “until the consent of managers of schools to “the compulsory employment of certificated teachers has been more clearly “ascertained,” and I was instructed “that the examination of the schools “should be carefully conducted, and the standards prescribed strictly “enforced, and if the result be, as may be anticipated, to diminish the “grants earned, the managers will then doubtless consult their own “interests by employing a better class of teachers.”

This decision of the Government was thus virtually what was asked for by the leading objectors. It has nevertheless met with very bitter opposition from school managers, many of whom now say that they had no serious objection to the original proposal of certificating English school teachers.

It appears to me, however, that managers can scarcely complain in this manner with any great show of reason, when it is remembered that it was entirely through their own want of support of the certificate scheme that it was thrown out.

UNTRAINED MINDS.*

BY WALTER G. BELL, M.A., Fellow of Trinity Hall, Cambridge.

If we were asked to give a name to the age in which we live, I think we might fairly describe it as an age of analysis—an age in which science is pushing its way into regions hitherto deemed far beyond its ken, and thirsting for fresh fields and pastures new. Our ancestors were more or less satisfied to know that things were so, and to regard them as dispensations, if they did not easily see their way to altering them. But we want to alter everything; we believe in the omnipotence of man, under the limitations of time and space, and we say that anything that ought to be done shall be done. We have a whole galaxy of physical sciences, and are looking forward to the time when we shall unite them into one grand science embracing everything inanimate—and perhaps animate. We have developed our science of physiology, as far as humanitarians will permit, into what we may call vital physiology, and we think we are getting to know what life is—we have a science of aesthetics, of which Ruskin has laid the foundation-stone—we are making headway with sociology, and two or three other ologies, including the educationist's science—psychology. So that we are all on the look-out for facts—facts that we may analyse, then generalise, and thence evolve a science. We also want our facts for another purpose—that of studying the art which is built upon our science. And it is mainly for this reason that educationists welcome eagerly [all experience which may give them some further insight into the youthful mind, and help them in the great problem of education. It was because I felt sure of a lenient audience, ready to receive all experience, however meagre, that I ventured on this paper to-night. Its title is vague, and perhaps ambitious; but, when your indefatigable Secretary applied to me months ago, I felt that, with such a title, I could not possibly commit myself to anything except a paper.

There are two extreme views which may be taken of the subject of education—the one school considers that the practical application of psychological doctrines produces on the youthful mind infinitesimal results in the face of all-powerful principle of heredity; and the other school believes that anybody can do anything if he is only taught properly. Between these two views we will steer a middle course, and, while admitting that due weight must be given to heredity, insist that education rightly conducted can and will produce vast results. (It seems a pity that I should have to qualify the word “education”! but its loose use now-a-days renders it unfortunately necessary.) And here I am confronted with the question, put by those who know too well the minds of at least one-half the Cambridge undergraduates, “Why don't you prove your case, by producing vast results

* Paper read before the Education Society.

on *this* raw material?" I answer with Jewish indirectness, "Why can't you alter the opinion of any human being who is past forty?" But still I think it best to ask the schoolmaster or tutor who supplies us with the undergraduate the same question, and I receive a similar answer to the one I gave. I go through a succession of tutors and schoolmasters, who lay the blame on each preceding one, till the subject in question is about eight years old. I then find he has been at home till then. To what conclusion are we driven? That the foundations have been badly laid, and that, whether the building above be of rubble or of marble, it is of no use as a building.

We have, I think, got at the root of the matter, when we insist that training, if it is to be of real use, must be begun early. The fault then primarily lies with the parents. But what are we to do? Are we to pass a law that all parents shall undergo an examination in psychology and the art of education before they presume to become parents, and thereby undertake the solemn duty of training the plastic nature of a child? Such grandmotherly government is, at the rate we go now-a-days, not at all impossible in the remote future; but as we cannot wait for this millennium, since parents are not aware of the necessity of knowing how to educate, we must do our best to prevent them from working their own sweet wills on their offspring. We have therefore artfully established our elementary training schools under the name of Kindergartens, at which the children are—not educated,—oh dear no, say the parents; they are far too young to begin education yet; they only go to play, and save us the trouble of looking after them, and the expense of a nursery-maid. And so those who have learnt something about a child's nature manage to get some influence over it at its best age; whence we may confidently hope for great results in years to come. "But this is all nonsense," I hear someone say; "we don't want a whole troop of geniuses—there are quite enough in the world without making any more." "Excuse us," we say, "but geniuses are not made by this process; the genius is educated in ways which, even we must admit are beyond our ken; our humble task is to elevate the standard of the ordinary mind, and remove stumbling-blocks out of the way of our genius."

I remember, some little time ago, giving a small examination to two boys of about the age of seven, in order to ascertain whether they would be able to work together. One had been at home, under the care of a governess, the other at a Board school. In spelling and knowledge of facts the balance was in favour of the governess-boy; they were about equal in reading; addition and subtraction were done by both with equal facility,—but it was in the multiplication table that the governess-boy broke down. He began, "5 times—," stuck fast, made a rush, got hopelessly involved, started again with increased energy and worse results; and it was not till his mother had scolded him, and his father pacified him and coaxed it out of him, that he managed to say it. The other boy said it rapidly and easily, and when asked, "Why, if 7 times 8 = 56, 7 times 9 = 63?"

said "because 63 is 7 more than 56." Many would have put this down to heredity. I put it down to the governess.

But admitting that careful training, when a child is very young, is all-important, we must not stop the process when we get our child to school. Even the most incompetent builder will hesitate before he puts rubble on a good foundation. So the schoolmaster should hesitate before he entrusts minds, still in the plastic stage, to the mercies of raw athletes. "But does he hesitate?" I hope I am not maligning the schoolmaster (I say it under correction—a correction we should all devoutly wish to be made) if I answer, "He doesn't." You all know that the University of Cambridge was the pioneer in the movement for training teachers. This she took in hand at the instigation of the head-masters of our middle-class and public schools, and in connection with her work there has been also established the Finsbury Training College, with its able and energetic head, Mr. Bowen. But of the number who leave the University for the purposes of teaching every year, the proportion who attend the Cambridge lectures, either during or after their course, is by no means large, and, out of these, the number who go to gain some practical experience at the school is very small. The reason is, I fear, not far to seek. It may be that the public mind is not ripe for realizing that education is a subject for theorizing about and studying, but the fact remains that the schoolmasters, whom we ought to regard as the leaders in the task of educating the public mind to believe in education, will have nothing to say to trained teachers. This to my mind is incomprehensible in the face of the fact that nearly all the leading head-masters are on the Council of the Training College, and yet there are at present, I hear, only eight students there. The schoolmasters may say that men wish to earn money directly they have taken their degrees, and cannot spend more time learning their profession. They may say that the first qualification for a master is to be a gentleman, the second to be a teacher. To this we would reply, Let it be known that you will take only trained teachers, or merely that, other things being equal, you will give the preference to trained teachers, and see whether the men then persist in refusing to learn the rudiments of their profession. Does this pledge you to anything from which you might have to draw back? The Training College for women is a success. And this is because schoolmistresses have let it be known that technical knowledge of the profession is required. I am well aware that in many public schools the spirit of "no work" is looked up to as a guiding principle by the boys, and that this spirit is the hardest thing in the world to eradicate. But all the more ought schoolmasters to put their shoulders to the wheel and help us who are trying to help them.

Let it be supposed, then, that a boy has had a good early training, and has also passed through the earlier stages of school-life under competent hands. His mind is now in good working order, and during the rest of his school-life, even if he falls into incompetent hands, he can withstand the

shock. This is not generally the case, however, for the higher masters in a school are more likely to be men of ability and experience. It follows, then, that the two most important stages in education are the pre-scholastic and the early scholastic training. We are gradually providing for the former, but the latter has always been and is greatly neglected, and our best energies should be directed to improving it. I myself, at the age of 10, underwent such a course of instruction (shall I call it?) that the wonder is I am alive to tell the tale. In one class the master used to set a collection of sums to be worked out. We worked away for an hour or so, and then changed slates with the next boy; after they had been looked at and ticketed with the usual big R, they were handed back. Then the master said, "First boy, how many have you done?" "26, sir." "Any boy on the first form done more or less than 26?" No one stirred—the master appeared quite satisfied, and went on, "Any boy on the second form done more or less than 26?" One industrious youth, who scorned to tell a lie, had done only 24, so down he went. Another quick lad, whom the head-boy had not calculated on when he gave in his estimate, had done 28. "Nonsense," said the master, "you couldn't possibly have done so many in the time. I can't let you go up." That boy also caught it afterwards from the others for being a sneak.

But let us suppose that the pre-scholastic training has been neglected, and the early scholastic training similarly deficient. Fixed habits have by this time been formed—want of power of fixing the attention, very little interest in the work in hand, and a deficient if not a total want of reasoning power, to say nothing of moral degradation. These come in to checkmate the master, and take all life and energy out of his work. "What can you do to these blockheads?" he says; "I suppose I must put some information into them, if I can do nothing else. I should like to train their minds, but that is out of the question now." The position of such a schoolmaster is not an enviable one; but, intensify and consolidate the defective habits formed, and you produce the ordinary university man (excluding the tripos-student) which we, as college lecturers and private tutors, have to deal with. Of course I should like to premise that, in disparaging the mental condition of the ordinary undergraduate, I am referring simply and solely to his mental condition. He is, as often as not, a capital fellow, with plenty of many other qualities except brains. And you cannot help pitying him and saying, "Why should this 'roof and crown of things' have been so hardly used?"

And here I would just say one word in favour of examinations, which it is the fashion to abuse now-a-days. There may be a few among those who come up to the University, who have tried for the army or other public examination and failed, but the majority of those who come are innocent of such things—so that their mental state cannot be laid to the charge of this deteriorating influence. In fact, it is noticeable that those who have undergone examinations previously are certainly in better condition than those

who have not gone through that ordeal. And moreover it is an unquestioned fact that, whatever warped notions of an examination they start with (regarding it as an end for which Euclid and the Greek Testament were invented, and not as a means to make them think), they emerge from their course, having gained a certain amount of mental power. With many it is almost a pure strain of memory, but it is well-nigh impossible to avoid getting an idea or two by the way. The one melaucholy point about it is, that their progress is more or less in spite of themselves, and this small addition of mental power is one that should have been made at least seven years previously.

Many of my colleagues, I know, take a different view of the situation, and say, "What can you expect from a dull father but a dull son?" It is regarded as a dispensation that we shall have yearly an influx of young men with an inheritance of no brains, who get a great amount of good from social intercourse and healthy life, but whose mental gain is infinitesimal compared with what we think it might have been. But in this one point, I think, we may learn something both from the Scotch and German Universities. It is well known that the intellectual standard at both of these is far higher than at the English Universities. And how is this to be accounted for? In the case of the former, I think it will be found that the Scotch schools have the right ideal in front of them. They have inherited a spirit of keen intellectual emulation, and the existence of this is sufficient guarantee for mental development. This is the *summum bonum* that the trained teacher should set before him as a goal, and, without this being inculcated, we cannot hope for permanent results from any reformed system of education. In the German schools this spirit exists, though in a less degree, but it is helped by a rational system of education, such as we are trying to establish in England. It seems, therefore, such a narrow and false view of the matter to imagine that because things have been for some time past at our universities as they are now, the defects are ingrained and ineradicable. So that, instead of deploring the system or abusing it over our wine, we ought to see some means to remedy this evil. But though the universities may help, the real impetus must come from without. We, with the minds we have to take charge of, have to do the best we can under the circumstances, and that is remarkably little. But we none the less look forward to the time when thinking shall be regarded in the light of a pleasure as much as any physical exercise is, and, when that era begins to dawn, the university will not be wanting in its share of the work.

But let us come to our undergraduate—there are two or three types of him, of which the most prominent are:—I. The lazy one; II. The dull one; III. The one who says he understands and thinks he does; IV. The one with a good memory and a fair knowledge; V. The one who hates work.

I. The lazy one. The only thing that may be said about him is that his laziness is principally an intellectual defect. About things that do not require much thinking, he is energetic enough. But, directly he sits down

to mental work, this laziness comes over him like a film. His reasoning powers are simply dormant—his receptivity is completely passive.

II. The dull one. He is generally a most hard-working and painstaking character, and, whatever be his intellectual defects, he certainly approaches nearer than most to the definition of genius—"the capacity for taking infinite trouble." But all this infinitude of trouble is often woefully misapplied. For want of the power of distinguishing between what is useful and what is useless, hours will be spent to no purpose. I have known him go through a Greek play six or eight times with the crib, instead of once carefully with the dictionary, and fondly imagine that he knows it all. He will learn things off by heart (as it is called) that were never meant to be learnt, and forget them just at a moment it is necessary to reproduce them. But he has generally made one step—he generally knows his incapacity, and knows an idea when he comes across it. A friend of mine had a pupil whom he described as quite terror-stricken when he lighted upon an idea. That shows that he regarded it as something rather different from a sense-impression. I myself came across an instance which will serve our purpose, though the subject was not an undergraduate.

In our college we have an old kitchen-clerk, who keeps his books with marvellous neatness and regularity, and one day I had occasion to go and look through all his books, and found elaborate devices and an astonishing amount of labour spent in producing what seemed to me to be very simple results, and I also found he kept duplicates of three or four of the books. "Why on earth do you keep these duplicates?" I said. "Well, Sir, to tell you the truth, I don't quite rightly know. I have thought once or twice, Sir, that we might shorten the work a little. But I felt it was not my place to think so, and I dismissed the idea." Beautiful child-like trustfulness!

III. Next we come to our mental black-sheep—the one who is regarded on all hands as the most hopeless. He never realizes what thinking is, and does not know what an idea is when he does come across it. Whereas the dull one will learn by heart because he knows he cannot acquire in any other way, this one will learn by heart because he thinks (I mean he has a vague impression) and that is the correct way, and imagines you are making game of him if you tell him that it is not. You perhaps earnestly give him a careful explanation, emphasizing all the points where he could possibly go wrong; he appears to take it all in, and at the end asks some idiotic question, which not only has no meaning whatever, but if it had a meaning, would have about as much bearing on the subject in hand as if he had remarked on the existence of mile-stones on the Dover road. I had a most delightful specimen of this class last year, with whom I was very sorry to part, he was so instructive.

IV. We come to a much more specious character—the young man whose knowledge does duty on many occasions for intellect. He has the power of telling about things with a certain amount of glibness; he pro-

duces neatly written essays that you think you must have read somewhere; he works out many sums with great method, and puts "Ans." in the proper place. His translations of Cicero and Sophocles which he has prepared are very good, only exhibiting here and there expressions that you would have hardly expected from him unaided. But suppose you try to find out what all this is worth. Tell him to sit down and write an essay on a subject on which he has not very recently collected information. His style remains the same, but you then discover his lack of ideas. Give him an arithmetical question, which has no rule for its solutions except that of common-sense, and he is very much puzzled and tries two or three ways, including Practice and the Rule-of-Three, and perhaps some mystic formula about principal and rate, and then says, "What rule does this come under?" Get him to translate a Latin or Greek passage word for word, instead of taking two or three words together, and then you find he knows what a sentence means, but not what each word severally means. He is the young man who, when reading Paley, came across a misprint, "the vilition of the Deity" for volition. "Dear me, what can it mean? Oh yes, I know—misprint for 'violation.'" So the next examination he goes in for he writes it so, and thinks he has done rather a clever thing in discovering a printer's error. No. II. would have felt there was something wrong, but would not have presumed to emend. No. III. would have serenely adhered to the text.

One cannot help thinking how much better it would have been for this man if he had had no knowledge whatever,—if he had only forgotten everything, and had to rely on his mother-wit.

V. We have also another specimen, who perhaps shows more character than all the rest. He simply hates and despises work, and regards it as an invention of the Evil One. He is a very good judge of the points of a horse or a terrier, and thinks Virgil and Euclid to be rather poor creatures because they probably could not hunt. To them mental effort is a thing decidedly below them. "Trinity would be a very jolly place if it wasn't for the reading man," says one. It is all very well for a man who has to earn his bread by his brains, but they will have quite enough to live on without taxing theirs. One of these young men told me that he thought it was perfectly right to copy in an examination if you could get the chance. Of course he would not copy in a competitive examination, because it would not be fair to the others; but a mere pass examination, set out of spite, was a legitimate field for the exercise of the copyist's ingenuity. I tried to raise his moral standard a little by suggesting a probable degradation of character if this view were persisted in and acted up to. But he went away and said I had given him a regular sermon.

They are apt to judge everything in the shape of work by the standard of "What good is it?" They recognize the utility of learning colloquial French and a certain amount of geography, and some arithmetic, but all

the rest is just so much nonsense that men, who know what's what, are not going to be lured on to wasting their time over.

Of course it would be a mistake to suppose that these different characters are sharply marked, or that anyone cannot possess more than one of them, or, in fact, all of them rolled into one. But still they are distinct phases of mental defect possessing the one attribute in common, that of failure in the reasoning powers. But, in the first case, will is wanting, and consequently power; in the second, will is present, but power is lacking; in the third case, the world of ideas is quite unrealizable (as unrealizable as a fourth dimension in space is to all but about three people); in the fourth, memory swamps thought; in the fifth, practical acuteness despises it. In all cases, one feels that had preconceived impressions not been formed, much more might be done. They have a wrong notion of things, which one has to attempt to eradicate before one can put right notions in. Only the other day, I was trying to make intelligible the proof of the rule for converting recurring decimals to vulgar fractions. They listened in silence, and, when I set some examples to familiarize them with the rule, they all said, "But can't we do them the other way?" "Which other way?" I said. "As many nines as there are recurrers, etc.?" "Why, that's the very rule I have been teaching you!" They did not know that, they said, it was so much longer than what they persisted in calling "the other way."

I have put before you one or two prominent types of absence of intellectual power which we came across at the University. It were needless to say that they are the worst cases; but that such cases should exist at all in the upper classes of society does not say much for civilisation. University men can do little as yet but preach at others. But preaching has its use in the world, and I think we are fairly entitled, with such examples as I have described to you before us, to say to those who precede us in the task of training minds,—If you can't make children think, don't do anything. Don't give them chaff, and persuade them it is corn. Teach them that, though knowledge may be useful for its own sake, it is not for its own sake that it is taught at school. Teach them the moral worth of all effort, whether it be physical or intellectual. Do not teach them anything so that they know that, and that only; but so that their minds may grow and grasp at things that you do not teach them, so that they may have a source of power within them that will enable them to grapple with all the mental vicissitudes of life, which not even the wisest of us can foresee for them.

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EDUCATION IN INDIA : THE REAL WANT.

IF our educational system is to be reformed at all, we must begin by reforming the teachers. A clumsy workman will spoil the best machine; he will do nothing good with an imperfect one. On the other hand, a skilful mechanic will turn out good work with, and sometimes in spite of, an indifferent machine. And the machinery of education is by no means so simple or so perfect that any bungler can work it with success. It is deeply complicated and difficult to understand. It is apt often to get out of order, and the best workmen are often at their wit's end how to supply its deficiencies. And while fools bungle, and wise men speculate otherwise, the material on which it is employed is being rapidly and irretrievably wasted.

Half the complaints against the anomalies and nationalities of our educational system would be removed if teachers as a body understood and performed their duties better. This is no exaggeration. A little reflection will convincingly prove the present argument. In every profession we find that its most successful members are those who have given themselves up entirely to their work, who have bought their way upwards against difficulty and discouragement. In every profession, men have to undergo a course—sometimes a long tedious course of training before they are allowed to invite public confidence. The Lawyer, the Engineer, and the Doctor, have their terms, lectures, and sessions. The Minister also has to secure some grounding in theology before he is allowed to expound the faith. The carpenter, the blacksmith, and the weaver have to serve apprenticeships. But how different it is in the teaching profession! Teachers alone despise their office; teachers alone have no apprenticeship to serve, and no training to undergo. There are, exceptional cases, of course, but it is not of

these I speak; and were it not for these cases, the truth would possibly be sooner brought to light. And these exceptions, besides, form so insignificant a minority in comparison with the rest, that they may numerically be left out of consideration.

A glance at the present condition of teachers will sufficiently explain what I mean. There prevails everywhere among teachers a low and humiliating estimate of their position, and a gross misunderstanding or rather a want of understanding, of their duties. When asked in company what their occupation is, they answer hesitatingly, and as if to apologise for being so, that they are teachers. Few of them are actually proud of their profession; fewer still look upon it as an actual aim in life. It affords no opportunity of acquiring a fortune; it requires mental occupation to which most men are averse; it is tedious and wearying; its trials are such as flesh and blood disdain to bear; it has not that security which a government or a mercantile office holds out; it has restraints which other occupations are free from; its opportunities of social advancement are few; and worse than all, it has no recognised status; while a clerk may rise to be the head of a department or a partner in the firm, and, failing this, he has at least the chance of a comfortable income with only routine work to trouble him in his declining years.

So it is, that of the vast company of teachers, only a small number take up their work from a genuine regard for it. If we set these cases aside, we shall find that teachers as a rule are men who have failed through incompetence or misconduct in some other occupation, or who cannot obtain a more congenial one. Nothing is more common than to find a man who is unfit for, or too lazy to get any other work, begging for a mastership in a school. No boast is oftener on a teacher's lip than that if he could get something better to do, he would leave teaching at once. The work is something he does not care for, something that wearies and disgusts him. A mercantile or a Government office is infinitely preferable both as to salary and to comfort. If he is not cynical enough to make this open confession, he makes a virtue of necessity, and declares that a teacher has "a very easy time of it," pointing to the regular holidays, the little actual teaching work, and other advantages which a teacher is vulgarly supposed to enjoy. But as soon as another situation can be obtained, he leaves without a pang the easy life he appeared to be so contented with. Or again, another pupil passes the Entrance Examination. He is too young for Government work, and there are no suitable vacancies at the time in any other place. His parents cannot bear

the expense of supporting him at College, or keeping him in idleness at home. He asks for, and obtains an assistant mastership in some school—generally his own. The moment a prospect of something more substantial occurs, he leaves without hesitation.

Now, we cannot blame those who protect and assist a young student in this manner. Indeed, as things are at present constituted, the undergraduate is greatly preferable to the middle-aged clerk, a super-annuated soldier, or bankrupt adventurer as a teacher. He is fresh from his studies, and has perhaps acquired a slight taste for them. He is new to the work of teaching, and an enthusiastic zeal might supply the want of experience and tact. He is young and pliable, easily taught, and easily guided by those whose guidance is at all desirable. In certain cases, such a course as this is as wise as it is benevolent. But when we talk of benevolence, we have also to inquire whether benevolence to a struggling undergraduate is at the same time justice to the pupils confided to his care. The impulse to entrust very young pupils to boy-teachers is a very natural one; but it is not one that altogether commends itself to experienced educationalists. And when a boy-teacher's ardour declines; when the first flush of a new enthusiasm changes into the hard, dull colours of daily duty; when the invitations of frivolous companions become more and more difficult to resist; when the dulness or obstinacy of his pupils, the contempt of his associates, and the coldness of his superiors become daily more and more evident and more and more intolerable; then what guarantee is there that his interest in his work will continue, and that he will still devote himself to it as at first?

LOUIS E. BLAZE, B.A.

(To be continued.)

NOTES ON THE RECENT F. A. AND MATRICULATION EXAMINATIONS.

"HAPPY" it is said "is that country which makes for itself no history," and so say we with reference to Examinations:—"Happy are the candidates when there is nothing to criticise in their question papers." Probably the F. A. and Matriculation candidates have never had fairer papers, both collectively and individually, than they had this year. If a candidate fails he will have no one to blame but himself. Of course it does not follow that a larger number of candidates must pass

this year, for much depends on the ideal standard of the different examiners; but of one thing we may be almost certain, and that is that the good candidates will not fail, and the bad ones will not squeeze themselves through by a fluke. This is of course as it should be. Looking at particular papers we notice that in English the power of writing correctly is aimed at more than a knowledge of all those peculiarities with which the legion of cram books abounds. It is of far more importance that our boys should be able to write a thoroughly idiomatic and grammatical letter, or essay, than that they should be able to reel off a list of such words as onomatopœia, autonomasia, &c. Another great thing is that our candidates should be taught to write simply, not affectedly, using the right word in the right place and not making themselves ridiculous by a pedantic striving after a rhetorical style quite out of place in a Matriculation Examination paper.

Take the following passage, and it will be seen at once how a flowery style and utter ignorance of the very rudiments of the language may be blended together:—

“Situating on the Eastern side of the Back-waters which kisses her shore near C. watered and fertilized by the silvery waters of the M. river, C. presents a beautiful scenery with all her sister towns of T. to the eye of a nineteenth century man of the western smell of civilization.”

Take another passage. The candidate was asked to explain the phrase “up in arms.” His explanation was this—“The people are fully equipped with weapon. *Capa-pie*.” Now would it not have been much wiser for his teacher to have taught him to spell the common English word “equipped,” than have crammed down his throat the quite unnecessary French word “*Cap-a-pie*”? Again some of the candidates use slang expressions in their papers. This comes from a more or less direct contact with Europeans. But surely it ought to be discouraged by all teachers. Here is one case out of many:—“He squandered his fortune,” means “He duk and drake his fortune.” If the phrase had been given correctly, it would not have been commendable, because plain unvarnished English should be learnt first, and all flourishes, rhetoric, elegances, slang phrases, and out-of-the-way idioms should be added as occasion requires. Since the papers were so fair and comparatively easy, a high standard of efficiency should be expected by the examiners. But little or no provision is made for this. A certain percentage of marks may be deducted for bad spelling, but nothing is said about

bad writing, bad punctuation, and general slovenliness. Surely these are important matters: a candidate has no right to pass who begins every sentence with a small letter, who ends every sentence without a stop, and who writes such a villainous hand that the examiner can only read it with great difficulty, and cannot see whether the words are correctly spelled or not. This is a matter which calls urgently for the attention of the Senate. In spelling 10 per cent. may be deducted, and even this is not a sufficient handicap for some boys with such papers. Spelling seems to be greatly neglected, and it is perfectly astonishing what a number of candidates there are who declare that the chief occupation of the people in one of our southern towns is “weaving and dying.” What an unhealthy occupation weaving must be! Of course there was the usual crop of laughable mistakes in the explanation of common idiomatic phrases. Here is one:—“Knocked up with his long walk” means “Beaten with his long walking stick.” Exaggeration is a common fault; one tower of the glorious temple at which the candidate does *pujei* is at least “half a mile high”, while the other is about “three-eighths of a mile.” A dense mass of superstition is found coupled with a very thorough knowledge of western learning, but occasionally there seems to be some glimpse into a higher moral world which shows that the faculty of conscience is not quite dead.

When Brahmans declare that at their festivals their priests pretend to be pious just for the sake of getting money though they are in reality great rogues, and when they exclaim that at these sacred festivals the “vilest atrocities” are committed by the boys of the college, it looks as if western ideas of morality were slowly tending to leaven the country.

NOTES ON THE ENGLISH TEXT

OF THE

MADRAS UNIVERSITY MATRICULATION EXAMINATION
OF 1886.

THE SPEECH OF ANTONY.

(From Shakespeare's *Julius Caesar*.)

INTRODUCTION.

1. *Shakespeare's Life and Writings.*—William Shakespeare was born at Stratford-on-Avon, Warwickshire, the 23rd April, 1564. At the time of his birth his father, John Shakespeare, was a well-to-do tradesman, and in 1568 he was Mayor of Stratford. His mother, whose maiden name was Mary Arden, brought her husband a small landed estate. As a boy,

William Shakespeare probably attended the Stratford Free Grammar School; but his father, becoming involved in money difficulties, early took him from school to assist in his business. Some time later, probably in 1579, his father apprenticed him to a butcher. About 1586 he removed to London, leaving behind his wife and three children. Arrived in London, he became an actor, play-writer, and shareholder in the Blackfriars Theatre, and subsequently in the Globe, where he was patronised by Queen Elizabeth, James I., and the Earl of Southampton. He saved money, with which he assisted his father, as well as purchased houses and land in his native town. Year by year he visited his family, until about 1604 he left the stage and retired to Stratford. He continued to write; and, during the few quiet years that followed, produced some of the grandest of his works. He died on the 23rd April, 1616, and was buried in the chancel of Trinity Church, Stratford, where soon afterwards a bust was erected to his memory. He had two daughters and a son, and several grandchildren; but the latter all died childless.

There are extant thirty-six plays and various minor poems attributed to Shakespeare. Some of these were not originally written by Shakespeare, but were more or less edited, recast, and refurbished by him. His best-known writings are:—(1) Tragedies: *Hamlet*, *Lear*, *Macbeth*, *Othello*, *Julius Caesar*, *Romeo and Juliet*. (2) English Histories: *King John*, *Richard II.*, *Henry IV.*, *Henry V.*, *Henry VI.*, *Richard III.*, *Henry VIII.* (3) Comedies: *Tempest*, *Midsummer Night's Dream*, *Merchant of Venice*, *As you Like it*, *Winter's Tale*¹. (4) Minor poems: *Lucrece*, *Venus and Adonis*, *Sonnets*.

2. Shakespeare's Grammar.—Shakespeare lived at a time when the grammar and vocabulary of the English language were in a state of transition. Various points were not yet settled; and so Shakespeare's grammar is not only somewhat different from our own, but is by no means uniform in itself. In the Elizabethan age 'almost any part of speech can be used as any other part of speech.' An adverb can be used as a verb, "They askance their eyes;" as a noun, "the backward and abysm of time;" or as an adjective, "a seldom pleasure." Any noun, adjective, or neuter [intrans.] verb can be used as an active [trans.] verb. You can "happy" your friend, "malice" or "foot" your enemy, or "fall" an axe on his neck. An adjective can be used as an adverb; and you can speak and act "easy," "free," "excellent;" or as a noun, and you can talk of "fair" instead of "beauty," and "a pale" instead of "a paleness." Even the pronouns are not exempt from these metamorphoses. A "he" is used for a man, and a lady is described by a gentleman as "the fairest she he has yet beheld." In the second place, every variety of apparent grammatical inaccuracy meets us. *He for him*, *him for he*; *spoke and took for spoken and taken*; plural nominatives with singular verbs; relatives omitted where they are now considered necessary; unnecessary antecedents inserted; *shall for will*, *should for would*, *would for wish*; *to* omitted after "*I ought*," inserted after "*I durst*;" double

¹ This is the usual classification, but it is purely artificial.

negatives; double comparatives ("more better," &c.) and superlatives; *such* followed by *which* [or *that*], *that* by *as*, *as* used for *as if*; *that* for *so that*; and lastly some verbs apparently with two nominatives, and others without any nominative at all."—Dr. Abbott's *Shakespearian Grammar*.

3. Shakespeare's Versification.—Shakespeare's Plays are written mainly in what is known as *unrime*, or *blank verse*; but they contain a number of riming, and a considerable number of prose lines. As a general rule, rime is much commoner in the earlier than in the later plays. Thus, *Love's Labor Lost* contains nearly 1,100 riming lines, whilst (if we except the songs) the *Winter's Tale* has none. *Julius Caesar* has only 34.

In speaking we lay a stress on particular syllables: this stress is called *accent*. When the words of a composition are so arranged that the accent recurs at regular intervals, the composition is said to be *metrical* or *rhythmical*. Rhythm, or Metre, is an embellishment of language which, though it does not constitute poetry itself, yet provides it with a suitably elegant dress; and hence most modern poets have written in metre. In blank verse the lines consist usually of ten syllables, of which the second, fourth, sixth, eighth and tenth are accented. The line consists therefore of five like parts, each of which contains an unaccented followed by an accented syllable, as in the word *attend*. Each of these five parts forms what is called a *foot* or *measure*; and the five together form a *pentameter*. 'Pentameter' is a Greek word signifying 'five measures.' This is the usual form of a line of blank verse. But a long poem composed entirely of such lines would be monotonous, and for the sake of variety several important modifications have been introduced.

(a) After the tenth syllable one or two unaccented syllables are sometimes added; as—

'*Me-thought* | *you said* | *you nei* | *ther lend* | *nor bor* | *row*.'

(b) In any foot the accent may be shifted from the second to the first syllable, provided it be not done in two adjoining feet:

'*Pluck*' the | *young suck*' | *ing cubs*' | *from*' the | *she bear*' . | '

(c) In such words as 'yesterday,' 'voluntary,' 'honesty,' the syllables *day*, *-ta-*, and *-ty* falling in the place of the accent, are, for the purposes of the verse, regarded as truly accented:

'*Bars*' me | *the right*' | *of vol-* | *un- ta-* | *ry choos*' | *ing*.'

(d) Sometimes we have a succession of accented syllables:

'*Why*, now, *blow wind*, *swell billow*, and *swim bark*.'

(e) Sometimes but more rarely, two or even three unaccented syllables occupy the place of one; as—

'*He says* | *he does*, | *be-ing then* | *most flat* | *ter-ed*.'

(f) Lines may have any number of feet from one to six.

Finally, Shakespeare adds much to the pleasing variety of his blank verse by placing the pauses in different parts of the line (especially after the second or third foot), instead of placing them all at the ends of lines as was the earlier custom.

N.B.—In some cases the rhythm requires that what we usually pronounce as one syllable shall be divided into two as *fi-er* (fire), *su-er* (sure), *mi-el* (mile), &c.; *too-elve* (twelve,) *jaw-ee* (joy), &c. Similarly, *she-on* (-tion or -sion).

4. **Julius Cæsar.**—This play was probably written about 1600—1. Shakespeare borrowed the names, the characters, and much of the dialogue from Plutarch, an old Greek, who wrote the lives of forty-six famous Greeks and Romans. Shakespeare made his acquaintance with Plutarch, through the English translation of North, to which the play owes some of its peculiar words and expressions and one or two trifling errors.

The time of the play extends over two and a half years—from February B.C. 44 to the autumn of B.C. 42.

The Government of Rome was then nominally republican; but Julius Cæsar, the chief magistrate, being a most able and ambitious man, had made himself king in all but the name. The title of Perpetual Dictator had been conferred upon him, and a scheme was afoot for giving him the title of King or Emperor. This aroused the fear and envy of some of the chief citizens, of whom Cassius was the leader. Brutus, who stood next to Cæsar in power and influence, was too noble to be envious; but he, too, was alarmed for his country, whose liberties seemed to be in great danger; and he was persuaded by Cassius to join with him and others in a conspiracy to kill Cæsar. The alliance of Brutus gave an air of justice to the plot, and won for the conspirators a large amount of popular support. But in other respects it was fatal to them; for Brutus hampered them by his scruples, and prevented their doing the work with the thoroughness necessary for success. In particular, he would not hear of the death of Mark Antony, who, in the end, was the means of their overthrow. Because Antony was addicted to sport and pleasure, Brutus wrongly supposed him incapable of vigorous action. But after the murder of Cæsar, Antony first by his marvellous oratory turned the tide of public feeling against Brutus, and afterwards by his good generalship beat him 'to the pit' on the battlefield.

NOTES.

1. Antony works on the feelings and only incidentally appeals to the reason. He speaks so as to make the people think they are moved by Cæsar's virtues and wrongs, and not by his own oratory.

2. *To bury Cæsar.*—The custom was to burn the dead.

3. *Lives.*—Is remembered.

4. *Is interred.*—Is forgotten.

"Men's evil manners live in brass; their virtues
We write in water."

Hen. VIII, iv. 2, 45.

5. *So.....with Cæsar.*—We won't talk of his virtues.

8. *Answered it.*—Been punished for it.

9. *Under leave.*—By permission.

10, 15, &c. *Honorable man.*—At first Antony speaks these words as if he used them in good faith; but when he has practically won the people over, he becomes openly sarcastic and ironical.

17. *Ransom.*—Price paid for redemption of a captive.

Ibid. General coffers.—Public treasury. Cæsar's campaigns in Gaul put vast sums of money into his hands, a large part of which he kept to his own use, as he might have kept it all; but he did also, in fact, make over much of it to the public treasury. This was a very popular act, as it lightened the taxation of the city.

23. *On the Lupercal.*—At the feast of Lupercalia. Lupercal was a sacred grotto or enclosure on the Palatine Hill, where a feast called Lupercalia, in honor of Lupercus, the God of fertility, was held yearly on February 13.

31. *Withholds.*—Forbids.

32. *Judgment.*—Faculty of reason.

35. *I must pause.*—His real motive being to ascertain how he has moved them—compare the 'I pause for a reply' of Brutus.

• 36. *Methinks.*—Is equal to 'it seems to me' (from A.-S. *me*, dative of *I*, and *thyncean*, to seem. Not from *thencan*, to think).

44. *Dear abide.*—Will suffer dearly for it.

50. *None so poor.*—There is none to do him reverence, so poor as himself.

52. *Mutiny.*—Revolt against authority.

57. *Than I will wrong.*—Properly 'than to wrong.'

59. *Closet.*—Private room.

61. His reluctance to read the will is but assumed, his object being to rouse their curiosity, and make them think he bears unwilling testimony to Cæsar's virtues.

63. *Napkins.*—Handkerchiefs.

80. *O'ershot myself.*—Said more than I intended.

104. *The Nervii.*—Belgian tribes around the Scheldt. They fought most stubbornly and were nearly all cut to pieces, B.C. 57. Antony was not there, but the victory having brought great glory to Cæsar, he uses it as he does the rents in the mantle, for oratorical purposes.

106. *Envious.*—Malicious.

110. *As.*—As if.

Ibid. Resolved.—Freed from uncertainty.

112. *Angel.*—Darling, most particular friend.

• 114. *Most unkindest.*—Double sup., common in Shakespeare. The inflections *er* and *est* had lost much of their force, and were sometimes strengthened by *more* and *most*.

117. *Burst.*—It suits Antony's oratorical purpose to represent Cæsar as dying of a broken heart, killed by the ingratitude of Brutus, not by his dagger.

120. *Ran blood.*—Blood which had spouted from Cæsar's wounds.

122. *All.....fell.*—He speaks of Cæsar as representing the popular cause.

123. *Flourish'd*.—Triumphed.
 125. *Dint*.—Impression.
 Ibid. *Gracious*.—Generous.
 128. *Marr'd*.—Spoiled, disfigured.
 143. *Griefs*.—Grievances, causes of complaint.
 146. *Steal*.....*hearts*.—Deceive you by working on your feelings.
 153. *Right on*.—Unskillfully, without art.
 157. *Brutus Antony*.—Had I the eloquence and oratorical skill of Brutus.
 He wishes them to think that Brutus by his eloquence made a bad cause appear a good one, whilst he himself is so unskillful that his influence is wholly due to his good cause.
 173. *Drachma*.—A Greek silver coin= $9\frac{1}{4}$ d. (pr. drack'ma).
 180. *This side*.—Should be *that side* (copied from North).
 182. *To walk*.—Adverbial infin. of purpose.
 185. *Burn*.—That being the course most honouring to the dead.
 Ibid. *Holy place*.—In the midst of the consecrated places, in the FORUM.

QUESTIONS.

1. Give two or three extracts from the speech of Antony, and write an analysis of it.
2. Show how far the conspirators were actuated by public and political considerations, and how far by private and personal grievances.
3. Relate and explain Antony's conduct over the will.

(By Thomas Parry, F.R.G.S.—Longman's Series).

NOTES ON TENNYSON'S "ENOCH ARDEN."

Selected portions of the English Course prescribed for the Calcutta University F. A. Examination and Roorkee Entrance Examination of 1886

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(Continued from page 10.)

Ev'n to the last dip, &c.—Scan thus;

Ev'n tō | the last dīp | ōf the vān | īshīng sāl.

The heroic measure in which Enoch Arden is written consists of five iambic feet. It is not unusual to find a *trochee* introduced at the beginning of a line, which may also begin with an *anapest*. In the above quoted line we have no less than three *anapests*, and will be seen that the line consists of only four feet instead of the orthodox five. The poet, however, has

sacrificed the rules of prosody in order perhaps to comply with the precept of Pope that the "sound should seem an echo of the sense." The introduction of so many short syllables represents in a manner the speedy vanishing of the vessel from the eye of the beholder.

Dip—Sax. *dīpan*—A downward inclination.

She watched it and departed weeping for him.

This line is hypermetrical

Shē wātched | īt ānd | dēpārt | ēd wēep | īng fōr | him.

Grave—Death.

Set her sad will no less to chime with his—Endeavoured to carry out her husband's wishes. Enoch had stocked their little home with

"All that seamen needed or their wives"

that Annie might be able to support herself during his absence, and she now made it her endeavour to dispose of her wares to the best advantage.

Not being bred to barter—Not having been educated to trade. *Barter* is from the Italian *barattare* (to exchange). From the same root comes the word *barratry*, a commercial term signifying any fraud committed by a ship-master by which he injures the owners or insurers. From the original meaning of barter, viz., to give in exchange, is probably deduced the idea of deceiving.

Nor compensating the want by shrewdness.—Nor did she possess a natural shrewdness to make good this deficiency in her bringing up. *Compensate* from Lat. *com* and *pense* (to value), from *pensō* (to weigh, to value) means to give equal value to, hence to make amends for. *Shrewdness* in Chaucer's time meant *mischievousness*, *vezatiousness*. A *shrewd* man meant a *troublesome* man. The word *shrew* alone of the class of words derived from the Sax. *shrewian* (to curse) retains its original signification, meaning a turbulent scolding woman. As examples of words the meaning of which has undergone a change, compare *simple*, *christian*, *fond*, *knave*, *humble*, &c.

Still—Always.

Foreboding—The prefix *fore* is the same word in origin as *for* from the root of Sax. *fōran* (to go, to advance). *Bode* comes from the same root as *bid*, Sax. *gebodian* (to relate, tell, announce). *Bode* is generally used in an evil sense, as "his arrival bodes us no good." The meaning here is gloomily conjecturing what her husband would say when he returned and saw how ill things were faring.

Pressure—Want, Lat. *premo*, *pressum*, (to press).

Wares—Goods. This word is generally used in the plural, but we may say *Chinaware*, *earthenware*.

Buying—A gerund.

She fail'd—She had not met with success in trade.

Her own—Her children.

Melancholy—Gr. *melan* (black), and *chole* (bile). It was formerly believed that dejection of spirits proceeded from superabundance of black bile.

"The voice who best could tell"

What most it needed—The physician.

Lingering—A gerund.

Seated with her grief—Seated and grieving.

Falteringly—The word *falter* is connected with the Lat. *fallō* (to deceive) the primary meaning of which is *to err*, *to miss*, *to fall short*.

The passion in her moan'd reply—The grief that was expressed in the sad reply she gave him.

His bashfulness and tenderness at war—While agitated by conflicting feelings of shyness and affection. Philip still loved Annie but felt bashful about approaching her so that while affection urged him to speak to her, his bashfulness advised him to go away.

To speak—Gerund.

Best—Better would be more grammatical.

A strong man—A strong minded man.

*For where he fixed his heart he set his hand
To do the thing he will'd and bore it thro'.*

When Enoch had resolved to accomplish an object, he worked determinedly until he brought the undertaking to success.

Weary way—Tedious journey.

Wherewithal—This word is the same as *wherewith* (with which); hence means, money.

*Vext will he be
To find the precious morning hours were lost.*

He will be vexed to find that the education of his children in the precious days of their childhood has been neglected.

Broke me down—Overwhelmed me.

That is borne in on me—That fact is impressed upon me, of that I am convinced.

Direct—Contemplated, gazed.

Garth—Garden. Both words are allied to the English *yard*, an enclosure from Sax. *geard*, the second syllable of *ortgeard* from which our word orchard is derived, literally meaning an enclosure for vegetables.

Lifted up in spirit—His spirits raised or rejoicing.

By his own—Here *by* has the same form as *to*.

Fearing the lazy gossip of the port—Fearing the scandalous talk of the idle people of the port. The word *gossip* coming from Sax. *God and sib* (related) originally meant a sponsor at baptism. The term has lost its original meaning and is now only applied to a tattling person. (*Wile note below.*)

His dearest wish—This was to pay Annie a visit. See following line:

"And seldom cross'd her threshold."

Threshold—Sax. *thürschweld*, Ger. *thürschwelle*. The first syllable of the Saxon word seems connected with *thrash*, *thresh* and *wald* (wood); but the German word is compounded of *thür* (door), and *schwelle* (sill), door-sill.

Garden-herbs—Vegetables.

Wall—Garden wall.

Conies—Rabbits. Lat. *cuniculus*.

*With some pretext of fineness in the meal
To save the offence of charitable.*

He often sent her a gift of flour assigning as a reason that the meal was finer than usual so as not to wound her feelings by letting her see that the gift was made from charitable motives.

Whistl'd on the waste—Note the sibilant in this line introduced probably to paint the action of the windmill.

Philip did not fathom Annie's mind—Philip did not understand her.

Light on a broken word—She could not falter out a word of thanks.

Philip was her children's all-in-all—Philip was everything to her children.

Worried his passive ear with petty wrongs—Incessantly poured into his patient ear their childish complaints.

Nutting—A gerund.

Blanch'd—White with the flour of his mill like a bee whitened by the pollen of the flowers. Fr. *blanc* (white). *Blank* and *bleach* come from the same root.

Force—Strength. Lat. *fortis* (strong.)

Lithe—Pliant. Sax. *lith*.

Reluctant—Resisting. Lat. *re* (against, back) and *luctor*, to struggle.

Tawny—Dark-yellow. Fr. *tanner* (to tan).

Orphans—Gr. *orphanos*.

It will out—It will speak out.

Fain—Gladly. Sax. *faegan* (glad.)

Fast—Firmly, for good.

Kin—Kindred, relatives. Sax. *cyn* (nature). Kind comes from the same root. Compare Shakespeare's Hamlet.

"A little more than kin a little less than kind."

Angel—Gr. *angelos* (messenger), *aggello* (to announce). The Angels are God's messengers to man. The Christian belief is that every man has given him a good angel to look after and guide him. Cf Spenser's lines beginning

"And is there care in heaven?"

A little after Enoch—After here means *behind*, hence *less than*.

Bide—Wait for. A corruption of the word *abide*, Sax. *abidan* (to dwell, rest). The use of the word *bide* appears to be a Scotticism. Compare the Scotch song. "We'd better bide a wee" meaning "We had better wait for a short time."

*Beheld the dead flame of the fall'n day
Pass from the Danish barrow overhead.*

Saw that the Danish barrow above them was no longer illumined by the rays of the sun which had gone down.

That was your hour of weakness—When I spoke to you it was a time when you were unable to refuse me, when the sense of your solitariness coming home to you made you accept my offers.

That autumn into autumn flash'd again—The year agreed upon had rolled swiftly by. It was autumn when Annie asked Philip to wait for a year.

Put him off—Asked him to wait. *To put off* has also the meaning of *to pass fallaciously* and *to lay aside*. Thus "to put off upon the world some ingenious theory" means "to palm such a theory upon the world;" "to put off one's clothes" means "to lay them aside." The verb *put* is joined with variations of meaning to such prepositions and adverbs as *on*, *in*, *to*, *away*, *by*, *off*, *forth*, *into*, *about*, *out*.

*By this the lazy gossips of the port,
Abhorrent of a calculation cross,
Began to chafe as at a personal wrong.*

And now the idle scandal-mongers of the port vexed that their calculations regarding the marriage of Annie and Philip had been upset, began to feel angry as though they had received some personal injury.

Regarding the word *gossip*, Trench has the following remarks in his *Glossary*: "Gossip" is one being still used by our peasantry in its first and etymological sense, namely as a sponsor in baptism—one *sib* or a kin in *God*, according to the doctrine of the Mediæval church, that sponsors contracted a spiritual affinity with the child for whom they stood. 'Gossips' in this primary sense, would often be familiar with one another—and thus the word was applied to all familiars and intimates. At a later day it came to signify such idle talk, the 'commerage' (which word has exactly the same history), as too often would find place in the history of such."

Abhorrent—Lat. *cb* and *horreo* (to tremble, shudder).

Calculation—Lat. *calculus* (a pebble).

Chafe—Fr. *échauffer*, Lat. *caleo* (to grow hot).

Evil fancies—Low suspicions.

Fancy, from Gr. *phaino* (to appear).

He often looked his wish—Showed by his countenance that he wished them to marry.

Sign—A visible proof, a manifestation.

Gone—Dead.

Compass'd round by the blind wall of night

Brook'd and not th' expectant terror of her heart.

Surrounded by the deep darkness of night she could not stand the terror which she felt at heart whilst waiting for the sign she had prayed for.

Desperately—Lat. *de*, and *spero* (I hope.) In despair.

Her Enoch sitting on a height—Supply some such word as *appeared*.

Hosanna in the highest—An exclamation of praise to God. *Hosanna* is a Hebrew word meaning "Save I beseech you" and was used in the ceremonies of the Hebrews. The expression is still used in the Christian service. The angels and saints in Heaven are always represented as singing Hosannas before the throne of the Most High.

Sun of Righteousness—Jesus Christ, the Saviour of mankind, is so called in Scripture.

"And these be palms

Whereof the happy people strowing cried

Hosanna in the highest—A week before the Crucifixion of our Saviour, the Jews accorded him a triumphant entry into Jerusalem strowing the road with palm branches and singing Hosannas in his praise. The Christian festival of Palm Sunday, the Sunday immediately preceding Easter, is celebrated in commemoration of that event.

Resolved—With her mind made up.

So you will wed me—So here means *if provided*.

Then the new mother came about her heart—A mother's affection for this new child of her's filled her heart. The poet calls Annie a "new mother," because she was a wife for a second time.

The Biscay roughly ridging eastward—The stormy Bay of Biscay with its line of cliffs trending to the east. The Bay of Biscay is noted for its boisterous weather.

Yet unwezt

She slept across the summer of the world.

Without encountering a storm she crossed the region of the tropics. It is obvious why the poet calls the tropic region the summer of the world.

And frequent interchange of foul and fair—With frequent alternations of calm and boisterous weather. *Foul* and *fair* are here to be parsed as nouns. Compare Shakespeare's Hamlet, "Fair becomes foul."

Golden isles—Isles lit up by a tropical sun probably. Some annotators say the Hesperides are referred to.

The breath of heaven—The winds.

Oriental haven—Eastern harbour. Lat. *oriens* (the east), from *orior* (to rise), literally the place where the sun rises.

Quaint monsters—Grotesque images. *Quaint* is probably from the Lat. *comptus* (well dressed). Originally it meant *nice*, *exact*, *spruce*, now *odd*, *grotesque*.

Dragon—Lat. *draco*. The ship sailed to China, where the worship of monsters is common. Hence probably the reason why the poet makes Enoch buy such articles.

Sea-circle—Circle of the sea.

Full-busted figure-head—Every ship possesses a figure-head, generally the bust of a female fixed to the prow or forward part of the vessel.

Ripple—Allied to *rip*, from Danish *ripper* (to stir, to agitate).

Feathering—Cast away in foam. *Foam* is of the same colour as a *feather*, hence probably the expression. Note that the meaning here is not the same as that in the lines

"Just when the prone edge of the wood began
To feather toward the hollow."

Baffling—Supply *winds*. Fr. *befler* (to play the fool with). The word is identical in origin with *buffoon*.

A long course of them—A long succession of contrary winds. *Course* from the Lat. *currere*, *cursum* (to run).

Hard upon the cry—Close upon, or immediately after the cry was raised.

Buoyed up—Held up by, floating upon. *Buoy* probably comes from the root of Sax. *byan* (to be stationary.) A *buoy* is a *stationary* float which warns vessels of the proximity of rocks, shoals, &c.

Tackle—Cordage, ropes.

Spars—Masts. Danish *spar* (rafter, shingle). Connected perhaps with *spear*, *spare* and *bar*.

Drifting—Connected with *drive*. Thus a *drove* of sheep or cattle was once a *drift*.

Nor save for pity was it hard to take
The helpless life so wild that it was tame.

Nor was it hard to slay the game that then abounded, though it moved one's pity to do so, as the animals which had never seen man were so wild that they could be easily approached. Note the double meaning in *hard*. In the second line we have the figure of antithesis.

Seaward-gazing—Looking on the sea.

Gorge—Fr. *gorge* (throat), hence a narrow passage between two hills.

Eden—The garden in which our first parents, Adam and Eve, were placed. Hence a generic name for garden or place of abundance.

Dwelt with eternal summer—The vessel had probably been wrecked in the tropics.

Lay ling'ring out a five years' death-in-life—Lingered for five long years more dead than alive. Note the figure here—*death-in-life*.

Fire hollowing this in Indian fashion—Hollowing this by fire, so as to make a canoe after the manner of the Indians of America. The small canoes of the American Indians are made of the stems of trees, the substance of which they burn out. Similar canoes are to be found on the coasts of India.

The slender coco's drooping crown of plumes—The cocoanut tree is here meant.

The lightning flash of insect and of bird—The poet may here refer to the firefly or perhaps generally to the insects of the tropics, which are of such varied colours, and flash in the sun's light.

Convolvulus—A species of bindweed. Lat. *con* and *volvo* (I wind).

Ran ev'n to the limit of the land, i.e., Ran to the shore.

the glows
And glories of the broad belt of the world.

This probably means "the glorious sunrises and sunsets of the tropics." Between them the tropics include a belt of 47 degrees round the world.

The kindly human face—Kindly means affectionate, benevolent.

Trench says of this word, "nothing ethical was connoted in 'kindly'; it was simply the adjective of 'kind.' But it is God's ordinance that 'kind' should be 'kindly,' in our modern sense of the word as well; and thus the word has attained this meaning." Compare Milton, *Paradise Lost*, Book III. "the human face divine." The account of Alexander Selkirk's sojourn upon the lonely island of Juan Fernandez, as embodied in Daniel Defoe's *Robinson Crusoe* may have furnished Tennyson with the idea of placing his hero in a similar position. The following lines from Cowper's *Alexander Selkirk* may, with advantage, be quoted here:—

"I am out of humanity's reach,
I must finish my journey alone,
Never hear the sweet music of speech,
I start at the sound of my own.
The beasts that roam over the plain,
My form with indifference see;
They are so unacquainted with man,
Their tameness is shocking to me.

But heard the myriad shriek of wheeling ocean-fowl.

The word *myriad* applies not of shriek, but to ocean-fowl.

Zenith—High above him.

Or the sweep
Of some precipitous rivulet to the wave.

Or the swift passage of some brook running down to the sea. *Precipitous* comes from Lat. *præceps* (headlong), from *præ* (before) and *caput* (head).

Shafts—Beams. The word comes from the root of *shape*, from *setting*, shooting, extending.

The blaze upon the waters to the east
* * * * *

The scarlet shafts of sunrise.

The meaning is, he saw morning merge into mid-day, noon into evening, evening into night, and night into morning.

The golden lizard on him paused—The lizard with its hues of gold watched him.

Phantom—From the same root as fancy, Gr. *phaino* (to appear.)

A phantom made of many phantoms mov'd
Before him haunting him, or he himself
Mov'd haunting people, &c.

He was disturbed by a fanciful picture in which moved many fanciful

objects, or he himself caused objects to pass before him who were ever in his thoughts.

Line—Equator.

Dewy—glooming downs—The downs upon which the gloom of night was setting and its dew falling.

Leaden-colour'd—Of the colour of lead.

and when the beauteous hateful isle,
Return'd upon him, had not his poor heart
Spoken with That, which being everywhere
Lies none, who speaks with Him, seem all alone.

And when the sense of his isolation upon that beautiful though hated island returned to him, if he had not prayed to the Omnipresent God who abandons no one that has recourse to Him, Enoch would assuredly have perished of having been left alone.

Doom—Condition, state, fate. Sax. *dom*. Compare *dom* in *kingdom*, *martyrdom*.

Mist-wreathen—Wreathed or enveloped in mist.

And then the tale he utter'd brokenly—

He told his story in broken sentences.

Scarce-credited at first but more and more,
Amazed and melted all who listen'd to it.

His story scarcely believed at first was gradually more and more credited, and all who heard it were surprised at and pitied his fate.

And shook his isolation from him

And got rid of the feeling that he was alone.

but evermore
His fancy fled before the lazy wind
Returning, till beneath a clouded morn
He like a lover down thro' all his blood
Drew in the dewy meadowy morning breath
Of England, blown across her ghostly wall.

On his return his thoughts were too fleet for the speed of the vessel, which was being driven by a slow breeze, until like a lover he felt in all his veins the perfume of the dewy meadows of England, which was blown to him across the white cliffs of her coast.

The term *ghostly wall* means the *white cliffs* of Dover, which have probably given to England the name of *Albion*, Lat. *albus*, (white), the name by which the Island was known by the ancients.

Levied a kindly tax upon themselves—Probably, made a subscription for him.

Bright was that afternoon
* * * * *

Flared upon him, and he came upon the place.

The afternoon was bright but cold; a mist from the sea rolled through the two openings in the line of cliffs when the two harbours opened into the sea, covered the world with a cloud of gray, and completely darkened a person's way before him, while on the right or left could be seen but a small portion of ground covered with forest, or crops, or for pasturage. On the tree which was almost despoiled of its leaves the Robin Redbreast was perched alone piping its sad lay and in the damp mist the withered leaf was borne to the ground by its own weight. The drizzle increased, the gloom grew blacker; and at length it seemed as though a light observed by the mist burst upon him and he found his home.

Holt—Sax. *holt* (wood). Lat. *celo* (to conceal).

Tillth—The state of being tilled. Sax. *tilian*, *tiligan* (to toil, to cultivate).

His heart foreshadowing all calamity—Anticipating at heart the greatest misfortunes.

A bill of sale gleam'd thro' the drizzle—Through the drizzle he could see a bill of sale posted on the house.

Tavern—Lat. *taberna* (a board). Literally a place built up of boards, of which probably taverns originally consisted.

A front of timber crost antiquity—A very ancient house, the front of which was built of beams laid across one another.

Propt—Supported, held up.

Daily-dwindling—Dwindle from Sax. *duinan* (to pine, vanish).

Brawl—Ger. *brüllera*, connected with Lat. *praeliari* (to fight).

Garrulous—Talkative, communicative. Lat. *garrulus*, *garrus* (to prate).

Yearned—Sax. *geornian*, *gyrnan*, *earnan* (to desire). *Earnest* comes from the same root.

Unspeakable for sadness—Here *for* is equivalent to *on account of*. Compare the Latin *prae dolore*.

By and by

Against it and beats out his weary life.

Later on the red light issuing from the square in rear of Philip's comfortable home and throwing its beams far into the darkness of the night, drew Enoch towards the house; just as the flare of the lamp in the light-house attracting to it the bird which is on its way to other lands causes it to beat itself against the glasses until in weariness it yields up its life.

The latest house to landward—Probably, the last house on the land side, farthest from the sea. *Latest* refers to time, *last* to order, though both are superlatives of *late*. Perhaps the word refers to Philip's house as having been the *latest* built.

Shingle—Sea-gravel.—Lat. *scindula*, *scindo* (to divide). *Shingle* also means a thin board sawed or divided to cover houses with. Compare Washington Irving's *Sketch Book*: "At the foot of these fairy mountains, the voyager may have descried the light smoke curling up from a village, whose *shingle* roofs gleam among the trees."

Board—Side-board. A table upon which to place delf or plate when not in actual use.

Genial—Comfortable, warm.

A later but a loftier Annie Lee—A second but more stately Annie Lee. Annie Lee was the name of Enoch's wife now Philip's. Note that the poet uses the mother's maiden name as though to describe Enoch's unwillingness to recognise her as the wife of Philip.

Creasy—Fat and wrinkled. Perhaps Fr. *creux* (hollow).

Like the blast of doom—Like the trumpet announcing the Last Judgment. The Christian belief is that at the end of the world, mankind will be subjected to a Last Judgment to which they will be summoned by blast of trumpet.

Tranced—In a swoon. Lat. *transitus* (a passing over), literally a passing beyond or out of oneself.

Beating it in upon his weary brain,
As though it were the burthen of a song.

Wearily repeating it to himself as though it were the chorus of some song.

He was not all unhappy—All here signifies altogether. Compare Horace, *Carmina* III, XXX, "Non omnis moriar."

His resolve
Upbore him, and firm faith, and evermore

Kept him a living soul.

His resolution not to make himself known to Annie and his confidence that God would help him to keep that resolution gave him courage; at the same time he always had recourse to prayer which coming from a resolute heart kept him alive in his misfortunes, as fountains of sweet water swelling up through the salt water of the sea refresh the weary sailor.

It is not clear what springs the poet refers to. It is well known, however, that rivers like the Amazon and St. Lawrence pour such a mass of waters into the sea that for several miles out at sea, the water is fresh.

Alms—O.E. *aelmesse*, Gr. *eleemosyne* (pity). This word is a true singular. So also *riches* and *eaves*. *News*, *tidings*, and *amends* are plurals in original.

Cooper—A copper-smith. Lat. *Cuprum* (copper). Compare *Plumber*.

Enow—Enough.

Wrought—Worked.

"there was not life enough in it
Whereby the man could live."

The prospect before him was a desperate one and there was therefore no encouragement in the calling he plied which might prolong his life. The *where* in *whereby* is a relative equivalent to *which*. Compare *wherewithal*.

Kept the house—Was confined to the house.

For sure no gladlier does the stranded wreck.

Death dawning on him, and the close of all.

Enoch viewed the approach of death and the termination of all his misfortunes with as much joy as do the crew of some stranded vessel. When they discern approaching through the mist, as the storm begins to abate, the boat by which they hope to save their lives of which they had despaired.

For through that dawning gleam'd a kindlier hope on Enoch.—For Enoch saw with satisfaction that after his death, &c.

I warrant—I guarantee, promise—This word from Fr. *garantir* is from the root of *guard*, *warren*, *wary*. The primary sense of the root is to stop or hold and thus guard by resisting danger. Hence the sense of security.

I knew him far away—I knew him in years gone by.

His head is low—His prosperity is gone.

That name has twice been changed—Annie's name had changed twice, since she had married twice.

Bairns—Children: a Scotch word from *bear*, *born*.

Save for the bar between us—Except for the barrier that separates us.

Crying with a loud voice—"A sail, a sail." When Napoleon I. was expiring, his last words were "Tête d'Armée."

(Concluded)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"
Educational Record, Madras.

ALGEBRA.

1. A man invests £14,970 in the purchase of 3 per cents. at 90, and of $3\frac{1}{4}$ per cents. at 97. His total income being £500, how much did he invest in each stock?

Let x = Amount invested in pounds in 3% stock,
Then $14,970 - x$ = " " " " $3\frac{1}{4}$ % " ;

$$\therefore \frac{x \times 3}{90} + \frac{(14,970 - x) \times 3\frac{1}{4}}{97} = 500$$

$$\frac{x}{30} + \frac{13(14,970 - x)}{388} = 500$$

$$194x + 195(14,970 - x) = 2,910,000$$

$$194x + 2,919,150 - 195x = 2,910,000$$

$$194x - 195x = 2,910,000 - 2,919,150$$

$$\therefore x = 9,150.$$

$\therefore$ Amount invested in 3 per cents. at 90 = £9150;

" " $3\frac{1}{4}$ " " 97 = £14,970 - £9150
= £5820.

2. The cost of levelling a square exercise ground is £70, and if each side were three feet longer, the cost would be increased by £7 3s. 6d. What is the length of the side of the square, and the cost per square yard?

Let x = Length of side of square in yards,

Then $\frac{£70}{x^2}$ = Cost per sq. yd.,

And $\frac{£77 \text{ 3s. 6d.}}{(x+1)^2}$ = " " ;

$$\therefore \frac{1543\frac{1}{2}}{(x+1)^2} = \frac{1400}{x^2}$$

$$\frac{3087}{x^2 + 2x + 1} = \frac{2800}{x^2}$$

$$\frac{441}{x^2 + 2x + 1} = \frac{400}{x^2}$$

$$441x^2 = 400x^2 + 800x + 400$$

$$41x^2 - 800x = 400$$

$$x^2 - \frac{800x}{41} = \frac{400}{41}$$

$$x^2 - \frac{800x}{41} + \left(\frac{800}{41}\right)^2 = \frac{400}{41} + \frac{160000}{1681}$$

$$= \frac{16400 + 160000}{1681}$$

$$= \frac{176400}{1681}$$

$$x - \frac{800}{41} = \pm \frac{420}{41}$$

$$x = \pm \frac{420}{41} + \frac{800}{41}$$

$$\therefore x = 20, \text{ or, } -\frac{20}{41}.$$

$\therefore$ Length of side of square = 20 yds;

Cost per square yard = £70

$$\frac{400}{16}$$

$$= £\frac{70}{4}$$

$$= 3s. 6d.$$

3. How much should be paid for an annuity of £250 to last for 9 years, reckoning compound interest at 4 per cent.? Express the answer in pounds and decimals of a pound.

$$\text{Log. } 1.04 = .0170333,$$

$$\text{Log. } 7.02587 = .8467003.$$

Let A denote the annuity in pounds, n the number of years, R the amount of one pound in one year, and P the present value of the annuity in pounds; then,

$$PR^n = \frac{R^n - 1}{R - 1} A;$$

$$\therefore P(1.04)^9 = \frac{(1.04)^9 - 1}{1.04 - 1} \times 250,$$

$$\begin{aligned}
 \left\{ \begin{aligned} \log. (1.04)^9 &= \log. 1.04 \times 9 \\ &= .0170333 \times 9 \\ &= .1532997 \\ &= 1 - .8467003 \\ &= \log. 10 \div \log. 7.02587 \end{aligned} \right. \\
 \therefore (1.04)^9 &= \frac{10}{7.02587} \\
 P \times \frac{10}{7.02587} &= \frac{7.02587}{.04} \times 250 \\
 &= \frac{2.97413 \times 25}{7.02587} \times 250, \\
 P \times 10 &= 2.97413 \times 25 \times 250, \\
 \therefore P &= 2.97413 \times 625 \\
 &= \frac{29741.3}{16} \\
 &= 1858.83125. \\
 \therefore \text{Amount to be paid} &= \underline{\underline{\pounds 1858.83125.}}
 \end{aligned}$$

MENSURATION.

1. A room 25 feet long and 15 feet wide is covered with paper 30 inches wide at 9d. per yd.; if the paper had been 33 inches wide, the cost would have been 14s. 8d. less. Find the height of the room.

$$\begin{aligned}
 &\left\{ \frac{2(25 + 15) \times \text{Height in ft.}}{9} \times \left(\frac{33}{30} - \frac{30}{33} \right) \times 9 \right\} d. \\
 &= 14s. 8d., \\
 80 \times \text{Height in ft.} \times \left(\frac{12}{11} - \frac{11}{12} \right) &= 176, \\
 80 \times \text{Height in ft.} \times \frac{132 - 120}{110} &= 176, \\
 \text{Height in ft.} \times \frac{80 \times 12}{110} &= 176, \\
 \therefore \text{Height} &= \frac{11}{6} \times (176 \times \frac{11}{80}) \text{ ft.} \\
 &= \frac{121}{6} \text{ ft.} \\
 &= 20 \frac{1}{6} \text{ ft.} \\
 &= 20 \text{ ft. 2 in. } \text{Ans.}
 \end{aligned}$$

2. A certain room is one-third as wide, and one-half as high, as it is long. One-twelfth of the wall space is taken up by windows and a fireplace. If the cost per square foot of painting the walls and ceiling be one-fourth the cost per square foot of carpeting the floor with carpet 2 ft. 3 in. wide at 3s. 4½d. per yard, find the length of the room, the entire cost being £52 13s.

$$\begin{aligned}
 \text{Cost of carpeting per sq. ft.} &= 3s. 4\frac{1}{2}d. \div (2\frac{1}{4} \times 3) \\
 &= 40\frac{1}{2}d. \div 6\frac{3}{4} \\
 &= \frac{3}{2} \times \frac{2}{27} d. \\
 &= 6d.
 \end{aligned}$$

Let L stand for length of room in ft.;

Then,

$$6d. \times [(L \times \frac{1}{3}L) \times \frac{1}{4}\{(L + \frac{1}{3}L) \times 2 \times \frac{1}{2}L \times \frac{11}{12}\} + \frac{1}{4}(L \times \frac{1}{3}L)]$$

$$\begin{aligned}
 &= \pounds 52 \text{ 13s.} \\
 \frac{1}{3}L^2 + \left(\frac{1}{4} \times \frac{4}{3} \times \frac{11}{12}L^2 \right) + \left(\frac{1}{4} \times \frac{1}{3}L^2 \right) \\
 &= \frac{1053s.}{6d.},
 \end{aligned}$$

$$\frac{1}{3}L^2 + \frac{11}{36}L^2 + \frac{1}{12}L^2 = 2106,$$

$$\frac{12 + 11 + 3}{36}L^2 = 2106,$$

$$\frac{26}{36}L^2 = 2106,$$

$$\begin{aligned}
 L^2 &= 2106 \times \frac{18}{13} \\
 &= 2916.
 \end{aligned}$$

$$\begin{aligned}
 \therefore L &= \sqrt{2916} \\
 &= 54.
 \end{aligned}$$

$$\begin{aligned}
 \therefore \text{Length of room} &= 54 \text{ ft.} \\
 &= \underline{\underline{18 \text{ yds. } \text{Ans.}}}
 \end{aligned}$$

ARITHMETIC.

I. A ship 40 miles from the shore springs a leak which admits 3½ tons of water in 12 minutes. 60 tons would suffice to sink her, but the ship's pumps can throw out 12 tons of water in an hour. Find the average rate of sailing so that she may reach the shore just as she begins to sink.

II. What must be added to

$$\frac{\frac{1}{5} - \frac{1}{6}}{\frac{1}{5} + \frac{1}{6}} \text{ of } \frac{9\frac{1}{2} - 5\frac{1}{3}}{4\frac{1}{2} + 3\frac{1}{4}} \div \frac{32\frac{2}{3} - 20\frac{1}{3}}{10\frac{5}{6} + 3\frac{1}{12}}$$

to make the total 8½ of ¾ of 4½?

$$\text{III. (a) Simplify } \frac{2.6 \text{ of } 5.25 \text{ of } 7.5}{12.6} + \frac{.0104 - .002 + .046}{.12}$$

(b) Add 3½th lb Troy to 3½th lb Av: and express the sum in Troy weight.

IV. A shepherd knew his flock was above 300, but less than 400. When he counted them by twos or threes, he had none left: similarly when he counted them by fours or fives. Find the number in the flock.

V. The up-train leaves the Central Station at 7 A.M., and reaches Arkonam at 10-15 A.M., and the down-train leaves Arkonam at 3-15 A.M., and reaches the Central Station at 8-30 A.M. At what time do they meet?

VI. (a) Find, by Practice, the rent of $6005\frac{2}{11}$ acres of land at Rs. 1-6-8 pias an acre.

(b) Extract the square root of $\frac{4}{9}$.

VII. What length of rope will be required to make a ladder for a vessel 60 ft. wide, the height of whose mast is 46 ft., to reach from the side of the vessel to a point 6 ft. from the top, allowing 5 yards for the tie.

VIII. (a) What Principal will in 3 years at $3\frac{1}{2}$ per cent. amount to £2,979.2-0 compound interest?

(b) Find the simple interest of 183 Rs. from 4th January 1884 to 14th April of the same year at 4 per cent.

IX. At the siege of Sebastopol, it was found that a certain length of trench could be dug by the soldiers and navvies in 4 days, but that when only half the navvies were present, it required 7 days to dig the same length of trench. How much more work did the navvies perform than the soldiers?

X. British Burmah, whose area is 80,000 square miles, is drained by 3 rivers, each $\frac{1}{2}$ mile wide and 40 ft. deep. If the rainfall is 50 inches and the rates of the rivers as 1 : 2 : 3, at what rates do the rivers flow, all the water being discharged in 10 days?

MILTON—PARADISE LOST: BOOK IX.

I. When did Milton first conceive the subject of Paradise Lost?

Explain:—

“ Since first this subject for heroic song.

Pleased me long choosing, and beginning late.”

What did Milton do in the interval?

When did he begin and complete the poem? How is the IXth Book important?

II. Contrast the characters of Adam and Eve as they were before the fall. What changes occurred in them after the commission of sin? Point out some weaknesses usually attributed to women in the character of Eve.

III. Expand fully the arguments contained in the following passage:—

Will God incense his ire
For such a petty trespass, and not praise
Rather your dauntless virtue, whom the pain
Of death denounc'd whatever thing death be,
Deterred not from achieving what might lead
To happier life, knowledge of good and evil;
Of good, how just? Of evil, if what is evil
Be real, why not know, since easier shunned?
God therefore cannot hurt ye, and be just;
Not just, not God; not feared then, nor obey'd:
Your fear itself of death removes the fear.

IV. Explain:—

- (1) Unless an age too late, or cold
Climate, or years damp my intended wing
Deprest, and much they may, if all be mine,
Not hers who brings it nightly to my ear.
- (2) Solitude is sometimes best society.
- (3) And what is faith, love, virtue unassay'd,
Alone, without exterior help sustained?
- (4) Not terrible, though terror be in love
And beauty not approach'd by stronger hate
- (5) To him she hasted, in her face excuse
Cause Prologue and apology to prompt,
Which with bland words at will she thus address.

Give the different readings and their meanings:—

- (6) Naked left
To guilty shame; he covered, but his robe
Uncovered more.

V. Explain:—

Creatures animate with gradual life,
Flaming ministers, act intelligential, unkindly fumes,
A pillared shade high overarch'd, universal Dame,
Virgin of Proserpina by Jove.

VI. (1) Give the derivations of:—impresses, sedulous, imp, astonished, tattered, integrity.

(2) In what sense does Milton use the following words?—

Quote where you can the lines or phrases in which they occur:—

Affronts, integrity, spring, obnoxious, tract, fraud, impregnated, devote, fact, shed.

(3) Give three instances of Latin constructions adopted by Milton.

VII. Explain the allusions in the following passages:—

- (1) More duteous at her call,
Than at Circean call the herd disguised.
- (2) So rose the Danite strong,
Herculean Samson from the harlot-lap
Of Philistean Dalilah.

VIII. (1) What is the simile that Milton uses to illustrate the impassioned way in which the Serpent delivers his last speech that persuades Eve to eat the forbidden fruit? Is there any incongruity in it?

(2) When the Serpent first sees Eve, how does she appear to him to add to the beauty of the flowery garden?

IX. Explain Milton's philosophy in the following passage:—

“ Secured from outward force; within himself
The danger lies, yet lies within his power:
Against his will he can receive no harm.
But God left free the will, for what obeys
Reason, is free, and Reason he made right,
But bid her well beware, and still erect.”

X. Explain what is remarkable in grammatical construction in the following passages:—

- (1) Let us divide our labours, thou where choice
Leads thee, or where most needs.
- (2) Thoughts, which how found they harbour in thy breast
Adam, misthought of her to thee so dear?

LOGIC.

NOTE.—The references in these questions are to the 'People's edition' of Mill's *Logic*, dated 1884.

(Continued from page 18.)

BOOK I. C. 1.

Of Names and Propositions.

15. Why is an inquiry into language a necessary preliminary to the study of Logic? page 11.
16. What is a Proposition in Logic? p. 12.
17. Of how many parts does every Proposition consist? p. 12.
18. What do the words Subject, Predicate and Copula denote? p. 12.
19. How many objects are necessary for an act of belief? p. 12.
20. Of how many names does every Proposition consist? p. 13.
21. What is Hobbes' definition of a name? p. 14.
22. In what sense does Mill use names? p. 15.
23. What did the schoolmen understand by the expression *suppositio materialis*? p. 15.
24. Can any adjective stand by itself as a predicate of a proposition? p. 15.
25. What did the schoolmen understand by Syncategorematic and Categorematic terms? p. 16.
26. How is it possible to ascertain whether any set of words makes only one name? p. 16.
27. What are general, singular, collective, concrete, abstract names? p. 17.
28. Do abstract names belong to the class of general, or to that of singular names? p. 18.
29. What are connotative and non-connotative names? p. 19.
30. Are concrete general names connotative? p. 19.
31. Why have connotative names been also called denominative? p. 20.
32. Are proper names connotative? p. 20.
33. When the name given to any object has any meaning, in what does the meaning reside? p. 21.
34. What names of objects connote nothing? p. 21.
35. How do names with indeterminate connotation differ from ambiguous words? p. 25.

(To be continued.)

COMPETITION: ITS ABUSE AND ANTIDOTE.*

The object of this paper is, I am afraid, not indicated by its title. Of all the irritating and futile tasks which one might undertake when proposing to oneself an essay on an educational subject, perhaps the most irritating and futile, certainly the most wearisome, would be *Declamatio controversia* upon competition. Everyone would feel that such a discussion was altogether *in nubibus*, and could lead to no practical result. Whereas I wish, above all, to make at least some practical suggestions in this paper, suggestions really conducive to the end I have in view. I think my general aim will be most clearly understood if I say that the thoughts here set forward were the outcome of a desire to preserve some sort of continuity in our discussions. I certainly think that the society suffers a good deal from the very diverse nature of the debated subjects—the *lanx satura* of our educational banquet may be appetising, but is not altogether digestible. But we have had two papers lately which seemed to me to have enough in common to make them the basis of an essay in the same direction. We had a paper on the "Training of the Imagination;" we had another which, under the title of the "House of Rimmon," set forth the dangers of erecting or adopting from others false ideals, or, as I think they might be called, if the author of that paper will permit, *Idola Ludi*, the "Idols of the School-room." Now, I believe that we were unanimous in admitting the desirability—nay, the paramount necessity—of "training the imagination," provided it could be done; but objector after objector then urged the practical difficulties which prevented anything more than tentative efforts in that direction. In taking a review of the objections then offered, and considering them in the light of the subsequent paper, it seemed to me that many, perhaps most of them, were suggested by a contemplation of that *idolon ludi* which, for want of another term, I call "Competition." I mean that we are all of us—(I speak for myself, of course)—we are all of us, as it were, spell-bound by the dread of teaching anything or engaging in any so-called "regular" work, which either will not help to fix the exact place of a boy in a form, or will not aid him in some forthcoming examination, or has not yet received the *imprimatur* of some examining board or board of faculties, or whatever it may be, as a fit and proper medium for a test examination. In other words, the worship of this *idolon* is a form of servitude for which my plea is that we should try to substitute more liberty of action. Where the causes of the evil lie beyond the proper action of schools, I shall pass over the subject lightly; I wish to confine myself more particularly to those cases over which we have complete control. And, if my hearers reflect how small a portion of its organised work is under the direct control of any school, how largely it is regulated by external pressure, they will, I hope, not regard my suggestions as wholly trivial and insignificant. Things which to the maker of theories may seem of quite ludicrously small import,

* A paper read before the U. U. Club.

assume a different magnitude when they form part of the routine of the practitioner.

I must begin, however, with *Pars Theoretica*, and try to lay down a general proposition. It is this, that among the worst results which may be expected of our present competitive system are these—first, that it tends to multiplication of formulas; and, secondly, that it forces attention rather to the form than the matter of the subject of teaching. I am prepared to find this disputed on the ground that, in a healthy view of competition, the result should be, not the stereotyping of a bad or, at any rate, an insufficient formula, but the striking-out of new and more adequate formulas as a substitute for those which have become discredited. The truth of this objection may be at once admitted, and the answer is that our view of competition is not healthy. Competition is healthy which regards the end aimed at as an ever-advancing point; it is unhealthy when it regards the end as out of question, and only seeks to elaborate the shortest methods to it.

Given a fair field and no favour, the mutual rivalry of competitors is directed not merely to the improvement of method, but to a nobler conception of the end aimed at; but, assume a fixed type as the standard, the article required to be of a certain form and dimensions, to exhibit certain attributes capable of being submitted to the test of a rigorous measurement, competition is no longer troubled about its ideal, but simply seeks to perfect its mechanism and economise its time and labour. I hope I shall not be thought fanciful if I indulge in an analogy drawn from the arts. What is the reason that the sculpture of the Greeks so infinitely surpassed anything that the Egyptians, with all their cleverness, could produce? The Greek sculptor was always haunted by the shadow of an ideal excellence greater than that which could be attained by the established conventions of skill and the traditions of craftsmanship. He regarded convention only as a necessary stage to a further point at which the old convention might be discarded. It was not to him identical with the truth, but only an approximation to the truth which his predecessors had regarded as the whole truth. His aim was never wholly finite; it might be, must be, limited in realisation, but it was unlimited in conception. The aim of the Egyptian sculptor was limited by the universal and necessary acceptance of a fixed type. He was compelled to compete, not in the realisation of an ideal, but in the elaboration of the speediest method of producing an image which alone had marketable value because it alone had received the stamp of priestly approval. It is easy to conceive that the better the mechanism, the more difficult it became to overcome the lazy acceptance of its result, as good beyond question.

Now what the hieratic sanction, the approval of a priestly caste, was to the Egyptian sculptor, that to us is our belief—I might almost say, our religious belief—that the fear of examinations is the beginning and end of the wisdom of the teacher. The evil lies partly beyond power of remedy

by schools. Where competitive examinations exist like the Woolwich and Sandhurst examinations, the duty the master owes to the boys under him is to prepare them for these in the best possible way. In the remarks that follow, I have in view the ordinary form-work—usually classical—of schools, where there is no examination in prospect beyond that which the school itself organises and controls.

I come, then, to the first of my practical suggestions—the first, after all, rather vague than helpful—not to be afraid of the bugbear of the examiner; the second admitting of more precise characterisation—that we should abolish as far as possible from our teaching, and especially from our examination papers, all that has special relation to the form, as form, in contradistinction to the matter and spirit of the subject taught.

It is all very well to bind down a beginner, to require him to teach after definite formulas, to supply him with rules and regulations, to prevent his going astray. But the teacher of experience who feels any original impulse, and finds that he can best develop character or influence taste by deserting tradition and striking out a new path, ought to have freer scope allowed him than he is now allowed. Thus, for instance, the aim of a Head-master in a form review ought to be, to my mind, not to apply tests tending to discover how far his subordinate has conformed to maxims laid down by himself, but to satisfy himself that that subordinate has, generally speaking, a right aim, that he sees it clearly and works for it strongly. An examiner, again, if he is a good examiner, does not carp because certain things which he thinks essential are not known, without first trying to divine what the teacher's aim has been, and what he has thrown his strength into, and whether, after all, he—the examiner—is not better fitted to be the learner than the judge. It ought not to be possible to say, as I have many times heard it said, that a master feels he produces better results in a term where there is no examination than in a term spent with an examination ever in prospect.

To define my meaning more accurately, I would say that I regard as one of the most valuable qualities in a teacher engaged in form-work what I may call a discursive faculty. Let me not be understood as meaning a faculty for talking off the point, or foisting utterly irrelevant matter into a lesson. I mean that kind of *εὑρηπλία*, in its literal sense, which enables a teacher to touch, even in his ordinary form-work, a note or two here and there, which may vibrate in the minds of some one or two among his hearers long after the exact words of the lesson have been forgotten. I mean that power of illustration and commentary which amplifies and enforces the meaning of what is read, by dwelling upon the thoughts it suggests, the touches of human life and character which it presents, the aspects of the natural world which it calls up. And I believe that the ideal school-book is that which supplies the minimum of verbal commentary necessary to the right understanding of the text; when the teacher has exacted that minimum he can indulge his discursive faculty. Of course there must be books

which aim at further illustration, but, as it is far better that this should be orally imparted, these ought to be written from the teacher's point of view, and aim at a higher level altogether. They are necessary because not all have the time, or width of reading and breadth of experience, required by this "large discourse" which I speak of. Or the matter may be put in another light—form-teaching, viewed in the light of competitive examinations, will aim at uniformity; viewed in the light of the many minds and varied interests involved, it will aim at difformity. The difficulty most boys experience in letting their individual tastes be seen, where they differ from the mass, and the plastic adaptability of most boys to any system, blind us to the harm we may do by insisting upon uniformity. I am of course aware that this general principle requires limitations, which, for want of time, I must leave to be supplied by others. I wish now simply to insist upon the principle that any one who possesses this discursive faculty should not be deterred by the dread of examinations from exercising it, and that reviewers and examiners should shape their questions and papers accordingly. Far less time ought to be given than is now usually the case to the teaching of style. Here I fear I shall encounter much opposition, but I must give it as my opinion that far less weight ought to be assigned in examination to Latin Prose, and far less time given to the teaching of it. In attempting to teach Latin Prose we commit the error of endeavouring to anticipate the instinct of imitation at a time when the reading has not been wide enough for the imitative instinct to have free play. I read somewhere lately—I think in Renan's autobiography—the opinion that, while the learner should be encouraged to express his thoughts in writing, no criticism should ever be offered on the style. This is the extreme view. A popular writer of to-day, whose books have been much praised for their style, said to me that his view of a good English education was that the child should be made to read books chosen solely with regard to their style—he mentioned the writings of Charles Lamb and Sir Thomas Browne,—the acquirement of knowledge might be left to the instinct of curiosity. Both these views, though apparently diverse and paradoxically stated, point to what I believe to be the truth, that style cannot be adequately taught by any rules: it must be apprehended by instinctive imitation. To sum up, composition must in its earlier stages aim principally, if not wholly, at grammatical correctness. In its higher stages, the language must be treated more as a vehicle for the expression of thought than as a medium for the development of style.

In book-papers, and still more in what are called critical or general papers, I believe we ought totally to abolish, or at all events very greatly diminish, the "tip" system. I mean the setting of passages isolated from the context for commentary. In theory this system is defensible on the ground that in the book-paper it makes a boy careful to get up the whole of his book, which cannot be all translated, and attentive to his notes; in the general paper, because it affords a test of the width of a boy's reading. But in practice it secures none of these results, and on the contrary deve-

lops very bad habits. It makes the boy attach a superstitious value to notes, and to regard that part of his book which requires a note as more important than the parts which need no such help; it draws attention towards the affected or unusual, and away from the simple and straightforward. As to the so-called critical paper, it fills one with dismay, almost with despair, to come across, in so many a college scholarship examination, the *crambe repetita* of stale tips and superannuated tags. Surely, one reflects, examiners are really better than their papers; they cannot attach any real importance to this *εὐλοκασία* of mis-directed ingenuity, these dregs of scholarship. If it is urged that mere translation is not sufficient to place boys in a book-paper, because translation may be stereotyped, it is enough to reply that I am not proposing the abolition of questions in general as distinct from minute verbal criticism, and that there is always the resource of a well-chosen unseen paper. It is difficult to draw any distinct line, but as a general principle it may be enough to say that critical questions ought to be a test of the critical faculty in its widest and not its narrowest sense; not verbal ingenuity, but the power of discriminating and appreciating excellence. But let everything be avoided which encourages the learning by heart of memorial formulas, even at the sacrifice of a great deal of what is called, by a convenient euphemism, exact scholarship, the chief merit of which is that it readily lends itself to the test of an examination paper.

A word must be said about a method of teaching which is becoming daily more widely used: hearing lessons on paper. Undoubtedly the employment of paper-work is defensible on many grounds. It seems fairer than any other system of marking answers to questions, and it is a short method of testing work. But equally, without doubt, it is chiefly practised with a view to examinations, to make boys verbally accurate in getting up their work, and to accustom them to express themselves readily on paper. After trying, in the teaching of history, both systems, the paper and the oral, for a long period, I have become convinced that the oral system is infinitely more valuable as an educating process, although I am at the same time convinced that the results in a general examination are not so verbally accurate nor so uniformly even, and this would probably be taken by an inexperienced examiner as an indication of less careful training. This, however, opens up a wide discussion, which it is impossible to enter upon more largely just now.

I now turn to competition as the motive to work, and state my conviction at the outset that the use of this lever of competition in our ordinary form-teaching has not been productive of unmixed good, and that it has done a good deal of positive harm. That it has had great results, I do not for a moment deny. Few who compare the organisation of school-work as it is organised at present with the testimony of their own and others' experience of the past, will hesitate to admit that the work done now is at once more thorough and more universal. Its total amount is far greater. I do not say that work has improv-

ed in quality, though this seems probable; it has indubitably improved in quantity. There is much less sheer idleness than there used to be. It is not my purpose to enquire in what measure this is due to the more conscientious way in which masters have set about their work; it is enough to insist upon the fact that it is due in principal measure to the discovery, or at least the more extensive and systematic use, of a motive force, the efficacy of the lever of competition. The causes of course, lie partly far beyond the influence of any teacher whatsoever. The age which has invented the phrase "struggle for existence," has likewise furnished the most striking example of the operation of the law, and no class of society or mode of activity has been uninfluenced thereby. But it is one thing to provide yourself with a good mechanical driving force; another to use it upon moral agents, to the almost entire exclusion of other forms of moral stimulus. Competition may be a good whip; but it is a truism that the unsparing use of the whip deadens the heart while it hardens the skin. The abuse of this motive has lowered our ideal. Boys take more and more a purely mercenary view of learning, and regard success in examinations as the sole test of merit, the sole thing worth working for. Nowhere, except occasionally in the pulpit, is the principle asserted that work is good in itself, and even there it is listened to with a smile of incredulity as the right thing to say, which nobody really believes. Yet, after all, the pressing question remains, What other motive can I appeal to which boys will believe in? I shall be told that the maxim "Work for work's sake" is purely visionary. Boys will never believe it. I reply that they will not believe you if you merely say it; but they will believe you if you act it. It must prevail if adopted, not as a theory or the text of a sermon, but as the rule of life. Assume that there is something which every boy would work at for the work's sake, if you could find out what it is; make it your business to find that out and work with them, at least sympathise with them, and they will work with you, if not ought of gratitude, yet from a crude instinct of compensatory justice. There is a sense in which it is true that a master learns far more from a boy than he can ever hope to teach him; it is the sense in which the Socratic paradox holds, that all learning is evolved, not imparted. It is by trying, in a groping sort of way, to turn the eye of many souls to the light, that we learn how great, how often far beyond our own, is the range of their vision, and how manifold are the forms of light to which they will turn.

This competitive stimulus chiefly takes the form of the encouragement of the "mark-hunger." To the master, marks are as counters; to the boy, they appear as money, and the master finds it more convenient to let boys remain in this strong delusion than to disabuse them of it. Now one simple remedy seems to me this—not to dazzle boys' imaginations by the use of larger figures than are necessary. Take a common example; term's marks have often to be reduced in order to be equalised with examination marks, or marks in some other subject. I have sometimes asked, "Why not so arrange your scale that your marks adjust themselves without reduction?"

and been met with the answer, "Boys would think nothing of marks if you did not mark them up." Truly they must be poor arithmeticians. This is to make of marks not merely an idol, but a fetish. I cannot admit that it is merely a "lie in words": it is a real lie, a "lie in the soul."

A good deal of the slavery to marks comes from a most laudable desire to do each boy strict justice. It seems to me a strange indication of the extent to which competition has perverted the natural view of things that this notion of *distributive* justice prevails in educational matters almost to the exclusion of any other, and that it is seldom thought unjust to spend a great deal of time in elaborate marking which might be spent either in teaching, or in preparing oneself to teach better. The weight of this idea of justice upon the conscientious mind, which does not see the fallacy involved, is also not to be disregarded. As a remedy for this I would advocate very free marking by impression, and, for composition, the marking by classes. Both these systems possess the advantage, with which the rigid system is not indeed theoretically, but is practically incompatible, that attention is naturally drawn to the positive elements of excellence rather than the negative of failure and mistake.

A word or two must be said about that much-debated subject, school entrance scholarships. It has been stated that the pressure to which young boys are subjected in order to bring them up to the level required by school entrance scholarships has been over and over again detrimental to health. I leave that question to those who know more about private schools and schoolmasters than I do; I wish to put the question, What is the effect upon the *minds* of the boys who are put through this system? And I wish to state clearly that, if the effect is bad, it is idle to fulminate against private schoolmasters: it is the schools which offer these scholarships which are to blame; the fault, if fault there be, is our own. I have worked with many boys prepared under this system, and the conclusion I have come to is that it has a very marked effect upon the less able boys. The really able boys do not seem much affected by it. But the less able boys remind one of the clipped yews of the old-fashioned garden. Such form as they possess has been imposed upon them, without organic assimilation on their own part. As long as the pressure of that form remains they do well, but at a certain point in their career one looks for fresh growth and looks in vain. By utilizing the old method, once again employing shears and pruning hook, you may still do something for them, but they cannot do anything for themselves. Their rules and formulas do not admit of indefinite expansion, and, when the exercise of the unimpeded intellect is required, they are bewildered. They may be compared to mathematicians who have learnt to apply a formula without understanding its principle; the moment they get the least outside the range of immediately recognisable examples, they are helpless. Of course there is always the possibility of error in the conclusion that this kind of premature maturity is due to the system of working up to an entrance scholarship examination, but the persistence of the type seems at least to point to some persistence in the cause. Another evil arises from

the necessity of working up the more promising boys; the general standard of work is pitched too high, and the boys who never do, and perhaps never could, get scholarships have what brain-power they possess too severely taxed at an early age.

The remedies for this mischief are not clear to my mind. To propose that several great schools should combine to agree upon the abolition of scholarships is, I am afraid, quite chimerical. But it would be a great step in the right direction if they could agree upon limiting the competition to boys already at the school. I do not mean to imply by this that the teaching at preparatory schools is inferior to that at public schools; I believe that it is, in many cases, very much more thorough—too much so, if it be not paradoxical to say so. In the larger forms of a public school, the standard of work must be fixed at what boys somewhere about the middle can do, not by those at the top, and the latter must be left more to their own efforts. That the mass of these would not do so well in an examination, I believe; but the few who did work for themselves would gain enormously, more than would compensate for the loss to those who did not. Another good plan would be a constant variation of the papers set. As it is now, the scholarships go to the sons of parents who can pay to have their children trained in the requisite special mode. I know that preparatory schoolmasters would say that this was an injustice to them; but it would not be so, if in the variation of the papers the principle was adhered to, that the object was to secure the best *generally*, not the best *specially*, trained boy. It might be an inconvenience to form-masters to find new boys not trained in the system they themselves are accustomed to; but that they have to face already in a measure, and, if there were less mere grammar teaching, it would be less felt. Lastly, I would try to prevent the publication or distribution of papers. If I had my way, I should like to see a ukase that all superfluous copies of all examination papers in every competition throughout the kingdom should be incontinently burnt. Nothing tends to formularism like working through old examination papers. But of course it is quite absurd to propose this; I limit myself therefore to the proposition that school scholarship papers should not be published or distributed any more than the University scholarship papers are. I dare say that at many schools, as a matter of fact, they are not now.

On glancing through what I have written—written, I may say, in the midst of almost overwhelming pressure of work,—I am chiefly conscious of two impressions. First, that I seem to have followed no sort of logical order; but that I should not so much care about, if it were not for the second, that any practical suggestions this paper contains are neither novel nor important. I think the explanation of that is that, after all, the evils exist a good deal more in the theory than in the practice of our system, and that one tries to counteract them in a number of small ways which do not admit of very precise characterisation. But if the discussion tends to bring out the practical experience of others, this paper will have more than served its purpose.

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[Vol. II.

WORDS TO TEACHERS.

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(Continued from page 5.)

It is a sad reflection, yet, none the less, it is a positive fact, that many of our so-called "teachers" are altogether unfitted for their posts. According to an old saying, a man will take to teaching when everything else has failed, and experience will tell us that this old saying is in a great measure true.

Go the round of our Indian Schools, and inquire into the attainments of the masters, and you will have food in abundance, I am sure, for serious reflection when you have done so.

In one school you will meet with a seedy-looking individual who, having been rejected from the shop counter or the office desk, has had the impudent assurance to imagine that he is capable of teaching in a school! True, his salary is small, and he only teaches the little ones—the big boys, by the way, laugh at his mistakes before his face—yet he's a teacher for all that.

In another school—I fear, in many others—you will come across a broken-down drunkard; you can tell him at once by his bloodshot eyes and his unsteady walk. The boys all know his shortcomings, but he is prudent enough to be more or less sober in school time, and so all goes well. He was never very bright, and even the little that he might have known is generally clouded by the peg-fumes that pervade his brain.

There are many junior teachers in our schools who are an honour, no doubt, to their posts, but there are far too many, who hail

from some such a class as those that we have described.* When you find a bright-looking junior teaching the little ones, you may take it for granted that things are as they should be; but when you come across a bearded or a whiskered fellow teaching A, B, C, and multiplication—beware! There must be something surely wrong if, while that beard or those whiskers have been growing, their owner has not made himself capable of higher things than these.

It is a common mistake amongst our Indian Principals to pay a high price for one good master, just for their senior classes and for the glory of their prospectuses, and to entrust their little ones, in consequence, to the questionable care of any half-educated fellows or needy loafers who are willing to keep the youngsters quiet, with a show of teaching, in return for the petty salaries that remain when the prospectus's pride has pocketed his.

With teachers such as these, no wonder that parents complain that their children don't get on; no wonder that they complain that their letters home are full of mistakes; no wonder that in the holidays they declare that their boys are rude and ill-bred; no wonder that drinking and immorality are actually spreading amongst boys—positive boys. The boys in question are doing no more than following in the footsteps of those who have been set before them as their models and their guides.

This bad system is the fault of Principals of schools, but it is the fault of parents too. Parents who take an interest in the welfare of their children ought, surely, to take some interest in the personality of the man who teaches them. If they were engaging a private tutor for their sons, they would be most particular in inquiring into his qualifications for teaching, into his moral character, and into any fact that concerns him; and it is, surely, hardly less necessary to do this in the case of entrusting a child to the care of a master of a class. Parents who look to the welfare of their offspring should find out everything they can about those who have the charge of them for the long hours—or, in the case of boarding-schools, the long months—that they are away from home, and they would do well to become personally acquainted, if possible, with the tutor of their boys. It seems really wonderful how indifferent parents generally are to the well-being of their sons; they will send them miles away to a school and yet never know, in many cases, even the name of the man who has charge of them.

The writer himself, for his own part, has had personal experience of a case in which a half-educated man, who managed to secure the

reputation of being a successful teacher, went about at large ruining the boys of his class—mentally with the doctrinations of his own ignorance, corporally with the lazy habits, the smoking, the tobacco-chewing, and the other enervating practices which he taught them, and spiritually with the pernicious doctrines which he instilled into their hearts and with the hell-born vices which he introduced amongst them.

Well will it be if the Educational Department will really introduce the much-talked-of system of compelling teachers to undergo examinations as well as boys. It would be a grand step in the right direction if they would first of all make a strict investigation into the moral characters and the respectability of their candidates, and then grant them grade certificates for teaching in accordance with their capabilities.

We hope sincerely that we have given offence to no one. We feel in our heart that the present system of unlicensed teachers is a most serious evil; we are crying out against it, and we are confident that no one who seeks what is right will say that we are wrong. Unqualified doctors, unqualified lawyers, are a thing of the past; yet those who are actually teaching and training the rising generation of our countrymen may be as "unqualified," in the most literal sense of the word, as they will, and the country says nothing against it.

But what does this qualification of a teacher mean? It means this—that a teacher ought to know a very great deal more than the mere subject-matter which he teaches his class. Boys are great questioners, and it is a bad thing for the master if their questions are too much for his understanding. A man cannot, of course, be expected to answer every question that may be put to him, but it will be a bad thing if he can answer none. Boys soon find out how much or how little a master knows, and it will be a bad thing for him if they find out that he knows no more, or, perhaps, less, than the first boy in his class.

One needs to know more than the alphabet to teach the A, B, C. Perhaps some of our readers may never have heard the old legend about our Lord at school. The school-master was initiating the Divine child into the mysteries of the vernacular Hebrew Alphabet. Our Lord had already said "Aleph," and the master wanted Him to say "Beth," but the Divine Pupil, in the interval, incurred his half-educated master's wrath by daring first to inquire the meaning of the word "Aleph." The master was non-plussed by his pupil's audacity; but, endeavouring to hide his want of knowledge under the terrors of his cane, his uplifted hand was miraculously wither-

ed to the bone. The story will, at any rate, illustrate the fact that it is of the first importance that a master should know everything that he can. If he can once gain a reputation for learning amongst his boys, his school life will be an easy one; he will have but little trouble in teaching them, for his teaching will be received with confidence and respect.

It would be positive impertinence for one teacher to take to advising his fellows, and the writer has no intention of doing so. But they will hardly take it amiss if he reminds them how necessary it is for all teachers, however well qualified they may be, to be still seeking "more light"—more knowledge. Let us sit daily at our books, and learn something from them; and, that we may not become mere loathsome bookworms or walking dictionaries, let us not fail to mix frequently with the world around us, and pick up there that truer knowledge which comes from a living intercourse with our fellow-creatures. The advice of some olden sage or another has especial force for a teacher: Never go to bed at night without first making sure that you have learned at least one new fact during the day that has passed.

The juniors, perhaps, after all, will not receive a small piece of advice amiss. To those who are qualified for their posts, it is enough to say, let them qualify themselves for better posts than these. Let them never think themselves clever enough to stop learning; no University degree, no successes in teaching, no public honours, no high educational appointment should be a limit to their endeavours; but they should press on up the heights of knowledge, grasping in their hands "the banner with the strange device—*Excelsior*."

And if any of our readers are amongst the unfortunate number of those who are not up to the mark for their posts, who enter the classroom day after day with an unpleasant feeling that they are going to make themselves ridiculous once more before their boys, with a strange dread of being asked questions that they cannot answer, and with the miserable consciousness that their class is none the better for their teaching—why, then, do they not make a serious start at once? If they are not educated now, why not educate themselves? Surely in a school they can find some better informed friend than themselves to help them on; and, with one of our University Matriculation courses to direct their studies, they can hardly fail to do well if they try in earnest to succeed. They would have something to look forward to in the future, instead of living in a hazy uncertainty as to what they will do when old age creeps on, and when their eyes are too dim, and their voices too feeble, to teach any longer. We might run into poetry, per-

haps, here, and descant on the delights of a bright home and a still brighter "some one" to make it happy—but we will spare our readers the infliction of our Muse, and leave our young bachelor teachers to think over the matter for themselves.

In conclusion, therefore, we may sum up our remarks in this chapter by observing that a duly qualified teacher is a man who knows enough to teach his class, and a great deal more, whose mind is eager for knowledge, and whose heart is devoted to the well-being of his boys. In short, an ideal teacher would be a strictly moral and upright man, a refined and highly-educated, gentleman. There are no recognized "heroes" of teaching to set as models before our eyes; teaching is not a profession by which a man can win renown. There are no Wellingtons, no Shakespeares, or Miltons, in the Educational world. Old Roger Ascham, perhaps, and the late Dr. Arnold are as well-known teachers as any, but very few people, even, have ever heard of these. A Teacher's position is an obscure one, but it is very much grander still than it is obscure, and it will be well if each of us will do his best to make his own position as grand as possible.

(To be continued.)

EDUCATION IN INDIA: THE REAL WANT.

(Continued).

If it is in this way that the ranks of Educational men are recruited, can we expect that the teaching will be satisfactory in any degree? And if not, is it any wonder that our education is so bad, and is complained of so loudly? Is it surprising that everywhere there should be a growing discontent with its results? Our stately Colleges, our flourishing Universities, our crowded Honour Lists, are often pointed to as a proof that education is widely extending. And so it is; but it is education of a kind: brilliant, no doubt; but with a brilliance that is not enduring and that cannot endure; a brilliance that, while it dazzles, fails to satisfy or please.

For our teachers, as I said at starting, and the fact needs repetition, do not look upon their profession as one to be pursued with as much devotion as any other serious profession in life. The lawyer subordinates his time and his reading to his duties; the doctor has rarely leisure for any other than his own calling. But the teacher does not

think of giving himself up to teaching, as a doctor to medicine, or a lawyer to the law. His conception of duty seldom rises beyond keeping boys quiet, making them work so many "sums" a day, reading so many pages of the lesson-book, committing to memory so many facts and words, writing so many lines of copy. When this is done he is satisfied; at any rate his day's work seems to be over, and he looks forward to "pay-day," with the consciousness of having fairly earned his wage. If he has been idle, or there is some examination at hand, then a supreme effort can be made, and boys sometimes scrape together a sufficient average of marks from which it might appear the boys have not been wholly neglected.

I said also that the teacher alone has no training to undergo. He is not qualified for his work by any instruction in the methods and ends of education. Many teachers would be surprised to hear that such instruction is sometimes given, or that it is very necessary. We sometimes hear of Normal Schools, but it would be interesting to learn how many trained teachers proceed from them; where, and in what capacities, they are afterwards employed; and how many continued to make teaching their main business. It would be interesting to ascertain how many teachers in the public and private schools of our larger towns come from Normal Schools; and further, to discover how many Normal Schools there are in the country, and what comparison obtains between the statistics of these, and the statistics of our legal, medical, and engineering colleges.

When a vacancy occurs in a large institution, the managing authority inserts an advertisement in one or more of the newspapers. Even the "Exchange Gazette" not unfrequently calls for "qualified teachers." Of the numerous applications that beset the advertiser, he selects one that bears, what he infers to be, the most favourable certificates of ability and experience. Whether this method of selection is a judicious one or not, might be made a matter of question; but it is the common way, and perhaps it is as reliable as any other. Ability, however, is tested by the candidates standing with regard to the University; or, failing that, by the number of testimonials he can produce from well-meaning clergymen, or interested friends. Experience is weighed by the number of years the candidate has been engaged in teaching work. Now, although in some cases, the result may justify this method, of what value, as a rule, is the test? As education now prevails, the test is indeed as good as any other; but we are more concerned now with education as it should be, rather than as it is. Few candidates, if any, have given a thought to teaching as a profession; a few are courageous or synical enough to deny that they have

any intention of making it a profession. Few know their subjects sufficiently, less know how to teach, and one or two perhaps have a few hazy notions as to the real aims and methods of education. But in general any one who has passed the F. A. Examination thinks himself competent to teach up to that standard. Any one who has escaped failure at the Entrance Examination thinks himself duly qualified for teaching up to that standard. Absurd and fatal delusion! Ought we not to remember that there is a great gulf between the ability to teach and the ability to cram? That knowledge may come, and wisdom still linger? What are we more frequently taunted with than that our graduates and undergraduates are in most cases so many sponges saturated with facts and fancies, which the pressure of worldly cares and pleasures soon squeezes out again? That a degree represents less of culture than of cram, not so much bringing-out as of forcing-in?

• That certificates and testimonials are called for is true; but it is tolerably well understood that certificates, like withered leaves, may be had for the stooping. And after all what do these testimonials testify? And of what value are the testimonies? What are 15, 18 or 25 years' of experience to a man who has no proper conception of his work, no desire for it, and who is driven to it for want of something he likes better? Have we not been told that "age may become justly contemptible, if the opportunities which it brings have passed away without improvement?" These opportunities may, of course, be improved, but are they? "*Experience makes the teacher,*" say the idle ones; but experience is not merely a matter of time. It is time well used. Like Chaucer's ideal, our teacher must gladly learn as well as gladly teach. How different is the actual case? In ordinate love of novel-reading and frivolous amusements, these, or something similar, take up the hours that should be spent in severer labours. Preparation for work there is hardly any; self-improvement there is no thought of; for literature there is no relish whatever.

It is easy to see how all this affects our education. The absence of educated and trained teachers is the worm that eats at the root of educational growth and development. This is the direct and secret cause of the ridicule which is heaped upon the victims of our educational system. How can a student acquire a literary taste or any real knowledge from a teacher who knows nothing of Shakespeare or Milton beyond what a "Reader" or a Theatrical Company tells him? Who has never heard of Chaucer, Spenser, or Dryden? To whom Lord Beaconsfield and Mr. Gladstone are dim abstractions except for what is thrust on them by the conversation of the ignorant, or the common

places of a party newspaper? To whom the "Constitution" of England is a mystery—*Vox et præterea nihil*? In Mathematics there would be less danger; but here, principles are not taught,—only rules. Geometrical problems are solved like conundrums; Arithmetic and Algebra are tricks of hand. How can children be better educated when their teachers cannot educate?

Nor is that the only phase of this evil; there is another, only less baneful, *viz.*, the frequent changing of teachers in any school. One leaves for a Government apprenticeship, when he can get it; he is succeeded by another, who soon enters a Mercantile office, his successor becomes a planter; the fourth is ousted for incompetence; the fifth leaves through ill-treatment; the sixth becomes a drunkard. Are these changes to be held of no account when discussing the present state of education?

But the teachers have, on the other hand, something to say for themselves. They point to the small salaries offered in schools, and to the want of respect paid to the profession. The reason why so few men devote themselves to it is because there are no adequate inducements held out. This is true. Then there are the whims and caprices of head-masters, committees, ministers, and parents. To submit is slavery, none the less bitter because it is disguised. That also is true. But these objections and others which may be urged do not touch the main contention that when the work is undertaken, it should be performed with a fitting sense of its responsibility when competition is so unfettered and debased; when every and any man feels teaching not too responsible a work for him to attempt; while an indifferent public looks on, and thinks teachers have a very easy time of it; when parents send their boys to school merely to prevent them from being troublesome at home; when also our teachers are what most of them are;—so long as these conditions exist, the profession must be ill-paid and neglected. But cannot teachers endeavour—separately and unitedly—to remove these conditions? No one will do it for them. Here, as in national life

"Who would be free, themselves must strike the blow."

They must educate the public into the right way of thinking, and by their own improvement as a body, they will more easily win public approval, and public confidence. But, better than this, will not more of them look beyond mere mercenary gain to the higher reward of disinterested, earnest, and devoted labour? This may be a sentimental cry; but it is sentiment like this that has preceded every honourable enterprise, that has been the secret of every earnest life, and of every

inspiring death. And the effort will not be in vain: for while bad examples may excite the ambition of bad men, the impulse of a noble one will in due time urge noble minds to good and useful toil. Truly, as the Poet Laureate in his latest work declares, the names of those who dare nobly to do, nobly to die, are few in number;

"but more than wall
Or rampart, their examples reach a hand
Far thro' all years, and everywhere they meet
And kindle generous purpose, and the strength
To mould it into action pure as theirs."

POSSUMUS.

CORRESPONDENCE.

To

THE EDITOR,

"Educational Record."

SIR,

I notice that the Calcutta University has not as yet notified the portions from Palgrave's *Lyrics* that have been selected by the Syndicate to be read for the ensuing Entrance Examination. The delay is one which must necessarily occasion great inconvenience both to teachers and taught. I venture therefore on behalf of those interested to thus bring the matter prominently to your notice in the hope that the Syndicate may soon find its way to allaying anxieties in time.

Dacca, }
March, 1886. }

IMPATIENT.

We hear the Selections have now been notified.—ED. E. R.

CALCUTTA UNIVERSITY ENTRANCE EXAMINATION, 1887.

NOTES ON

Selected portions of the English Course prescribed for the Calcutta University Entrance Examination of 1887,

By M. DUNN, B.A.,

Professor of English and Classics, St. Peter's College, Agra.

Mr. Francis Turner Palgrave, M.A., who was recently elected by the University of Oxford to the Professorship of Poetry, is son of that clever and learned antiquary and English historian, the late Sir Francis Palgrave. He was born in 1824, was educated at the Charterhouse and at Balliol College, and was elected a Fellow of Exeter College. He was five years Vice-Principal of the Training College for Schoolmasters at Kneller Hall; was for some time Private Secretary to Lord Granville, and was appointed to an office in the Education Department of the Privy Council. He is author of a volume of "Idylls and Songs," and other "Lyrical Poems;" of a prose work entitled "Five Days' Entertainment at Wentworth Grange;"

and of many essays, prefaces, and critical reviews on subjects of literature and the fine arts; he is also editor of "The Golden Treasury of English Songs," of a collection of "Hymns," and of a selection of Herrick's poems, and of the poems of Sir Walter Scott. The degree of LL.D. was conferred upon him by the University of Edinburgh. His brother, Mr. W. G. Palgrave, is an Oriental scholar and traveller, author of books on Arabia and Turkey, and is in the Consular service.—(*Illustrated London News*.)

PAGE 1.

Agincourt—This was one of the great battles of the Hundred Years' War which, it will be remembered, originated in the claim advanced by Edward III, to the throne of France in right of his mother. The struggle was, however, precipitated by the encroachment of the French King Philip of Valois in Aquitaine. The Treaty of Bretigny in 1360 conceded to Edward, among other clauses, the right of holding Poitou and Aquitaine as an independent sovereign and no longer as a vassal, while Edward waived all claim to the French crown. During the reign of Henry V., the French King Charles VI, became insane, the country was the sport of rival factions and Henry seized the occasion as most opportune for revivifying the lapsed claim of his predecessor. In any case supposing the claim of Edward III to have been a just one, the succession to the throne of France descended to the Mortimers and not to the House of Lancaster to which Henry belonged. After besieging and capturing Harfleur, Henry marched to Calais. He was met by the French army which is variously estimated by various writers at from 1,00,000 to 1,40,000, while the numbers of Henry's forces are variously stated at from 10,000 to 22,000. The French army was cooped up in a narrow position, which did not allow their numbers to expand to the best advantage. Added to this a fall of rain previous to the battle had so soaked the ground that the French Knights floundered and rolled over in the slush, while the English archers pouring in an "arrowy sleet" struck them down in numbers. The French lost 92 barons, 1,500 knights, 8,000 gentlemen of Family and several thousand private men, besides 14,000 prisoners including the Duke of Orleans. The loss of the English was only 1,200, including the Duke of York and the Earl of Suffolk.

Bills—Pikes.

Morris-pikes—Moorish pikes, a larger kind of pikes—Fr. *moresque*.

Thomas Heywood—circa 1640. A most prolific writer; the author of our famous play "A woman killed with kindness."

Prove our chance—Try our luck.

Putting to the main—Putting or sailing out to sea. The word *main* is used promiscuously for the sea and the mainland. Compare Cowper:—

Full charged with England's thunder
And plough the distant main (sea.)

And Pope:—

Flies o'er the unbending corn and skims along the main (land).

Furnished in warlike sort—Supplied with munitions of war.

PAGE 2

Skirmishing—Fighting in small parts, irregular fighting. Fr. *escarmouche*.

Where the French General lay—Where here signifies to the place where.

Which in his height of pride,
King Henry to deride,
His ransom to provide
To the king sending.

The grammatical construction of the above seems to be very loose. The meaning is "The French General to deride King Henry sent word to him to provide for his ransom."

• Which is here equivalent to *who*. Which now refers only to neuter antecedents.

It is reported that the French spent the night before the battle in playing at dice for the ransoms of the prisoners they expected to capture on the morrow.

Which he neglects the while—Another example of the looseness of the grammatical structure of this rough, though spirited poem.

Which is the relative to the four lines that go before, the sense of which may be summed up in the word insult.

As from a nation vile—As coming from a vile nation. Compare the same idea in Cowper's *Conversation*.

"a gentleman
Will not insult me and no other can."

Regarding the offer of ransom made to King Henry by the French, see Shakespeare's *Henry V*, Act IV, Scene III, beginning

"Once more I come to know of thee, King Harry,
If for thy ransom thou wilt now compound."

Portending—Foretelling. Lat. *Portentum*, *pro* (forward), and *tendo* (to stretch).

Have ever to the sun
By fame been raised.

Compare *Henry V*, Act IV, Scene III., lines 99 and 100.

"They shall be famed,
For then the sun shall greet them
And draw their honours reeking up to heaven."
England ne'er mourn for me,
Nor more esteem me—If I am beaten.
Never shall she sustain
Loss to redeem me—Never shall she have to ransom me.

Poictiers and Cressy—Fought in the reign of Edward III. in 1346 and 1356, respectively. At Poictiers King John of France was taken prisoner. In the battle of Crecy (or Cressy) the loss of the French included the King of Bohemia, the Count of Flanders, 80 bannerets, 1,200 knights, 1,500 gentlemen, 4,000 men at arms, with the Duke of Alencon and the flower of the French nobility.

Then when our grandsire great.—Meaning Edward III. Henry IV, the father of Henry V, was the son of John of Gaunt, Duke of Lancaster, third son of Edward III. Hence Edward III was the great grand-father of Henry V.

Claiming the regal seat.—The throne of France.

Lopp'd the French lines—Defeated the French. The lilies or Fleur-de-Lys are the arms of France.

PAGE 3.

*The Duke of York so dread
The eager vaward led*

Vaward means the *foremost part*, a corruption of *vanward*, *vanguard*.

York—My Lord, most humbly on my knee I beg,
The leading of the vaward.

King Henry—Take it, brave York.

Shakespeare, Henry V, Act IV, 3.

Henchmen—Attendants. Sax. *hinc* (a servant.)

Which did the signal aim—Who gave the signal to commence the battle.

Archery—Archers.

Yew—Bows made of yew.

Weather—Sky, air.

PAGE 4.

Bilbous—Swords. From Bilboa, a town in Spain, noted for its swords.

Not one was tardy—None lagged behind.

Scalps—Heads.

Down the French host did ding—Did cut down the French host. Sax. *denegan* (to beat).

Besprent—Besprinkled. A. S. *Besprengan*, to besprinkle.

Gloucester, that Duke so good—The "Good Duke Humphrey" as he was called, brother to the King. He died in 1447.

A maiden knight—A knight who had not yet flashed his sword; an untried knight.

PAGE 5.

Bare them right doughtily—Conducted themselves bravely.

*Upon St. Crispin's day
Fought was this noble fray.*

St. Crispin's day is the 25th of October,

Then call we this the field of Agincourt,
Fought on the day of Crispin Crispianus.

Shakespeare, Henry V, Act IV, 3.

*O when shall Englishmen
With such acts fill a pen.*

When shall Englishmen again furnish such a subject for description.

Blenheim—The war of the Spanish Succession was undertaken by England and several of the Continental powers to support the claims of the Archduke Charles of Austria to the Spanish crown in opposition to the pretensions of Louis XIV of France. Marlborough united his forces with Prince Eugene and attacked and defeated the French and Bavarians at Blenheim in 1704. Louis XIV had hitherto been deemed well nigh invincible, but Marlborough's victory broke the spell and the consequences were tremendous.

PAGE 6.

For there's many here about—We should rather say "there are many." Unconsciously perhaps Southey wishes to point out the fact that an uneducated peasant is speaking.

Ploughshare—That part of the plough which cuts up the ground. *Plough* is from German *phlug*, and *share* comes from the same root as *shear*.

PAGE 7.

Robert Southey (1774—1843).—His principal works are *Thalaba the Destroyer*, *Madoc*, *Curse of Kehama*, *Roderic the last of the Goths*, *Vision of Judgment*, and *Life of Nelson*. Arnold remarks of Southey that "his characteristics as an author are indefatigable industry, great skill at manipulating and shaping his materials, extraordinary facility of expression, and considerable powers of reflection and imagination."

PAGE 8.

And snapp'd a faggot band—Probably to light the lantern which Lucy was to carry.

Blither—Merrier, more joyous.

Mountain roe—A species of deer that affects a mountainous country.

With many a wanton stroke

Her feet disperse the powdery snow.

As she trips lightly along, her feet scatter the snow which is as fine as powder.

Moor—A plain covered with heath, sometimes marshy. Sax. *mor* (a plain).

PAGE 9.

O'er rough and smooth she trips along—*Rough* and *smooth* must be parsed here as nouns.

W. Wordsworth (1770—1850).—His principal works are the *Prelude*, the *Wanderer*, the *Excursion*, the *Recluse*, and some lyrical ballads.

(To be continued.)

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course for 1887.)

BY

WILLIAM E. MILLER, B.A., F.S.Sc. (LONDON),

Principal, Agra High School.

Biography of the Author.—Robert Southey, an eminent poet and general writer, was the son of a respectable linen draper, and was born at Bristol in 1774. After receiving the rudiments of education at the hands of country school-masters, he was sent to Westminster school, and thence to Balliol College, Oxford. His early display of more than ordinary talents and corresponding steadiness of character led his friends to choose the church as his destination. At Oxford, however, he remained but two years; the then unsettled state of his opinions as to both church and state causing him to quit the university, and wholly renounce the idea of taking orders. He next studied law for a time; but after travelling in Spain and Portugal, and residing in Ireland as Secretary to Mr. Corry, Chancellor of the Exchequer in Ireland, he having for some time been married, he at length settled down at Keswick in Cumberland, in 1804, and adopted literature as his profession. The decade between 1790 and 1800 added a greater number of brilliant names to our literature than perhaps any former space of the same extent; the political agitation which then prevailed, being probably the means of awakening some minds which might have otherwise remained inert. In the number who seemed to have been stirred by the exciting events of that day, we must reckon Southey, who, together with Wordsworth and Coleridge formed what has been called "the Lake School" of poetry. When only twenty-one years of age, in 1795, he had published his first poetical volume, and was known to the world as the author of "Wat Tyler," a dramatical poem, which has been considered by some as an argument for principles of liberty and equality in their utmost latitude, "Lines on Bradshaw the Regicide," the masterly epic entitled "Joan of Arc," and other pieces which indicated more political and poetical fire than political judgment or personal prudence. Southey was at this time an enthusiastic admirer of the contemporary revolution in France, and in company with his friend Coleridge, and a Mr. Lovel, projected the establishment of a philosophical government on the banks of the Susquehanna; a scheme which was broken up by the marriage of the three young men to three sisters, resident at Bath. Wordsworth, Southey and Coleridge afterwards embraced, with equal enthusiasm, the opposite side of politics. In 1801, Southey had obtained a pension of £200 for his services in Ireland, and in 1813, his income was increased by his obtaining the situation of poet-laureate, which then, for the first time since the days of Dryden, was held by a man of eminent abilities. This in 1835 procured for him a pension of £300 a year. In settling at Keswick, he commenced an almost unexampled career of industry on literary composition of every description; his overflowing mind and ready pen being equal to whatever could be demanded of them. He continued to delight and instruct the reading world by his genius until 1840, when the intense labours of a long life at length overpowered even his fine mind, and he remained in a state of mental darkness to the day of his death in 1843.

His works.—A mere list of his separate publications would form a long article, not to speak of his numerous and elaborate contributions to the "Quarterly Review." He was the author of more than one hundred volumes of poetry, history, travels, &c., &c. But though he wrote so much, he wrote both carefully and well. His principal poems are *Thalaba the Destroyer* (1803), *Metrical Tales* (1804), *Madoc* (1805), *The Curse of Kehama* (1811), *Roderick the last of the Goths* (1814), and *A Vision of Judgment* (1821). His principal prose works are his *History of the Church*; *Life of Nelson*; *Life of Wesley*; *Lives of the British Admirals*; *History of Brazil*; *History of Portugal*; *History of the Peninsular War*; his admirable philosophic gossiping romance *The Doctor*; and *His Common Place Book*, a posthumous publication.

His Style.—Southey was an ardent and indefatigable worker, but frequently unfortunate in the choice of his subjects. In his *Thalaba* and *Kehama*, he developed the more striking of his poetical powers; which consists in the delineation of characters hovering on the verge of the natural, or altogether transcending it, whom he leads through scenes of more than earthly beauty and terror, filling the mind of the reader with wild and agitating images, but at the expense of all influence over his sympathies. In his more familiar poems, his invention becomes comparatively languid, but his power over the attention of the reader is increased. The verse which he employs in *Thalaba* is an unrhymed lyrical stanza, entirely of his own invention, and which adds greatly to the effect. In his poetical style, in the choice of his subjects, in his language, and its structure, he is alike original: he resembles in no respect any preceding poet, and no one seems to have yet found it possible to make him an object of imitation. His prose style is remarkably clear and vigorous. His biographies especially are admirable; that of Nelson, published in 1813, with the unambitious purpose of affording to common sailors a view of the transactions of that hero, is perhaps the most perfect biography in our language. It is brief and simple; but while apparently free from effort or design, it is in reality a master-piece of literary art. The biography of Wesley is highly appreciated both by churchmen and dissenters for its candour and impartiality. His pure language and graceful manner of composition seem to have been peculiarly adapted for biography. As a historian, Southey displayed great industry and research, an engaging and forcible style, and that affection for his subject which, when not carried to an extravagant length, imparts a charm to narrative.

CHAPTER I.

Parsonage-house.—House is superfluous, and makes a pleonasm. From Lat. *persona* (sc. *ecclesie*) equivalent to clergyman. The affix *age* denotes state, condition or quality, as in *bondage*; and also a place of residence as in *vicarage*.

Burnham Thorpe.—Thorpe or Thorp, a hamlet; generally used in composition—as *Milthorp*, *Thorparch*. From old Eng. *thorp*, a group of houses; Ger. *dorf*, as in *Dusseldorf*.

Rector.—From Lat. *regere*, *rectum*, to rule. Hence one who rules over.

Elder sister.—Elder and eldest are applied to persons; older and oldest generally to things. Elder and eldest are from the Anglo-Saxon *Eald*, which was thus compared, Pos. *eald*, Comp. *yld-re*, Sup. *yld-est*.

Sir Robert Walpole.—Born at Houghton, Norfolk, in 1676, died 1745; entered Parliament in 1701; appointed Secretary of War 1708; treasurer of

the navy in 1709; was dismissed from all his offices, expelled the house, and committed to the Tower, on the charge of breach of trust and notorious corruption. On the accession of George I. was made paymaster of the forces in 1714, and subsequently prime minister. In consequence of disputes with his colleagues, however, he was induced to resign in 1717, and remained in opposition till 1720, when he once more became paymaster of the forces. His reputation as a financier induced all eyes to be directed towards him on the occurrence of the unprecedented disasters arising from the bursting of the South Sea Bubble; and Walpole was again made premier, which post he retained for 22 years. In 1742, he resigned and was created Earl of Oxford.

The first Lord Walpole.—*Horatio*, Lord, brother of the preceding, was born in 1678, held various offices under the government, and was an able diplomatist, was created a peer in 1756, and died in 1757. He wrote an answer to Bolingbroke's Letters on History, and some political pamphlets.

Widower.—An instance in which the masculine is formed from the feminine. From Lat. *vidua*, bereft of her husband.

Ecent.—Lat. *e* out and *venire* to come.

County newspaper.—The newspaper of the county of Norfolk. From Fr. *comté*, Lat. *comitatus*. County—the lands of a Count or Earl; a shire.

Of 64 guns.—Carrying 64 guns as armament.

Bath.—A city of Somersetshire on the Avon. This city has been famous, from the time of the Romans, for its hot springs, which are not only used as baths, but internally as medicines. It is considered the handsomest city in England. Long. 2° 21' W., Lat. 51° 22' N.

Whither.—A relative adverb signifying motion to a place; so called because it refers to "Bath," another word. Used as an interrogative, it means 'to what place?'; as a relative, 'to which place.'

Character.—From Gr. *charassein*, to make sharp, to engrave.

In whatever station.....tree.—Whatever might be his occupation in life, he would rise to an important position in it.

To rough it out at sea.—To suffer the discomforts and inconveniences of a life at sea. Rough from Lat. *raucus*, rough.

Let him come.—In making a proposal or expressing a desire in reference to first or third persons, there is no inflexional form of the Imperative Mood available, so the auxiliary 'let' is commonly used, or the subjunctive is substituted.

Provide for him.—Dispose of him.

It is manifest.—It is plain. From Lat. *manifestare*, to make public.

He strayed a birds' nesting.—He wandered out, looking for birds' nests. This is an example of the use of *a* as a prefix, when it is equivalent to the prepositions *in* or *on*, and placed before a participle, as, 'gone a-hunting.'

Gipsies.—This word is a corruption of *Egyptia*. The community called Gipsies is a nomadic tribe of Indian origin, of which their language gives proof. They came to Europe through Egypt in the fourteenth century. They are also known in Western Europe, Italy, and Spain, by the names of Bohemians, Zingari, and Gitanos, respectively. In England, the Gipsies have no avowed occupation but that of tinkering, and live by telling fortunes and stealing.

A reasonable excuse.—An honest plea. From Lat. *excusare*, to make a defence.

As lawful booty.—As plunder which it was no crime to avail one's self of. From Fr. *butin*, to exchange.

He only took them.—Synonym of only, 'merely.' The general meaning of 'only' is 'this one thing by itself,' to the exclusion of other things. The word 'only' requires great attention, for, according to its position in the sentence, the very same words may be made to express very different meanings.

Summons.—As a noun is plural in form but singular in meaning.

North Walsham.—A town in Norfolk.

Medway.—A river that rises in Ashdown Forest in Sussex; entering Kent, it flows by Tunbridge to Maidstone, and is navigable thence to Rochester; immediately below which, at Chatham, it is a station for the royal navy.

Chatham stage.—The stage-coach bound to Chatham. From A.-S. *stigan*, to go. For Chatham, see preceding note.

Been apprised of.—Been informed of. Fr. *appriser*, to give notice.

The pain.....through life.—The suffering of a lad leaving home for the first time, like a branch cut off from a parent tree, is a suffering so great, as to force his remembrance of it throughout after life. Poignant, from Lat. *pungere*, to prick, through Fr. *poignant*.

Scars never to be effaced.—Wounds not to be healed by the course of time. From Norm. Fr. *escarre*, a wound.

The seaboys.—The lad who has chosen the sea as his profession.

Physical hardships.—Inconveniences cognizable by the senses. From Gr. *physis*, nature.

Having been commissioned.—Having been sent with a mandate or authority. Sending a ship of war on any duty is termed "putting into commission." Lat *con* and *mittere*, to send.

Falkland islands.—Two large islands, surrounded by 88 smaller, lying in the Atlantic Ocean, to the east of the Straits of Magellan.

The West Indies.—The West Indian islands are situated in the Atlantic Ocean between North and South America, and are so called to distinguish them from the East Indies.

Master's Mate.—The officer next below the master in rank. In ships of war, the master is the navigating officer.

A practical seaman.—A seaman who has had real experience.

"*Aft, the most honour; forward, the better man.*"—*Aft* is the nautical term for the hindermost end of the ship; *forward*, that for the first or foremost end = greater reputation, as practical seamen, is usually attached to those living in the after end of the ship, i.e., the officers; but the really practical men are found in the fore end, i.e., amongst the sailors.

If he attended well to his navigation.—If he mastered the science of navigation. Lat *navis*, a ship, and *agere*, to act.

In the cutter and decked long-boat.—A cutter is a small boat used by ships of war. A long-boat is the largest and strongest boat belonging to a ship. Decked long-boat = a long-boat planked over so as to form a deck or floor to walk in.

The Tower.—The Tower of London, began to be built 1078.

Sevin Channel.—A passage leading to the Downs.

North Foreland.—A promontory of Kent; the east point of the isle of

Thanet, 13 miles distant is South Foreland. North Foreland is in Long. 1° 29' E., Lat. 51° 22' N.

Voyage.—From Fr. *voyage*, from *voie*, way. Lat. *viaticum*, travelling money or provisions for a journey.

Effective men.—i.e., efficient men. Lat. *ex*, out and *facere*, to make. A certain percentage of boys is carried in every ship. This being a voyage of unusual hardship, it was decided to carry all men and no boys.

Soliciting to be received.—Asking to be taken on.

Coxswain.—Also spelt *cockswain*, = the man who steers the ship's boat; he is especially the Captain's or Admiral's servant, and has charge of the boat and its crew.

Royal Society.—The Royal Society of London. This Society has priority over all other Societies in Great Britain (and abroad, with the exception of Italy), both in the date of its foundation and in the scientific eminence of the names it has enrolled. It had its origin on the motion of some members of a small society who were present, 28th November 1660, in the Hall of Gresham College, founded 1575, to hear a lecture on astronomy by one of the resident professors, Christopher Wren. Provisional rules were thereupon formulated, and the new Society at once secured adherents starting with 55 members, under the presidency of Sir Robert Moray. The Society soon solicited a Royal Charter, which was graciously accorded, 15th July 1662, by King Charles II. An amended supplementary Charter, of date 22nd April 1663, is still the law of the Society although a third Charter, of April 8th, 1669, gave new privileges and the occupation of Chelsea hospital. The object of the Society is the improvement of natural science by experiments. The College of Chelsea reverted to the Crown in 1682, a payment in compensation being made to the Society, which has since been housed in various places, finally in Burlington House, Piccadilly. The Government of the day has on many occasions resorted to the Society for counsel and advice, and now confides to it the distribution of a grant of £4,000 annually for the encouragement of original research. The astronomical observatory at Greenwich was founded (1678) with its assistance, the original instruments being the property of the Royal Society, and of late years it has frequently been consulted as to the establishment of colonial stations, and as to the objects and equipment of subsidised expeditions for recording celestial and meteorological phenomena, the collection of specimens, and appreciation of the facts of natural history. The Royal Society may be regarded as an unofficial Scientific Court of Ultimate Appeal. The meetings are conducted with some ceremonial observance, the official mace, a royal gift in 1663, lying always on the table. The present president is Professor T. H. Huxley, LL.D.

Bombs.—i.e., vessels armed with mortars for throwing bombs.

Dock.—From Lat. *doga*, a sort of vessel, from Gr. *doché*, a receptacle. An enclosure artificially constructed on the side of a harbour or bank of a river, and enclosed by gates, for the reception of ships.

Two masters of Greenlandmen.—Two masters of vessels trading to Greenland. Compare *Indiamen*, i.e., vessels trading to India.

The first Lord of the Admiralty.—The president of the body of officers appointed for the management of naval affairs. Admiralty from Arabic *Amir-al-bahr*, commander of the sea.

A laudable solicitude.—A praiseworthy anxiety.

Completed to the wishes.—i.e., completed according to the wishes.

Apparatus.—From Lat. *ad*, and *parare*, to make ready. The machinery for distilling fresh water from salt is called a condenser.

Kettle.—From A.-S. *cetel*, from Lat. *catinus*, a bowl.

Mop.—From Welsh *mop*, from Lat. *moppa*, a napkin.

The Nore.—A roadstead off Sheerness.

They hove her through.—They moved her through. Hove is the past tense of heave.

Ice-anchors.—From A.-S. and Icel. *is*, to shine and Lat. *anchora*, an anchor; an ice-anchor is a one-armed anchor which ships in the whale trade employ for securing whales to ice-floes.

Ranging along the ice.—Roving over the ice. From Fr. *ranger*, to set in a row.

Young ice.—Ice newly formed.

The ice closed upon them.—The ice surrounded them.

Soft.—Soft, when applied to water, means not tinged with acids or salts; not astringent.

(To be continued.)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on one side of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"

Educational Record, Madras.

GEOMETRY AND MENSURATION.

(Questions with Answers.)

Short Test Paper for Calcutta University Entrance Examination Candidates.

I. Define a trapezium, a gnomon, a sector of a circle, and a regular polygon.

A trapezium is any four-sided figure that is not a square, an oblong, a rhombus, or a rhomboid.

In every parallelogram, any of the parallelograms about the diameter together with the two complements, is called a gnomon.

A sector of a circle is the figure contained by two straight lines drawn from the centre and the arc between them.

A polygon which has all its sides and its angles equal to one another is called a regular polygon.

II. Draw the figure for the third case of Euclid I. 7., and state why it needs no demonstration.

The third case of Euclid I. 7. needs no demonstration, because when the vertex of one triangle is upon a side of the other, that is on a point between A and C, in the triangle ACB, the sides which terminate in one extremity of the base are unequal, which is contrary to the hypothesis.

III. E is the middle point of BC, a side of the parallelogram ABCD, and AE, DC produced meet in F; prove that the triangle DEF is half of the parallelogram ABCD.

Because the triangle AED and the parallelogram ABCD are upon the same base AD and between the same parallels AD, BC; therefore the triangle AED equals half the parallelogram ABCD. Hence the triangles ABE, DEC are together equal to half the same parallelogram. But because they are upon equal bases BE, EC, and between the same parallels AD, BC, therefore the triangle ABC is equal to the triangle DEC.

Again, in the triangles ABE, ECF, the angle AEB is equal to the vertical opposite angle CEF, and the angle ABE is equal to the alternate angle BCF. Likewise the side BE is equal to the base EC; therefore the triangle ABE is equal to the triangle ECF. But the triangles ABE, DCE together equal half the parallelogram ABCD; therefore the triangles DEC, ECF, i.e., the triangle DEF, are together equal to half the parallelogram ABCD.

IV. To describe a parallelogram equal to a given rectilineal figure and having an angle equal to a given rectilineal angle.

Euclid I. 45.

V. In a straight line AB any point C is taken, and AC is bisected in D. Prove that the rectangle AD, AB, is equal to the rectangle CD, CB together with twice the square on CD.

From A draw AE equal to AD, and at right angles to AB. Through E draw EF parallel to AB. Through D, C, B, draw DG, CH, BF parallel to AE.

Then AF is the rectangle AB, AD, for AE is equal to AD. AG is the square on AD, for being a parallelogram, AD is equal to EG, and AE is equal to DG, but AD is equal to AE, therefore the four sides are all equal, and as the angle DAE is a right angle, all the interior angles are right angles, hence the figure is a square. Again, the angle CDG is a right angle, for it is equal to the angle DAE, therefore it can be proved that the figure DH is the square on DC, and as AD is equal to DC, therefore the figures

AG, DH are equal to twice the square on DC. And CF is the rectangle CB, CD, for CH is equal to CD. Hence the three figures CF, AG, DH make up the whole figure AF; that is the rectangle CB, CD, together with twice the square on CD, are equal to the rectangle AB, AD.

VI. In a circle, the angle in a semi-circle is a right angle; but the angle in a segment greater than a semi-circle is less than a right angle; and the angle in a segment less than a semi-circle is greater than a right angle.

Prove the above and give the corollary.

Euclid III. 31.

COROLLARY.—If one angle of a triangle be equal to the other two, it is a right angle; because the angle adjacent to it is equal to the same two (I. 32) and when the adjacent angles are equal (I. Def. 10), they are right angles.

VII. Describe an isosceles triangle, having each of the angles at the base double of the third angle.

Euclid IV. 10.

VIII. The area of each of the 64 squares of a chess board is 2.89 inches, and the outer rim of the board is 2 of an inch wide: find the length of a side of the board.

The sq. root of 2.89 = 1.7

$1.7 \times 8 = 13.6$ inches, the length of one side of 8 squares.

$.2 \times 2 = .4$ inches, the total width of rim.

$13.6 + .4 = 14$ inches. *Answer.*

IX. Find the area of a triangle whose sides are 12, 15, and 17 chains.

$12 + 15 + 17 = 44$

$44 \div 2 = 22$

$22(22 - 10)(22 - 15)(22 - 17) = 22 \times 10 \times 7 \times 5 = 4200.$

$\sqrt{4200} = 87.75$ chains nearly.

$= 8.775$ acres.

$= 8$ acres, 3 roods, 4 poles nearly. *Answer.*

X. Find the cost of boarding a floor in the form of a trapezoid, whose parallel sides are 16 ft., 8 inches, and 14 ft., 10 inches, and the distance between them 8 ft., 4 inches, at $3\frac{1}{2}$ d. per foot.

$\frac{1}{2}(16 \text{ ft. } 8 \text{ in.} + 14 \text{ ft. } 10 \text{ in.}) = \frac{1}{2}(31 \text{ ft. } 6 \text{ in.}) = 15 \text{ ft. } 9 \text{ in.}$

$15\frac{3}{4} \times 8\frac{1}{2} \times 3\frac{1}{2} = \frac{11025}{24} = 459\frac{3}{8}.$

$= £1.18.3\frac{3}{8}.$ *Answer.*

XI. Find the circumference of a circle whose area is half an acre. As 360° : angle of sector :: area of circle : area of sector.

$\sqrt{\text{area} \times \frac{360}{\pi}} = \text{circumference.}$

$\sqrt{2420 \times 9 \times \frac{360}{\pi}} = \sqrt{273805.714285}$

$= 523.26$ feet nearly. *Answer.*

ARITHMETIC.

1. A plot of land containing 14 ac. 3 ro. is divided into 36 larger and 64 smaller allotments, 2 of the former being equal to 3 of the latter; find the size of the lots.

$$\begin{aligned}\text{Size of smaller allotments} &= 14 \text{ ac. } 3 \text{ ro.} \div \left\{ \left(\frac{3}{2} \times 3 \right) + 64 \right\} \\ &= 14 \text{ ac. } 3 \text{ ro.} \div (54 + 64) \\ &= 59 \text{ ro.} \div 118 \\ &= \frac{1}{2} \text{ ro.} \\ &= 20 \text{ po.}; \\ \text{Size of larger allotments} &= 20 \text{ po.} \times \frac{3}{2} \\ &= 30 \text{ po.}\end{aligned}$$

2. Two vessels are seen to double a point at the interval of 5 days, travelling at the rates of 50 and 80 miles respectively a day. The faster of the two vessels reaches the destination, turns back, and sailing with its speed altered, meets the other vessel 10 days after doubling the point at $22\frac{2}{3}$ miles from the destination; find the altered rate of the vessel.

$$\begin{aligned}\text{Distance from point to destination} &= \{ 50 \text{ miles} \times (5 + 10) \} + 22\frac{2}{3} \text{ miles} \\ &= 750 \text{ miles} + 22\frac{2}{3} \text{ miles} \\ &= 772\frac{2}{3} \text{ miles};\end{aligned}$$

$$\begin{aligned}\text{Time for the faster vessel to reach destination after doubling the point} &= (772\frac{2}{3} \div 80) \text{ days} \\ &= 9\frac{52}{80} \text{ days} \\ &= 9\frac{13}{20} \text{ days}; \\ \therefore \text{Altered daily rate} &= 22\frac{2}{3} \text{ miles} \div (10 - 9\frac{13}{20}) \\ &= 22\frac{2}{3} \text{ miles} \div \frac{7}{20} \\ &= \left(\frac{200}{9} = \frac{72}{25} \right) \text{ miles.} \\ &= 64 \text{ miles. } \text{Ans.}\end{aligned}$$

3. Two men are walking in the same direction along a railway line. A train, travelling at the rate of forty miles an hour, overtakes the first man, who is walking at the rate of four miles an hour, and passes him in $7\frac{1}{2}$ seconds. In $6\frac{3}{4}$ minutes after it passes the first man, it overtakes the second, and passes him $7\frac{1}{8}$ seconds. In how many hours will the first man overtake the second?

$$\begin{aligned}\frac{\text{Length of train in yds.}}{(40 - 4) \text{ miles}} &= \frac{7\frac{1}{2} \text{ sec.}}{1 \text{ hour}}, \\ \frac{\text{Length of train in yds.}}{36 \times 1760} &= \frac{15}{8600 \times 2} \\ &= \frac{15}{240}\end{aligned}$$

$$\begin{aligned}\therefore \text{Length of train.} &= \frac{36 \times 1760}{480} \text{ yds.} \\ &= 132 \text{ yds.}\end{aligned}$$

$$\begin{aligned}\frac{132 \text{ yds.}}{(40 - \text{Rate of second man}) \text{ miles}} &= \frac{7\frac{1}{2} \text{ sec.}}{1 \text{ hour.}} \\ \frac{3}{132} &= \frac{19}{3600 \times 8'} \\ (40 - \text{Rate of second man in miles}) \times 1760 &= \frac{3600 \times 8'}{1200}\end{aligned}$$

$$\begin{aligned}3 \times 1200 \times 8 &= 40 \times 19 (40 - \text{Rate of second man in miles}), \\ 3 \times 30 \times 8 &= 19 (40 - \text{Rate of second man in miles}), \\ \frac{720}{19} &= 40 - \text{Rate of second man in miles}, \\ \therefore \text{Rate of second man per hour} &= (40 - \frac{720}{19}) \text{ miles} \\ &= (40 - 37\frac{12}{19}) \text{ miles} \\ &= 2\frac{7}{19} \text{ miles.}\end{aligned}$$

$$\begin{aligned}\text{Distance between the two men when the train overtakes the first man} &= (40 - 2\frac{7}{19}) \text{ miles} \times \frac{6\frac{3}{4} \text{ min.} + 7\frac{1}{2} \text{ sec.}}{1 \text{ hour}} \\ &= 37\frac{12}{19} \text{ miles} \times \frac{6\frac{3}{4} + \frac{1}{8}}{60} \\ &= \left(\frac{720}{19} \times \frac{6\frac{3}{4}}{60} \right) \text{ miles} \\ &= \left(\frac{3}{19} \times \frac{55}{2} \right) \text{ miles} \\ &= 1\frac{11}{38} \text{ miles};\end{aligned}$$

$\therefore$ Time for first man to overtake the second after train reaches the first man

$$\begin{aligned}&= \left\{ \frac{1\frac{11}{38}}{4 - 2\frac{7}{19}} \right\} \text{ hours} \\ &= \left(\frac{1\frac{11}{38}}{1\frac{1}{2}} \right) \text{ hours} \\ &= \left(\frac{165}{88} \times \frac{19}{36} \right) \text{ hours} \\ &= \frac{55}{24} \text{ hours,} \\ &= 2\frac{5}{24} \text{ hours,} \\ &= 2 \text{ hrs. } 17\frac{1}{2} \text{ min. } \text{Ans.}\end{aligned}$$

4. Two persons set out to walk from A to B; the first walks 4 miles an hour, and in 45 minutes he is $\frac{3}{8}$ mile before the other; he then stops $\frac{1}{2}$ hour, and afterwards proceeds at the same rate as before, and in the end, arrives $\frac{1}{2}$ hour before the other, who has travelled at a uniform pace all the way without stopping. Required the distance from A to B.

Distance walked by second person in 45 min.

$$= \frac{3}{4} \text{ of } 4 \text{ miles} - \frac{3}{8} \text{ mile}$$

$$= 3 \text{ miles} - \frac{3}{8} \text{ mile}$$

$$= 2\frac{5}{8} \text{ miles};$$

$$\therefore \text{Second person's rate per hour} = 2\frac{5}{8} \text{ miles} \times \frac{4}{3}$$

$$= \left(\frac{21}{8} \times \frac{4}{3} \right) \text{ miles}$$

$$= 3\frac{1}{2} \text{ miles};$$

First person gains $\frac{1}{2}$ mile per hour;

$$\text{Total distance gained} = 3\frac{1}{2} \text{ miles} \times \left(\frac{1}{2} + \frac{1}{2} \right)$$

$$= 3\frac{1}{2} \text{ miles};$$

First person gains this distance in $(3\frac{1}{2} \text{ miles} \div \frac{1}{2} \text{ mile}) \text{ hours} = 7 \text{ hours};$

$$\therefore \text{Distance from A to B} = 4 \text{ miles} \times 7$$

$$= 28 \text{ miles. } \text{Ans.}$$

5. Three clocks, A, B, and C, are going at a uniform speed. A at noon on Monday is a minute too slow, B is 2 minutes slow, and C is one minute fast. At 8 P.M. on Tuesday B is 3 minutes fast, and C is 1 minute slow. At 8 A.M. on Wednesday A is $2\frac{2}{3}$ minutes before B. Find when A and C will indicate the same time.

Time from noon on Monday to 8 P.M. on Tuesday = 32 hours;

" " " 8 A.M. on Wednesday = 44 hours;

$\therefore$ B gains 5 min. in 32 hours;

C loses 2 " " " ;

$$\text{Time gained by B in 44 hours} = 5 \text{ min.} \times \frac{44}{32}$$

$$= 5 \text{ min.} \times \frac{11}{8}$$

$$= 6\frac{5}{8} \text{ min.};$$

$$\text{" lost " C " } = 2 \text{ min.} \times \frac{11}{8}$$

$$= 2\frac{3}{4} \text{ min.};$$

$$\therefore \text{At 8 A.M. on Wednesday A is } (6\frac{7}{8} \text{ min.} - 2 \text{ min.} + 2\frac{3}{4} \text{ min.}) \text{ fast}$$

$$= 7\frac{1}{4} \text{ min. fast};$$

$$\text{" " " C is } (2\frac{3}{4} \text{ min.} - 1 \text{ min.}) \text{ slow}$$

$$= 1\frac{3}{4} \text{ min. slow};$$

A gains $(7\frac{1}{4} \text{ min.} + 1 \text{ min.})$ in 44 hours,

$$\therefore \text{A's daily gain} = 8\frac{1}{4} \text{ min.} \div \frac{44}{24}$$

$$= \left(\frac{33}{4} \times \frac{6}{11} \right) \text{ min.}$$

$$= 4\frac{1}{2} \text{ min.};$$

C loses 2 min. in 32 hours,

$$\therefore \text{C's daily loss} = 2 \text{ min.} \div \frac{32}{24}$$

$$= \frac{2 \times 3}{4} \text{ min.}$$

$$= 1\frac{1}{2} \text{ min.};$$

$$\text{Daily difference} = 4\frac{1}{2} \text{ min.} + 1\frac{1}{2} \text{ min.}$$

$$= 6 \text{ min.};$$

$\therefore$ There will be a difference of 1 hour in

$$\frac{60 \text{ min.} - (7\frac{1}{4} \text{ min.} + 1\frac{3}{4} \text{ min.})}{6 \text{ min.}} \text{ days}$$

$$= \frac{51}{6} \text{ days}$$

$$= 8\frac{1}{2} \text{ days};$$

$\therefore$ At 8 P.M. on Thursday week, there is an hour's difference between A and C;

There will be another hour's difference in

$$\frac{60 \text{ min.}}{6 \text{ min.}} \text{ days}$$

$$= 10 \text{ days};$$

$\therefore$ There will be 12 hours' difference in $(10 \times 11) \text{ days}$

$$= 110 \text{ days}$$

$$= 15 \text{ weeks, } 5 \text{ days};$$

$\therefore$ A and C will indicate the same time at 8 P.M. on Tuesday, 17 weeks after the first Tuesday.

LOGIC.

NOTE.—The references in these questions are to the 'People's edition' of Mill's *Logic*, dated 1884.

(Continued from page 62.)

BOOK I. C. 1.

Of Names and Propositions.

36. What are positive and negative names? p. 26.
37. Are any names which are positive in form, negative in reality? p. 26.
38. What are privative names? p. 26.
39. How many things do privative names connote? p. 26.
40. What are relative and non-relative names? p. 27.
41. What is the characteristic property of relative names? p. 27.
42. When relative names are predicated of objects, what do they suppose? p. 27.
43. Are concrete relative names connotative? p. 27.
44. What did the schoolmen mean by the expression *fundamentum relationis*? p. 28.

45. What are univocal and equivocal names? p. 28.
46. What constitutes a Proposition in Logic? p. 29.
47. What are Aristotle's Categories? p. 29.
48. Why does Mill object to Aristotle's Categories? pp. 29-30.
49. What does a Feeling denote in the language of philosophy? p. 32.
50. What relation does Feeling bear to Sensation, Emotion and Thought? p. 32.
51. What distinction does Mill make between thoughts, and objects of thoughts? p. 33.
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60. What is a body according to the received doctrine of modern metaphysicians? p. 35.
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62. What did the schoolmen mean by a *substratum*? p. 37.
63. What does the word Matter denote in philosophical discussions? p. 37.
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(To be continued.)

SOME DEFECTS IN PUBLIC SCHOOLS.

BY A PARENT.

HAVING had considerable acquaintance with many of the Public Schools for many years, I read with great interest Mr. Lee Warner's late contribution to the *Contemporary Review* and also his letter in your Journal.

Cordially agreeing with Mr. Lee Warner in his feeling that the boarding-house system in our Public Schools is a failure in many cases, both educationally and morally, I tried to find any practical suggestions in Mr. Lee Warner's article and letter for the amendment of the failure which he deplores. Beyond some vain hope that such a state of things could prevail in our public schools as existed at Rugby some twenty years ago—namely, a large mixture of day-boys with the boarders,—and a conviction, unsubstantiated by any evidence or argument, that the sending boys to a private school at an early age is to a great extent answerable for the mischief he recognizes,—I could find simply nothing in article or letter to reassure the minds of anxious parents. I may remark, *en passant*, that there is something humorous in Mr. Lee Warner's expressing regret for a state of affairs at Rugby which the party with which he has always been intimately connected did their best some years ago, and successfully, to abolish.

Will you allow me in turn, as a public school man myself, and a parent of public school boys, to give some reasons, as I conceive them, for the deficiency of education and morality in some of our public schools, and to suggest some remedy?

First, as to Education, by which term I mean here mere teaching.

I have always looked upon superannuation as a confession of incapacity on the part of the public schools to teach ordinary or, if you choose, stupid boys satisfactorily. The public schools generally hedge themselves against admitting really stupid boys by a preparatory or entrance examination of some considerable difficulty. If a boy can pass this examination, it proves that he must have received some education somewhere, and shown himself capable of benefiting by that education up to the standard required by the public school; and it is but fair to assume therefore that, under competent teaching, that education ought to be capable of being carried on to a satisfactory conclusion, and not be suddenly arrested when the boy reaches the age of sixteen or thereabouts. That this is too often the case now, is undoubted; but I believe it might be in almost all cases obviated, if the public schools would provide a sufficient number of masters. I maintain that the forms at a public school are too large for any masters to do their duty by them—that is, to teach satisfactorily each boy in the form. Why should

it be thought probable that a man, simply because he is a first-class man at one of the Universities, should be able to teach thirty boys in a class, while the second or third-class man can only satisfactorily teach a class of ten, or even less—the ordinary number in the class of a private school? As long as such a probability is assumed as a fact, it is no wonder that many boys who have done fairly well in a private school fail utterly to advance in the exaggerated classes of a public school. Unfortunately, the public school master of to-day often seems blissfully oblivious of the fact that it may be some deficiency on his part that leads to this result. It is but a short time ago that I read, in the report of an unsuccessful boy in the middle division of a public school these words by the form-master: "His sixth term in the form." Such a remark (intended, I suppose, as a sneer on the boy's power) reflected to my mind fully as much discredit on the teaching and influencing powers of the master as on the ability or industry of the boy. No Head-master of a private school could tolerate, for his own sake, such a confessed incapacity on the part of a master to teach his pupils. He would be ruined if such a state of things were allowed to continue; and he would change his master, or set him a task that was within his powers. The private school relies for its success on its teaching and training capacity. It is not so with the public school. I question whether there is one parent in ten who sends his son to a public school for the benefit of the teaching he will derive there. The success of the public schools rests at present on the benefits that a parent thinks that his son will obtain by a public school training; that is, the training to independence which is to be found in the life among the boys themselves, and not from the master. This idea of the parent is so strong at present that the fact that many parents are dissatisfied with the progress of their sons carries little weight with the master of the public school. If one boy is removed or has to leave, another is easily found to supply his place. I repeat again, that the numbers in forms of our public schools are too large for the successful education of the boys, or, in other words, that the number of masters is insufficient. Let the public schools have a sufficient number of masters, and we shall soon hear less of failures in education and the system of superannuation.

I will now, with your permission, make some remarks upon the far more serious question of immorality.

First of all, it is my conviction that the evil of immorality is not so generally common as some believe; and that there are some public schools which are almost free from it, and this is as much as can be reasonably expected, for in any large collection of boys or men there must be found some black sheep. In other public schools, I believe immorality to be rather the rule than the exception. The chief difference, I believe, arises from the different modes of procedure which are used to check any ill-doing in the school or boarding-house. I will describe two modes of procedure that are in use at different schools at the present day. One way, and it

seems to me unfortunately rather increasing in popularity among public school masters, may be called the system of espionage, and aims at getting rid, as quickly as possible, of an offender, without taking any steps to reform him, and at any cost. It is arranged thus:—A master thinks he has reason to suspect some particular boy or boys of ill-doing. He immediately has recourse to the sixth boys in his house. He communicates to them his suspicions, and asks them to combine with him in finding some tangible evidence against the suspected one. If he can obtain this evidence he acts on it by requesting the parent to withdraw his son. By so acting, he commits, as I think, a grave offence both against the condemned boy and also his sixth. He is educating the latter to become mere spies, and, by encouraging them to report offenders to him instead of dealing with them themselves, he is robbing them of the inestimable privilege that of right belongs to the sixth form, namely, having to exercise responsibility on their own behalf, and to administer justice of their own hand. The stronger-minded of the sixth at times refuse silently to accept the master's teaching of their duty, and do not co-operate with him in his wishes. But the majority, naturally wishing to stand well with their master, do as he directs them and from responsible officers soon sink to the level of amateur detectives. I will not say that it is never the duty of a preceptor to appeal to the master, but I maintain that such occasions are rare, and the stronger the preceptor, the rarer the occasions. The master, in acting as he does, solves his conscience by saying to himself that he is best consulting the interests of his other boys and their parents by getting rid, in whatever way, of any ill-doer, though the latter may very possibly have but once or twice offended, and be still quite open to a conviction of his wrong-doing, and capable of amendment under good influence. But how about the offender himself? Does the master owe no duty to him and to his parents? He has been established by the parent *in loco parentis*, and the parent can most justly claim from the master that he shall act as a sensible and judicious parent would do in the case of his child. Does the master so act? Would any right-minded parent allow a son to go on in suspected wrong-doing without warning him and endeavouring by kindly influence and persuasion to lead him to better courses? If he did not do so, he would be justly open to the accusation that, when his son asked bread of him, he had given him a stone. No! if the master has any reason to suspect a boy, he should take the earliest opportunity of exerting all the influence he can exert by persuasion, by kind warning, by appealing to all that is best in a boy's nature, to arrest him in his evil course and direct him in the right way. Many a boy has been thus saved, and has made by his good example and influence afterwards a worthy return to his master for his forbearance and judgment in thus dealing with him.

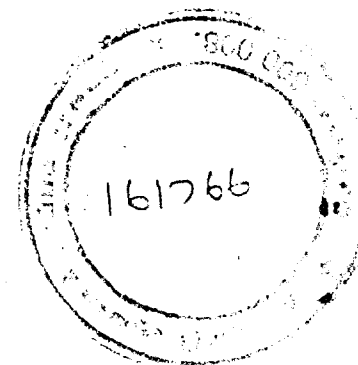
But the main question now is, Does such a system put a stop to immorality? Because, if it does, though flagrant injustice may be done to the offender, yet it might be argued that it was done for the benefit of the

greater number, and consequently was justifiable. I maintain that not only does the system not put a stop to immorality, but absolutely increases the chances of its occurring by doing away with the most important safeguards against it. These safeguards ought to be found in the personal influence of the sixth form, as representing the superior intelligence joined to quiet the average physical powers of the school. I mean by this that, while the sixth are, as a rule, equal to the rest of the school in athletic prowess, their superior intelligence and power entrusted to them, give them the necessary influence. That personal influence is lost as soon as the sixth become separated from their inferiors in the school. And this separation is most easily effected by the kind of combination that I have described as existing between the boarding-house master and his sixth form. The result is that the sixth, becoming mere deputies and spies of the master, cease to be in harmony with the rest of the house, and are looked upon by them as their natural enemies, as much as the old traditional usher of the private school. The inferiors, in their turn, learn to practise deception and secrecy, and, while looking on those above them as enemies, glory in the wrong-doing that successfully outwits them, and grow hardened in all that is evil. These are the schools in which immorality is rife.

But other masters adopt a different method. They are glad to see the sixth at one with the rest of the school, and are willing to leave them to deal generally with offenders on their own responsibility. The consequence is that boys, while passing into the sixth form, still remain as much at union with the rest of their fellows as before, and, while recognising the responsibility that attaches to their position, do not by any means consider that that position cuts them off from free association with, and consequent influence on, their inferiors. And with this free association comes the power of dealing with immorality in a way that no master and no mere espionage can deal. But the question may be asked, *Quis custodiet ipsos custodes?* Who can ensure that the influence of the sixth shall be in the right direction,—this leads me to my last point. As the sixth should influence the rest of the school, so should the master influence the sixth. But the necessary influence can only be exerted when the master's personal character is strong, quite apart from any classical attainments he may have. But too seldom is this thought of by the Head-master in the selection of his colleagues. Let a young man be a high first class man at either of the Universities, and signify his wish to join the scholastic profession, and he will not long remain without an offer of a mastership in a public school. Thackeray has remarked, that a woman with fair opportunities and without an actual hump can marry when she pleases. In like manner, the first class man, unless he has something as distinctly marked about him as a natural deformity, will never look for a place in a public school. Those qualities which give a man influence with his fellow-men, which would enable him to mould boys' minds like clay in the hands of a potter, and to induce a ready willingness in them to follow his lead, are as nothing in the

eyes of many a Head-master, compared with the fact that he has been gifted by nature with a facility for mastering the classics, and has industriously used it to obtain his first class. Hence it comes that there are many houses in the various public schools of to-day that are governed by men who can exert no personal influence on their boys, who in an ordinary sense of the term were never boys themselves, and who have no idea of the right way of guiding and directing the ordinary thoughtless, mischievous, head-strong, but not really immoral boy.

To sum up—my conviction is that want of success in the education of the public schools might be remedied by an increased staff of masters; that immorality can be best dealt with by a free and independent sixth form, rightly acting under the influence of a strong house-master; that it behoves, therefore, the Head-master of every public school to encourage to the utmost, the free independence of the sixth, and to select his masters more for their natural strength of character than for their mere classical and mathematical attainments.—(*Journal of Education*).



THE UNIVERSITY OF CHICAGO

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THE EDUCATIONAL RECORD.

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TERM FEES.

—♦♦—
We publish below for the benefit of our readers, a letter, dated 9th March, addressed by the Managers, Principals and Head-masters of Aided and Unaided Schools in the Town of Madras to the Chief Secretary in which they protest against the hardships of the existing Term Fee System and point out that such hardships will be aggravated when the Educational Notification issued by the Government of Madras in February last, respecting school fees should come into force in July next. The document is a most important one and embodies the feelings and views of the leading Educationists in the Presidency Town on the subject of the Notification. It also incidentally touches on the growth of experimental and adventure schools, which tend to lower the standard of Education and foster the system of cram. We refrain from re-printing the Notification for want of space. The letter sufficiently takes in and explains the entire subject. We hope to have our say in the matter in our next issue but for the present must content ourselves with the publication of the letter only.

From

THE MANAGERS, PRINCIPALS AND HEAD-MASTERS

Of Aided and Unaided Schools, Madras.

To

THE HON'BLE W. WILSON, Esq.,

Acting Chief Secretary, Madras Government.

SIR,

We the Managers, Principals and Head-masters of Aided and Unaided Schools in the Town of Madras, have the honour to address you with reference to the Notification, dated February 1st, 1886, of the Government of Madras, respecting school fees.

2. On February 4th, 1884, just two years ago, the Government issued a school fee Notification by which not only was the rate of fees in most classes very considerably increased but an entirely new method of payment was introduced, viz., by the half-yearly term, either in one sum or by four unequal instalments. We then felt it to be our duty to point out that some of the changes introduced by that Notification would cause great and needless inconvenience to parents and would hinder the spread of education. These views we embodied in a letter to the Director of Public Instruction, dated March 6th, 1884, which we asked him to lay before Government with his remarks thereon. On June 2nd, 1884, the Director passed orders on our letter declining to recommend Government to adopt any of the proposals we had made. As the new scheme was then only beginning to come into force, we thought it better to have experience of its working before laying our views again before Government. The scheme in its main features has been in operation for two years though it took effect in its entirety only on January 1st, 1886,* and in one month from that date, without any previous intimation either to parents or to managers, a new Notification involving most serious changes has been issued.

3. We feel bound to enter our protest against the issue without any consultation with those most interested of such a Notification as this, affecting as it does most materially the interests not only of every manager of a boys' school but the parent or guardian of every male pupil in the Presidency. This absence of consultation is the more surprising to us as on previous occasions, prior to the issue of a New Fee Notification, some managers of schools have invariably been consulted; and moreover since the issue of the last Notification not only has the Education Commission unanimously recommended (No. 9 of para. 677) that in determining the scale of fees the Director of Public Instruction shall consult the managers of Aided schools, but the Government of India in its Resolution upon the Commission's report (para. 23) strongly approved of this recommendation.

4. We know that the introduction of this new Notification, so soon after the last and without any warning, has produced a widespread feeling of uncertainty and alarm which is most detrimental to the interests of education. We respectfully suggest that, after obtaining the views of Government officers and Managers of schools, a scheme shall be drawn up which shall be declared in force for a definite period of years (at least five). This will obviate frequent change and,—what is even more injurious—the fear that further changes are impending.

5. The chief feature of the Notification of February 1884, as of the one just issued, is the introduction of half-yearly term fees payable either in one sum or in four unequal instalments. It was to that system that we chiefly objected in our letter to the Director of Public Instruction of March 1884 and to that we now object even more strongly than we did then.

We wish Government clearly to understand that we do not desire any reduction in the total amount of fees to be paid for each term. We most heartily endorse the policy which we believe has dictated these Notifications, viz., that a greater share of the cost of education should be borne by those directly benefited than has been the case in the past. We do not seek to relieve parents and guardians of a legitimate burden. Our object in addressing you now is not to lower the rate of fees and afterwards ask for increased aid towards the support of our schools. It is the very reverse. We believe that, by collecting fees in ways which are most in harmony with the established customs of the people, the rates of fees may be increased, the total amount of income to each school largely augmented and eventually the amount of aid from Government reduced. It is not to our interests to see the rate of fees reduced and we do not seek it. What we do ask is a change in the method of collection and on this point, next to parents themselves, we feel that we have a claim to be heard. Other things being equal, our income from fees rises, when we collect them in ways which are most convenient for parents and falls when we do not do so. And after a trial of two years we are unanimously of opinion that the system of payment by unequal

* In Article I, there is a proviso that a pupil, who had entered a department prior to the issue of the Notification might continue to pay fees at the old rates so long as he remained in that department. Thus in many schools the Notification did not come into force in the Upper Fourth Class until 1886.

instalments has done much more harm than good and we urge a return to the old monthly system with one or two slight modifications.

6. The main argument, indeed, as far as we know the only argument, in favour of the payment of fees in one sum at the beginning of a term or by unequal instalments in the early part of the term, is that thereby greater regularity of attendance is secured and especially that a check is put upon the practice of pupils going up for a Public Examination leaving school one, two or three months before the close of the year in order to avoid payment of the fees for those months. At its very best we submit that this is only a clumsy expedient to remedy lax discipline. We doubt, however, very much whether it has even secured the desired regularity of attendance. Our experience is that the difficulty which pupils have had in getting the large instalments at the beginning of a term has led to quite as much irregularity of attendance as this method was designed to check. We would point out too that the evil which is sought to be remedied by this instalment system does not occur to any appreciable extent except in one class, the Matriculation, out of the nine classes in which it is in force,—from the lowest class in the Middle Department to the highest in the College Department. To impose a method of payment which is so strongly objected to by parents where there is no evil to be corrected and no advantage to be gained, seems to us a purely gratuitous hardship.

The harassing effect of this method of fee collection is further seen in the diminution of attendance in the Middle School classes. The report of the Director of Public Instruction for 1884-85 has not yet been issued, but from the annual report of the Presidency Division for that year we learn that the number of boys in Middle Schools has fallen from 6,427 to 4,887, or a decrease of 24 per cent. in one year, and we note that the Inspector cites the introduction of the new fee system as the first cause of this decline.

The income from fees throughout the Presidency has certainly increased since the introduction of the Notification of 1884, but we have no doubt the increase would have been much greater had the method of payment been more suited to the customs of the people. In many schools, notwithstanding the increase in the rates of fees, there has been an actual decrease in the annual fee income. This decrease began in 1884, continued during 1885 and seems likely to go on through 1886. Thus this notification which was intended to have the effect of placing more funds at the disposal of managers has, in not a few instances, by the peculiar method of collection which it imposes, defeated its own purpose.

But what we attach much more importance to than a mere fall in numbers or decline in fee income, is the deterioration in the quality of education that has been going on of late, for which we have reason to believe that this method of fee collection is largely responsible. In 1884 when the new scale and the new method of collection came into force a large number of boys were obliged for a time to discontinue their education. Advantage has been taken of this and of the objection of parents to the new system to start a number of purely adventure schools—schools which being unconnected with the state and uninfluenced by state inspection must necessarily in most instances have little stability. These schools exist because the fees though levied at rates the same or but little less than those charged in Aided schools, are collected monthly. This undue competition has led to a weakening of discipline and to a lowering of the efficiency of existing schools. At the same time the instruction given in most of these adventure schools themselves is of the poorest type. The Notification of last month has given a fresh impetus to the starting of these adventure schools. At the present time meetings are being held for this purpose in different parts of the Presidency. The effect of these schools has been decidedly injurious to the best interests of education and unless some check is put upon the movement we cannot look forward to the future without grave alarm.

Lastly, we object to this system of payment on the ground that it is impossible for Government to secure its being carried out. We do not refer to wilful misrepresentation, though we think this system encourages it. We refer to the simple way in which without any misrepresentation whatever the rules can be rendered nugatory by a manager advancing as a loan from private resources the fees at the beginning of the term and receiving back what has been advanced

month by month. It is needless to enlarge upon the evil effects of rules which can be so easily set aside.

7. The points in which this new Notification differs from the one of two years ago are: (1) an increase in the rate of the term fee in the College Department, (2) the withdrawal of the opportunity of payment by instalments in that Department, (3) an increase in the amount of the term fee when paid by instalments in the High and Middle Departments, (4) the extension of the Notification to Primary schools proper and (5) changes in the number of free scholars allowed in the various departments. On each of these points we beg to offer a few remarks.

8. In the College Department it will be simply impossible for the bulk of the native students to pay down the whole term fee of Rs. 30 on the day of opening. The effect of this proviso will be that a considerable number of those who could pay if the payments were monthly will certainly be prevented from entering upon a college course, and that many of those who do enter upon it will be obliged to go to the money lenders and borrow their fee at a heavy rate of interest, and thus at the commencement of their University career involve themselves in debt. We strongly urge that the proviso that the whole fee must be paid on the first day of the term be withdrawn, and that, whilst retaining a term fee of Rs. 30, the students be permitted to pay it at the rate of Rs. 5 a month, of which the first monthly instalment shall be paid on the day of enrolment. We especially urge this now, because by a recent change in the rules of the University the argument that has hitherto existed for the payment of the fee in one sum at the beginning of the term has been completely done away with. Students are now required, before they can be admitted to the F. A. or the B. A. Examinations, to present certificates of having attended some affiliated College during four half-yearly terms. As the issue of these certificates at the close of the term is in the hands of the Heads of Colleges, and as it is expressly provided that certificates shall not be given unless the student has discharged his duties satisfactorily, there is a perfect guarantee both for the regularity of his attendance and for the payment of his term fee. The course thus suggested is that recommended by the Education Commission which, after full discussion of this whole question, unanimously recommended (No. 11 of para. 678),—"that to secure regularity of attendance at colleges the principle be affirmed that fees, though levied monthly for the convenience of students, are to be regarded as payments for a term, and that a student has no right to a certificate from his college for any term until the whole fee for that term is paid."

9. We approve of the term fee of Rs. 18, in the High School Department, but as in the College Department we think that the students should be permitted to pay it at the rate of Rs. 3 a month. We are aware that in one class of this department a practice has existed of boys leaving school two or three months before the end of the year in order to avoid payment of their fees, and that it was as a remedy for this that the system of payment by unequal instalments was devised. Should Government still think the evil to be so great that special means must be adopted to check it, we respectfully suggest four equal instalments of Rs. 4-8-0 payable in the first four months of the term, in place of the unequal ones now prescribed. We approve of the present practice that in the second term of the sixth class the third and fourth instalments be collected together. We deprecate in the strongest terms possible the proposal to make the sum total of the instalments exceed the term fee when paid in one sum. To us this appears nothing more than an unfair advantage to the rich, and it certainly encourages the vicious system of running into debt so common among the natives of India.

10. With regard to the Middle Department we still retain the opinion expressed two years ago that the fees should be levied monthly, and we suggest Rs. 2 as the monthly fee for the Upper Fourth, Rs. 1-8 for the Lower Fourth, and Rs. 1-4 for the Third Class, with an entrance fee for each class. The total of these monthly payments for each pupil even without the entrance fees would exceed by Rs. 3 the sum of the instalments now prescribed for the Middle Department. This slight increase would, we are sure, be gladly paid if the obnoxious system of unequal instalments were withdrawn. The course of study in the

Middle Department prepares the pupils for the Middle School Examination, and as by Order of Government no pupil can appear for that examination without having paid his fees, there seems to us no argument whatever for insisting upon a method of payment to which there is so strong an objection. Should Government, however, determine to continue a system of instalments, we then respectfully submit that a similar plan may be adopted to that we have suggested as an alternative for the High School Department, *viz.*, that the term fee of Rs. 9 be payable in four equal instalments of Rs. 2-4 each in the first four months of the term.

11. In the Primary Department the rate of fees in each class is the same as in the Notification of 1884;—of which we approve. The entrance fees have, however, been lowered in the new Notification from double the monthly class fee to the rate of the monthly fee itself. As the object of entrance fees is to check needless migration from school to school we decidedly prefer the higher rate. We beg to point out that where this needless migration takes place the pupil usually leaves the school he is reading in when the monthly fee is demanded and does not join the new school until the first day of the month following. If the entrance fees be reduced such a change will be no pecuniary cost to the pupil for the monthly fee saved by leaving his old school will pay the entrance fee into the new. It was to check this evil that years ago Government insisted upon all entrance fees being in excess of the monthly fee of the class to which they gave admission. If our proposal is accepted the income from fees of Primary Departments will be maintained whilst under the rules of the new Notification they would be reduced.

12. For the first time it is proposed to make the levying of fees compulsory in Primary Schools unattached to Middle or High Schools. This we consider a step in the right direction. But whatever is done must be done gradually otherwise a check will be put upon that improvement of the indigenous schools which has been going on in recent years. We also think that it should be a definite instruction to Municipal and Local Boards that wherever they impose fees an exception should be made in the case of schools for the poor of whatever caste or creed.

13. There is only one other point to which we beg to call attention, *viz.*, Art. XIII which refers to free scholarships. If that article be put in force on July 1st it will entail very great hardship. By it the number of free scholarships in the College Department will be suddenly reduced from 15 to 8 per cent. We do not object to this reduction in itself. In our letter to the Director of Public Instruction two years ago we said that we considered 15 per cent. too high—but we object to such a change taking place during a student's collegiate course. The College Department is divided into two courses of study of two years each. The junior course prepares students for the F. A. Examination and the senior for the B. A. Examination. On July 1st, students will have completed either six months or eighteen months of their two years course. To turn out of College on July 1st and so prevent from completing their course of study seven out of every fifteen of those now holding free scholarships would in our opinion inflict a very unnecessary and uncalled for hardship. We would suggest that in the College Department those who are now in the enjoyment of free scholarships shall continue to hold them until the course through which they are passing expires although this may require that the prescribed percentage be exceeded for a year and a half.

14. The same Article besides fixing the number of free scholars in each department states that in certain cases boarders and pupils receiving *bona fide* money scholarships shall not be deemed free scholars within the meaning of this section. We suggested that to these be added under proper limitations those pupils whose fees are paid by the proceeds of such endowments or subscriptions as are specially designed for this purpose. This matter is referred to with approval in para. 278 of the Education Commission's report and the Government of India in para. 23 of its resolution upon that report says: "Some of the objections urged against the proposal"—that the Departmental authorities in consultation with managers of Aided schools should determine the scale of fees to be charged—"would be met by recognizing the right of the managers of an Aided school to pay out of subscriptions or endowments any share of the fees

that they might wish so to defray." What we suggest was indeed the rule of the Madras Education Department from September 1st, 1871, until the beginning of 1884 when by a departmental interpretation of the Notification of that year it was changed.

15. In conclusion we respectfully ask the careful attention of Government to the subjects discussed in this letter. It may seem that the method of collecting fees, the one on which we have dwelt at greatest length, is not one of any great importance. We beg to assure you that our experience has shown that such is by no means the case. Upon the way in which this question is settled the most serious issues respecting the education of this Presidency depend. Whether Government shall continue to mould and guide the education of South India as it has hitherto done or whether it shall allow it to drift out of its hands, depends in our opinion upon the course which may be adopted with reference to this subject. We feel convinced that unless a large concession is made to the feelings of the country and to the views of managers the result will be that the education of South India will be divorced from the healthy influence of Government and that the policy of the Despatch of 1854 and the labours of the Education Commission will be rendered nugatory. We cannot contemplate the possibility of such a national calamity without feelings of the gravest alarm.

CORRESPONDENCE.

To

THE EDITOR,

Educational Record, Madras.

Sir,

I shall feel very much obliged if you will kindly let me know whether there is any restriction as to age for the Higher Test, &c., whether Map-drawing and Geography are taken as separate subjects, that is, will deficiency in marks, for Map only, pluck one. INQUIRER.

No restriction as to age for the Higher Test.

Map-drawing and Geography are taken as one subject.

A deficiency in marks, for Map-drawing only, will not pluck one.

ED.—E. R.

MADRAS UNIVERSITY MATRICULATION EXAMINATION, 1886.

NOTES ON

THE HEROINE OF SIBERIA.

BY

LOUIS BLAZE, B.A.

1. *Popular*—Lit. belonging to the common people; hence, fit for, or pleasing to the public.

It also means plain, easily understood by most people, as in the phrases *popular science*, *popular astronomy*.

2. *Exiles*—Persons banished from their native country. Latin *exilium*, banishment. In the phrase *condemned to exile* (line 27) the word means the state of banishment.

3. *Authoress*—It would not be incorrect to say *author*. Macaulay speaks of Madame D'Arblay as "the author of *Evelina*."

Translated, &c.—This shows the popularity of the work.

4. *Version*—Translation. *L. vertere*, to turn; hence, that which is turned, or translated, from one language into another.

7. *Passed thro' numberless editions*—An edition (*L. e* out, *dare* to give; lit. that which is given out; published) of any book is the whole number of copies printed at a time. If more copies of the book are wanted than have been printed in an edition, a "new edition" is prepared. *Numberless* is, of course, not to be taken in its strict sense; it merely denotes that many editions were printed, as the demand for the work was so great.

8. *Unabated*—Undiminished; not lessened.

9. *As a fiction*—As a story not strictly true in all its details.

Founded on—Madame Cottin's story was not a faithful account of what actually happened; but it was suggested by, and based upon what really took place.

10. *Paul I*—Emperor 1796—1801 A.D. He used to punish persons for the most trifling reasons, and throughout his reign he behaved like a mad despot. He was at last murdered.

12. *Authentic*—Reliable. A *genuine* work is one that is known beyond doubt to be the work of its professed author. An *authentic* source is one that may be depended upon as true, or well-informed.

14. *Real name*—Because in Madame Cottin's work she is described under a feigned name.

16. *The Ukraine*—Or Little Russia, one of the principal divisions of Russia in Europe. It lies to the south-west, and Kiev is one of its larger cities.

The chances of life—The uncertain changes of fortune to which men are subject in this world.

21. *In retirement*—Without taking part in public affairs.

Campaigns—Warlike expeditions, like the recent campaign against Upper Burma.

25. *Commendations*—Praises. *L. com. mandare*, to commit to one's care or favour.

28. *Imputed crime*—The crime laid to his charge; the crime of which he was said to be guilty.

Transpired—Come to light, been revealed.

29. *Inferior tribunal*—A court having less power and authority than the High Courts. Our "Small Cause" and "Presidency" Courts are inferior tribunals.

Tribunal from the raised platform (*L. tribunal*) on which the seats of Roman magistrates were placed.

Revision—Lit. a looking over (L. *re*, *videre*, to see again) reconsideration.

31. *Mitigation*—L. *mitis*, soft, hence, a softening, lessening.

33. *Summarily*—Speedily; at once.

34. *Penal*—L. *pœna*, punishment; hence, a *penal residence* is a place where punished persons are condemned to live; a place of punishment; exile. The Andamans, for example, are penal settlements.

35. *Comprehends*—Includes, consists of.

36. *A vast proportion*—An immense proportion as compared with the whole Russian Empire.

37. *A third*—i.e., a third part.

38. *Least agreeable*—i.e., to live in.

39. *Autocrats*—Gr. *autos*, self, *kratos*, power. One who has the supreme power entirely in his own hands. An absolute ruler. Russia is an absolute monarchy, and indeed, the Czars call themselves *autocrats*.

42. *Genial*—Merry, pleasant, cheerful. This adjective is frequently used in the sense of warm, and so, agreeable.

Cf. Gray's *Elegy*:—

"Chill Penury repressed their noble rage,
And froze the genial current of the soul."

To mark, &c—To show whether a prisoner is severely or lightly punished. The severity of the punishment may be estimated by seeing what work the prisoners are condemned to; those who are severely punished have not only to live apart from their homes and families, but they have also to work in the mines, &c. Others have to suffer banishment only.

44. *Mines* of iron, copper, gold, coal, salt, &c.

Till—An Anglo-Saxon word meaning to labour. To till the ground is to prepare it for sowing seed; to cultivate it.

46. *To partake in*—To take a part or share in.

47. *Forced*—Compulsory, as part of their punishment.

Pension—L. *pendo*, I weigh out; hence, a fixed allowance. The term is now used for an annual allowance made either by the Government or by a private person in consideration of past services, and without receiving any farther services in return for the allowance.

50. *To keep body and soul together*—To support life; the allowance in all cases was just enough for providing the actual necessities of life.

52. *Affluent*—rich.

Occasional—At times. Rich friends were allowed to send money now and then, but not regularly.

55. *Lesser*—A double comparative, often used for *less*. But *lesser* is used as an adjective only, while *less* may be used either as an adjective or as an adverb.

58. *Enormity*—Lit. something out of rule. (L. *e*, out, *norma*, a rule); hence, a crime which is of greater wickedness than usual.

59. *Indulgences*—Privileges, such as freedom from forced labour; assistance in money, &c.

61. *Ischim*—Somewhat to the south of Tobolsk, on a tributary of the river Irtysh.

65. *Arid*—Dry, wanting moisture.

Divided—i.e., there were many plains, each separated from the other by lakes.

Stagnant—Lit. *standing*, or motionless water, which naturally becomes unwholesome or unhealthy.

69. *Present to the eye*—Show.

70. *Promiscuously*—Without order, confused.

Here and there—A common phrase for *in a few places*.

There is another phrase—"That is neither here nor there," meaning, that is of no importance; that does not concern the matter under discussion.

Rearing—*Rear* is another form of *raise*. It is an A.-S. word, meaning also to bring up, to educate.

73. *Despite*—In spite of; notwithstanding.

Its unpromising character—Though one could not expect Ischim to be an agreeable place to live in.

75. *The Italy of Siberia*—Ischim is called the Italy of Siberia because it is the warmest and most agreeable portion of that desolate region; just as Italy is considered one of the most delightful places in Europe.

Cf. Goldsmith's *Traveller*:—

"Could Nature's bounty satisfy the breast,
The sons of Italy were surely blest,
Whatever fruits in different climes were found,
That proudly rise, or humbly court the ground;
Whatever blooms in torrid tracts appear,
Whose bright succession decks the varied year;
Whatever sweets salute the Northern sky
With vernal lives, that blossom but to die;
These, here disporting, own the kindred soil,
Nor ask luxuriance from the planter's toil;
While sea-born gales their gelid wings expand
To winnow fragrance round the smiling land."

78. *A heavy snow*—A heavy fall of snow.

80. *The intervening season*.—Between May and September.

Nature loses no time, &c.—This is explained by what follows. In the four months between May and September, it is warm enough for trees to be covered with green leaves, and for crops to grow. The leaves and the crops appear in Ischim sooner than they usually do in countries where the winter is shorter. The farmers take advantage of this rapid growth by

ploughing the land and sowing the seed as quickly as they can, so as to gain the largest crops possible.

81. *Celerity*—Quickness, speed.

82. *Crops*—Of barley and rye.

Is scarcely credible—Can hardly be believed.

83. *Operations*—Works (*L. opus*, a work) such as ploughing, sowing, &c.

84. *From this circumstance*—Owing to this fact; on account of the quickness with which crops grow.

The preposition *from* indicates *motion away from*, and so comes to be used with the idea of a starting-point, or origin. In the passage, the circumstance is the source, or cause, of the fact that the prisoners work. (See Rowe's *Hints*, p. 178.)

85. *Term*. A short, *limited* period. *L. terminus*, a boundary.

90. *Apportioned*—Portioned out; appointed; given as his share.

Pittance—Originally, the amount of appetising food allowed to a monk or nun. Hence, any small portion allowed; a very small sum of money.

91. *Subsist*—Live, have the means of living.

92. *Invariably*—Without alteration, or change.

Allotted—Given out as a lot, or share. Cf. *apportioned*.

96. *Solace*—Comfort, consolation.

Softened the rigour—Made his hardships less difficult to endure.

97. *Altered situation*—From being an officer of the Russian army to being an exile in Siberia.

98. *The full force of the punishment*—Being so young and unaccustomed to a luxurious life, she did not fully understand how much her parents must feel the change from the comfort they had once enjoyed, to the miseries they had now to bear.

103. *Bare subsistence*—That amount of money with which it was just possible for them to exist.

104. *Laundress*—O. E. *lavanderess* (from *L. lavare*, to wash) a washer-woman.

105. *Harvest time*—The time for reaping and gathering in fruits, corn, &c.

109. *Occupied herself in*—Employed, or engaged herself in; looked after.

110. *Meagre*—Lean, hungry; here, poor, scanty.

Deplorable—That which should be deplored, or lamented.

With patience—Quietly; without complaining.

113. *Was less resigned to his fate*—Did not bear his hardships so patiently; he did not try to make the best of his altered circumstances.

At intervals—Now and then; at different times.

114. *Despondency*—Melancholy; being cast down in mind; feeling without hope.

In *despair* we lose all hope; in *despondency* we are cast down, but are not entirely hopeless.

115. *Justified*—Made right. His misfortunes were great, but they were not so great as to make him feel so wretched as he used to be.

117. *Addressed*—Here means wrote, prepared; but to address a letter ordinarily means to write on it the name and residence of the person to whom the letter is to be sent.

Modification—*L. modus*, a measure or limit, and *facere*, to make; hence a change; here, a making less.

121. *Prayer*—The prayer of a petition is that which is *prayed* or asked for in the petition; the request.

Court influence—Influence at Court; the influence he had with the advisers and friends of the Czar.

123. *Government Courier*—*Courier* is derived through the French from the Latin *curro*, I run. A runner. A Government Courier is a special messenger carrying letters belonging to the Government.

125. *Deferred hope*—An expectation continually put off, or delayed in the fulfilment. The phrase is taken from "Hope deferred maketh the heart sick." (*The Book of Proverbs* xiii. 12.)

129. *Desperation*—Despair; the condition of one who is careless of, or indifferent to danger.

134. *Hard fate*—Cruel destiny; the unjust arrangement by which they were made to suffer though innocent.

137. *Existence*—In the objective case, after the verb *continue*.

Dragged on—To drag on an existence is to live a miserable life, without any hope of its being made better in time; to have no interest or pleasure in life. Just as a person forced to draw something along, drags it after him when he is weary.

138. *Affected*—Touched, moved, grieved.

Absorbed, &c.—Who spent most of his time in silently grieving over his misfortune, and who took no interest in anything else.

139. *Avowed*—Confessed, declared openly. A French word used when a tenant acknowledged himself the vassal of his feudal lord. *L. ad-vocare*, to call to (witness). Cf. *avouch*, which is almost the same word.

141. *Make allusion*—Refer to, speak about, mention.

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course for 1887.)

BY

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(Continued from page 89.)

Warp through.—A.-S. *weorpan*, to throw. Warp here means to tow a vessel or move her, with a line or warp attached to buoys, anchors, or the like.

Utmost.—An irregularly compared adjective; pos. *out*, comp. *outer*, or *ulter*, superl. *uttermost*, or *utmost*. This form of the superlative is an old superlative ending, —*ma*, more recently corrupted into the O. E. —*mest*; —*m* —*+est*, a double superlative ending; not the "most" prefix to adjectives.

Continued to grow by aggregation.—Increased by being collected into one mass. Aggregation from Lat. *ad* and *grex* a flock, a herd.

Getting the ships out.—i.e., extricating the vessels from their enclosure of ice.

Extricating.—Lat. *ex* and *trica*, hindrances, through *extricare*.

Young as he was.—A co-ordinating or predicate adjective.

Walrus.—From D. and Ger. *wal*, a whale and *ros*, a horse; an aquatic and carnivorous animal of the seal family, commonly called the sea-horse.

The passions of humanity.—Those strong feelings which prompt mankind to action; specifically, anger, wrath, love, fondness, desire, violence, &c. Passion from Lat. *pati*, *passus*, to suffer.

Staving.—A nautical expression=breaking a hole through. Connected with staff.

His musket had flashed in the pan.—The pan was that part of the flint-lock in old-fashioned fire-arms which held the powder, percussion cap, or other device used to communicate the fire to the charge in the weapon. Flashing in the pan signifies igniting but not communicating the fire to the charge.

Chasm.—Gr. *chainein*, to open wide.

Do but let me.—*But* is here an adverb of comparison, and as in all such cases, is a substitute for *only*.

It is a preposition of separation and exclusion when it signifies except, as in "none but him."

It is an arrestive adversative conjunction, when it places the second sentence or clause in some kind of opposition to that which precedes. It is the conjunction of exception and surprise; it has also been called "the conjunction of epigram."

It is a relative in certain constructions where the principal clause has a negative force, and as such is always restrictive. It is then equivalent to *who not* or *what not*; as, "There is no one *but* believes the story true"; i.e., "There is no one *who does not* believe the story true."

Of the office which he filled.—Nelson was admitted to this expedition in the capacity of coxswain to Captain Lutwidge, the second in command.

Was wont to do.—Was accustomed or habituated to do. *Wont* is the present form of *woned*, from the obsolete verb *won* or *wone*, to dwell.

Charts.—Lat. *charta*, Gr. *chartes*, a leaf of paper.

Midshipman.—A kind of naval cadet in a ship of war. So named probably from his quarters on boardship which are in the middle of the ship or "amidships."

Fresh eastwind.—When applied to wind *fresh* has the force of strong.

In clearing the bay.—In getting out of the bay in which they had been ice-bound.

Betake themselves.—The prefix *be* in this instance signifies an intensity of action.

Emergency.—Lat. *e* out and *mergere*, to dip or plunge.

Dutch whalers.—Ships and sailors of the Dutch nationality employed in the whale-trade.

Shoal water.—Shallow water. From Ger. *scholle*, a clod, a glebe.

Having but fourteen fathoms.—A nautical way of saying that the vessel was floating in only fourteen fathoms depth of water. Fathom from A.-S. *fæthem*, Ger. *faden*, a thread or line.

Take the ground.—The nautical way of expressing the circumstance of a vessel being deposited on the ground of a shoal or shallow, from want of water to float her.

Driving fast.—Impelled towards by either current or wind or both.

Men were sent with the lead and line.—When a vessel is in the proximity of shallow water, the depth of the water she is in is continually taken by what is technically termed "the lead," or "sounding the lead." The lead is a weight of that metal attached to a sufficiently strong rope, one end of which is secured on boardship. The lead is thrown forward and the rope run out, the thrower knowing by the feel of the rope when the lead has reached the bottom. The measurement is got at by noticing what is the last mark on the rope submerged when the lead touches the bottom. Some times, as in this case, the lead and line are sent ahead in a boat.

Overset.—Turned bottom upward. The prefix *over* has the meaning of subversion in this instance. Compare *upset*.

To haul the boats.—To draw the boats forcibly over the ice. Fr. *haler*, to pull.

Four-oared cutter.—A cutter propelled by four oars. See note at page 87.

The ice slackened the least.—The ice yielded anything at all to the pressure of the vessels.

The ship moved something.—Something is here an adverb = a little.

Farther. Here an adverb. As an adjective, it is pos. *far*, comp. *farther*, superl. *farthest*, and has no connection with "further," and "furthest," which are the comparative and superlative degrees of "forth." *Far* was in O. E. *feor*, and had *fyrre*, for its comp. and *fyrrest* for its superl. The later form of *fyrre*, *ferre*, took on the common ending (like *nerre*, *nerrer*, *nearer*) and became a double comparative *ferrer*. *Farrer*, *furthest*, remain in

Scotch; but *farther*, *farthest*, the English forms, have admitted—*th*—from “further,” “furthest,” on a mistaken analogy.

Got past the boats.—*Past* is the duplicate form of the past tense and past participle “passed.” Most usually the form ‘passed’ is written, though the—*e* is merely a connecting vowel seldom pronounced now. The pronunciation is influenced by the sounds immediately preceding, and, to agree with this,—*t* is sometimes written in place of —*d* or—*ed*.

All sail was set.—All the sails were exposed to catch the breeze.

Broke the shank of the..... best bower-anchor.—By the shank is meant the shaft of the anchor, which has a ring at one end to which the cable is attached, and the arms at the other. By bower-anchor is meant the anchor carried over the bows or bends of the ship, as distinct from any anchors not ready for immediate use but kept in reserve.

Hakluyt's Headland.—So called in honour of Richard Hakluyt, a naval historian, who was born at Eyton in Herefordshire in 1553. He received his education at Westminster school, and at Christchurch, Oxford, where he made cosmography his favourite study, and read lectures on it. About 1584 he went to Paris as Chaplain to the English Ambassador, and, during his absence was made prebendary of Bristol. On his return to England he published several works, particularly, a translation from the Spanish of “Leo's Geographical History of Africa,” and Peter Martyr's “History of the West Indies.” In 1605 he was promoted to a prebend of Westminster, and the rectory of Wetheringset, in Suffolk. His principal work is a valuable collection of the “Voyages and Discoveries of the English Nation” in 3 vols, folio, to which allusion is made in this passage.

Fatigue.—Lat. *fatigare*, to weary with labour.

Observatory.—Lat. *ob* and *servare*, to preserve. A building constructed for astronomical observations.

In these latitudes.—In these parts of the world. From Lat. *latus*, broad.

Blink of the ice.—From Ger. *blinken*, to glance. It means the dazzling whiteness about the horizon occasioned by the reflection of light from fields of ice at sea.

The ships were paid off.—The crews received the wages due to them. Sailors, though engaged on monthly rates of pay, are not paid monthly, but at the end of the voyage.

Squadron.—From Fr. *escadron*, through Lat. *quadratus*, square, *quatuor*, four. It here means a division of a fleet. It also means body of cavalry.

He was stationed in the foretop at watch and watch.—He was placed for duty in the foretop. The foretop is the platform placed over the head of the foremast, serving to extend the rigging and give standing room to the fore-top-men and their tools. The crew of a ship is divided into ‘watches,’ or lots, one of which is off duty while the other is on. The watches last four hours each. But the four hours between 4 P. M. and 8 P. M. nautically called the dog-watch are divided into two watches of two hours each, and this is what is here called *watch and watch*.

The Captain rated him as Midshipman.—Placed him on the ship's books as a Midshipman, i.e., entitled to receive the pay, &c., of a Midshipman.

Athletic.—Gr. *athletes*, from *athlein*, to contend for a prize. Athletic means physically robust.

My mind was staggered.—I lost confidence. From Dan. *staggeren*, to stagger.

Reverie.—Unconscious meditation. From Fr. *reverie*, through *rerer*, to dream, to rave.

Patron.—Lat. *patronus*, a patron, from *Pater*, father. Among the Romans the patron was a master who had freed his slave, but who retained some rights over him after his emancipation. Then the word came to mean a man of distinction under whose protection another placed himself;—hence, one who countenances, supports, or protects.

In his mind's eye.—An idea borrowed from Shakespeare = it was ever present before him.

The mystics mean by their season of darkness and desertion.—The Mystics maintain that they have direct intercourse with the divine spirit, and acquire a knowledge of spiritual things unattainable by the natural intellect.

Enthusiasm.—Gr. *enthousiasmeîn*, to be inspired or possessed by the God

Its essence was the same.—Its predominant quality remained unaltered. *Essence* from Lat. *essentia*, *esse*, to be.

Comptroller of the navy.—An officer appointed to oversee and verify the accounts of the navy. Comptroller from Fr. *controle*, a counter register, from *contré*, against and *role*, a roll.

Going out with convoy.—Fr. *convoyer*, Lat. *conviare*, to accompany. The word convoy means both the merchant ships protected on their voyages by men-of-war, told off for the purpose, and the men-of-war doing this duty.

Gibraltar.—Captured by the English under Admiral Sir George Rooke and the Prince of Hesse-Darmstadt, during the war of the Spanish Succession in 1706. Confirmed in the possession of the English by the Treaty of Utrecht, in 1713. Sustained a gallant defence against the united forces of France and Spain under General Elliott for three years and seven months, until relieved by Admiral Lord Howe, in 1783.

At the head of the board.—*Board* here means the council assembled to judge of the qualifications of candidates for naval preferment.

Younker.—Most probably another form of youngster, from A.-S. *Geong*, not long born. Some think that *younker* is a modification of *youker*, and thus allied with *yon* and *yonder*.

Received his commission.—Obtained the legal warrant appointing him second Lieutenant. From Lat. *con* and *mittere*, to send.

Frigate.—Probably contracted from Lat. *fabricata*, something constructed or built. A ship of war of a size larger than a corvette or sloop of war and less than a ship of the line, formerly with two decks and mounting between 50 and 60 guns.

Jamaica.—Said to be named from the Indian word *Caymaca*, that is a country abounding in springs. One of the West India Islands, taken from Spain, during the Commonwealth, in 1655.

Privateers.—Lat. *privatus*, past part. of *privare*, to bereave and the suffix *eer*, which is itself obtained from Lat.—*arius*, Fr.—*aire*,—*ier*. A privateer is an armed vessel fitted out by private individuals, and carrying a commission or letter of marque from a belligerent government to cruise against the commerce of its enemy in time of war.

Under American colours.—Carrying the American flag.

Harassing our trade.—Disturbing our commerce. Harass is derived from the Fr. *harasser*, probably from *harasse*, a heavy shield, which fatigued the bearer of it.

The Lowestoft's tenders.—Lat. *tendere*, to stretch. A tender is a small vessel employed to attend a larger one, for supplying her with provisions, &c.

Captured an American letter-of-marque.—i.e., captured an American vessel carrying a letter of marque. Letter-of-marque comes from *Lettre-de-marque*, which is a letter authorizing reprisals, or the act of taking from an enemy by way of retaliation or indemnity.

A heavy sea running.—The nautical way of expressing that the waves were large.

To board the prize.—Nautical technicality for going on board of the prize, that is, taking possession of it.

Hanger.—A.-S. *hangan*, to suspend. A sword, short, broad, and incurved towards the point.

Of being swamped.—Of sinking through having become filled with water.

It would otherwise founder.—It would be filled with water and sink. From Fr. *fondre*, to sink, to fall, Lat. *fundus*.

The prize.—In nautical parlance, a captured vessel is called a prize. From Fr. *prendre*, to take, Lat. *prehendere*.

A heavy press of sail.—A great pressure of sail, i.e., with all sail set.

Water-logged.—A.-S. *wäter*, and Dan. *log*, heavy or dull. Rendered log-like, heavy, or clumsy in movement, in consequence of being filled with water.

Went in on deck and out again with the sea.—The captured vessel, floating like a log on the water, was level with the wash of the waves, so that when the prize-crew's boat came near it, it was lifted up by an advancing wave, carried over the vessel, and brought back to the bosom of the ocean by the receding waters of the wave.

Flagship.—The ship which bears the Commanding Officer of a squadron, and on which his flag is displayed.

The after-hold.—The interior cavity in the hindermost part of the ship, in which provisions are stowed in a war vessel.

He was made Post into the Hinchinbrook.—He was made Post-Captain of the Hinchinbrook.

A Post-Captain is so called unofficially in distinction from a commander, to whom the title of Captain is often given by courtesy.

An enemy's merchantman.—A trading vessel belonging to the enemy.

Sheathed with wood.—Cased over or coated with wood.

Which had been taken into the service.—Which had been enrolled as a man-of-war.

The army and navy are often spoken of as "the services."

St. Fernando de Omoa.—A town of Mexico in Honduras. Long. 88° 47' W. Lat. 15° 40' N.

The Bay of Honduras.—Honduras is a province of Mexico; formerly one of the most populous countries of America, but at present, although

very fertile, it is almost a desert. The Bay of Honduras lies west of the Caribbean Sea, between this province and the Peninsula of Yucatan; and on its coast great quantities of log-wood and mahogany are cut.

Some register ships.—Probably, some registered ships is meant. A registered ship is so called to distinguish it from a war ship. Every merchant vessel carries a register, which is a document issued by the custom-house, always to be kept on board a vessel on a foreign voyage, as evidence of its nationality.

Quintals of quicksilver.—A quintal is an old foreign weight equal to 50 French kilogrammes, or about 112 lbs. avoirdupois. From Fr. *quintal*, Arabic *kintar*, a weight of 100 lbs.; connected with Lat. *centum*, a hundred.

Quicksilver or Mercury is a fluid of a metallic nature, so called from its fluidity.

Piastres.—From It. *pietra*, a thin plate of metal. The piastre is a coin of different values in different countries—the Italian piastre is worth about 4s. 6d. sterling; the Turkish piastre about 2½d.

Before he had attained.....rank.—Nelson was made a Post-Captain before he was twenty-one years of age.

Count D'Estaing.—Charles Henry, a French Commander, was born of a noble family in Auvergne; he commenced his career in the East Indies under Lally, when he was taken prisoner by the English. In the American war he was employed as vice-admiral and general of the French armies of that station, where he took the island of Grenada. In 1787 he became a member of the assembly of notables, and commandant of the national guards at Versailles at the commencement of the revolution; but like many others who had promoted the revolution, he was accused of counter-revolutionary projects, and suffered in 1793, by the guillotine.

St. Domingo.—Or Hispaniola, one of the richest islands in the West Indies. It was discovered by Columbus in 1492, who called it Hispaniola; but his son, Bartholomew, building a city, to which he gave the name of St. Domingo, the island became more frequently called by that name. The natives call it Hayti, or high land; for such it presents itself, particularly in the north.

Port Royal.—A sea-port of Jamaica, once a considerable town, abounding in riches and trade; but visited at various times with the direst calamities, having been destroyed by earthquake, inundation, hurricane and fire. The harbour is deep, and 1,000 ships may ride therein, secure from every wind. Long. 76° 45' W. Lat. 18° 0' N.

Fort San Juan.....Lake Nicaragua.—San Juan is a town of Mexico in Nicaragua. Long. 84° 45' W. Lat. 11° 15' N.

The river San Juan or Desognadero issues from the south-east corner of Lake Nicaragua, and flows between the Provinces of Nicaragua and Costa Rica, into the Caribbean Sea.

Nicaragua is a province of Mexico. It produces sugar, cochineal and chocolate. In this province is a large lake of the same name.

Granada.—A city of Mexico in the province of Nicaragua. Long. 86° 36' W. Lat. 12° 5' N.

Leon.—A city of Mexico and the capital of Nicaragua.

There is also a town of Mexico of the same name, in Mechoacan, in a plain eminently fertile in grain.

Canal.—From Lat. *canalis*, a channel. *Canalis* was originally an adjective from *Canna*, a reed, a pipe.

Lord George Germaine.—Formerly Lord George Sackville. A man of ability but of violent temper, who commanded the cavalry at the battle of Minden, in 1759, when a British and Hanoverian force under Prince Ferdinand of Brunswick defeated the French.

Secretary of State for the American department.—Fr. *secrétaire*, from Lat. *secretum*, a secret. A Secretary of State is a cabinet minister who presides over one of five departments of executive administration, viz., Home Department, Foreign Affairs, Colonies, War, and India.

Nuevo Reyno.—A city of Colombia, in the province of St. Martha, situated in a fertile valley. Long. 73° 30' W: Lat. 10° 6' N.

Popayan.—A province and valley in the south-west part of Colombia, through which a chain of lofty mountains runs from north to south, in which are mines of silver.

Peru.—A country of South America, formerly the richest and most extensive Kingdom in that country, and long celebrated for its gold and silver mines, from which immense wealth has been drawn.

Sanguine.—Lat. *sanguis*, blood. Primarily, having the colour of blood; then successively, plethoric, cheerful, and full of hope.

To dream of acquiring an empire.....another.—The empire here spoken as being about to be lost to the English was the possession of the United States.

Geography.—Gr. *ge*, the earth and *graphe*, a description.

Which would do the enemy's work.—i.e., destroy them.

Cape Gracias a Dios.—Means thanks to God. Situated east of Honduras.

Enslaving.—The prefix or suffix *en* generally attached to adjectives, forms a verb which denotes *to make*.

The Mosquito Shore.—The east of Honduras and Nicaragua is called the Mosquito Coast, or Mosquitia, of which the lagoons are a distinguishing feature.

The Mosquito Shore craft.—Craft here means little vessels or boats, such as were used in that part of the country. A.-S. *craft*, W. *cryf*, strong.

The latter end.—Latter is the irregular and *later* the regular comparative of late.

Currents and rapids.—A current is the name given to the flowing of water in a particular direction. Lat. *currere*, to run.

A rapid is a sudden descent of the surface of a stream without actual waterfall or cascade. Lat. *rapere*, to seize and carry off.

Insurmountable.—Fr. *sur*, over and *monter*, to mount.

Brunt.—A.-S. *bront*, boiling. The heat or utmost violence of the onset.

Aloof.—Is an adverb, either standing for *all off*, that is *quite off*, or of the same origin with aloft, i.e., from Jeel. *loft*, height, A.-S. *lyft*, air, cloud, from A.-S. *hlyftan*, to be high.

Dews.—When strictly used the material noun cannot be plural. Yet occasionally we find such nouns used in the plural, as sands, wines, teas, &c. This happens in three ways:—

(1) When the material name is used to designate the things made of it; as *papers* for what gives the news.

(2) 'When instead of the whole collection, detached portions of it are meant; as stones, slates, clouds, &c.

(3) When a material is divided into distinct kinds, or varieties; as wines, teas, salts, &c. This is the commonest case of the material noun used in the plural.

San Bartolomeo.—Also written Saint Bartholomew. An island of the West Indies, one of the Canibbee islands, belonging to Sweden. Long. 63° 40' W. Lat. 17° 46' N.

Semicircular battery.—Lat. *semi*, half, and *circulus*, diminutive of *circus*, a circle.

Battery from Fr. *batterie*, from Lat. *batuere*, to strike, to beat = any place when cannon are mounted for attacking a fortification or an enemy.

A semicircular battery is a battery mounted in the shape of a semicircle.

Swivel.—A.-S. *swifan*, to move quickly. A small cannon fixed in a swivel or in a socket, or turning on a pivot, connected with swift.

Manned.—An example of a noun used as a verb. Nouns and Adjectives are freely converted into verbs, and regularly conjugated as such.

It commanded the river, &c.—It commanded the approaches of the river, at a part where the navigation was difficult.

Boarded the battery.—Got within the battery. *Boarded* is nautical language, and Nelson may have used the expression either by way of joke or from force of habit.

Despard.—Edward Marcus, an officer in the English army, was a native of Queen's County, Ireland. At the close of the American War he served in the West Indies, where he distinguished himself by an expedition on the Spanish Main. For his services there he was made Lieutenant-Colonel, and in 1784 appointed superintendent of the English affairs at Honduras; but his conduct giving offence to the settlers, complaints were sent home against him, and he was suspended. He applied to Government for an investigation into his conduct, which was rejected, as were also his claims. This naturally irritated him; and conceiving that he was at least entitled to a fair hearing, he became a violent democrat, and for his inflammatory conduct was imprisoned. Having collected some followers from the lowest classes, they held secret meetings, to which no persons were admitted without taking a treasonable oath. At these assemblies various plans were devised for the murder of the king; and at last it was determined to make the attack when His Majesty went to the Parliament house. The plot being discovered, the Colonel and several others were taken up, and brought to trial by a special Commission, Feb. 5, 1803; when the charges were proved, Despard and seven others were found guilty and executed.

Treason.—Fr. *trahison*, from Lat. *tradere*, to give up. Treason is the offence of attempting to overthrow or betray the Government of the state to which the offender owes allegiance.

Hammock.—Span. *hamaca*, a hammock, a word of Indian origin. The hammock is a kind of hanging bed consisting of a piece of canvas about six feet long and three wide, gathered at the ends, and suspended by cords from hooks fixed in the beams of a vessel. In camping, the hammock is hung between two trees or posts.

Monitory lizard.—A lizard that gave warning. Lat. *monere*, to warn. Lizard from Lat. *lacertus* or *lacerta*, a lizard.

Manchineel.—Lat. *mancanilla* a lofty tree of the West Indies, possessing poisonous properties; its wood is valued for cabinet work.

Where the river.—The river San Juan.

Assault.—Lat. *ad* and *salire* to leap.

Contagion.—Lat. *con* and *tangere*, touch.

Garrison.—O. E. *garneson*, Fr. *garnison*, a garrison, from *garnir*, to furnish.

There were not orderly men enough.—Orderly is here used in its military sense. An orderly is a non-commissioned officer who attends a superior officer for the purpose of bearing his orders, or rendering other service.

Gallinazos.—Also written *gallinagoes*, from Lat. *gallina*, a hen. Probably a species of vulture.

War against nature.—In contending against the difficulties presented by the river, the weather, and disease.

Baleful conquest.—A conquest full of misery. A. S. *beal*, *halo*, gives the O. E. *bale*, which meant calamity or misery.

Complement.—The full number of crew. Lat. *completo*, to fill up.

Dysentery.—Gr. *dysenteria*, from *dus*, ill, and *euteron*, from *eutos*, within.

The author of "Leonidas."—Was Richard Glover, a poet and dramatist, the son of a London merchant, born 1712. "Leonidas," an epic poem, published when the author was only 25 years old, was his principal work, and enjoyed considerable celebrity for a long while, though little read now. Glover's other works were "London or the Progress of Commerce," a poem published in 1739; "Hosier's Ghost," a popular ballad brought out in the same year; and the two tragedies of "Boadicea" and "Media."

(To be continued.)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"
Educational Record, Madras.

ENGLISH.

1. If a spot on earth be found
Where, responsive to alluring
Voice of nature—so beguiling,
Grief will cease to be enduring;
Then that spot must be for ever
In fair, beautiful Hardanger.

Analyse the above passage, parsing the words in italics.

Sentence.	Kind of Sentence.	Con- nec- tive.	Subject.	Predi- cate.	Object.	Extension.
(a) If a spot on earth be found.	Adv. cond. to c.	If	a spot	be found		on earth (place)
(b) Where, responsive to the alluring voice of nature so beguiling, grief will cease to be enduring.	Adj. to spot in a.	Where	grief responsive to the alluring voice of nature so beguiling	will cease	to be enduring.	
(c) Then that spot must be for ever in fair, beautiful Hardanger.	P. S.		that spot	must be in fair, beautiful Hardanger		for ever (time.)

Be—aux, verb to *found*, indg. passive voice.

found—past part. of *to find*, refg. to *spot*.

be found—irreg. trans. verb, pass. voice, subj. mood, pres, 3rd, sing., agreeing with *spot*.

where—cop. conj., joining the sents. 'If a spot be found,' and 'grief will cease.'

responsive—adj. of quality, qualg. *grief*.

so—adv. of degree, qualg. *beguiling*.

beguiling—partl. adj. of qual., qualg. *voice*.

to be—aux. verb to *enduring*.

enduring—pres. part. of *to endure*, ref. to *grief*.

to be enduring—reg. trans. verb, act., inf., pres. pres. prog. governed by *cease*.

for—prep., showing rel. between *cease* and *ever*.

ever adv. used as a noun, neut., sing., obj., gov. by *for*.

[NOTE.—For *ever* = for *time ever continuing*. If the ellipsis be supplied thus, *for* would govern *time*, and *ever* qualify *continuing*.]

2. Paraphrase the above passage.

If in the whole wide world there is a place so beautiful that its charms would successfully assail the grief-stricken heart, and drive away sorrow, then such a spot can most assuredly be found on the beautiful Hardanger.

3. What are the principal methods of distinguishing words of Saxon or English origin? Give examples as far as possible from the above passage.

(1) The parts of speech most commonly used (excepting many nouns and verbs), as, adjectives of quantity, numeral adjectives, distinguishing adjectives, pronouns, auxiliary verbs, prepositions, conjunctions, interjections, and primary adverbs.

Ex. :—A, the, that, fair, be, much, will; on, to, of, off, in; if, where; ever, then.

(2) Words formed by modification, as irregular verbs, nouns forming their plural by a change of vowel, many primary derivatives and their roots.

Ex. :—Found.

Many common prefixes and suffixes.

Ex. :—Be in *beguiling*.

Most words of one syllable.

Ex. :—All except *grief*, *voice*.

Most of the nouns, verbs, and adjectives of common use.

Ex. :—*Grief*, *voice*, *beautiful*, *Hardanger* are not E.

Most words beginning with *kn*, *gn*, *wh*, *sh*, *th*, *gl*.

Ex. :—Then, where.

4. Name the common English prefixes.

A, an, at, after, all, be, e, en, for, fore, forth, gain, ill, in, mid, n, off, on, out, over, through, twi, under, up, well, with.

GEOGRAPHY.

1. Draw a map of the Ganges, or the Nile, or the Congo basin.

2. Describe Japan.

Japan consists of four large islands and a number of smaller ones, which stretch in a chain about 1,000 miles in length from Kamtschatka and

Saghalien to Corea along the East coast of Asia, enclosing the Japan Sea. The chief islands are Yesso, Nippon, Sikok, and Kiu-Siu, and the total area is about 155,000 square miles. The Kurile Is. and the Loo Choo Is. also form part of the country. The surface is very mountainous, the whole range being traversed by a range of mountains from north to south, many of the peaks being active volcanoes, that of Fusi-yama rising to a height of 14,000 feet. The rivers are short and rapid, the coast is indented, and has many good harbours. The soil is fertile, and the hills are rich in minerals, gold, silver, iron, and sulphur being abundant. Yesso is covered with forests, but in the other islands the timber has been cleared, owing to the density of the population. The chief forest trees are oak, beech, chestnut, maple, pine, and cypress, but there are other remarkable trees, among which may be mentioned the *wax-tree*, *varnish-tree* and *camphor-tree*. The population amounts to 35,000,000, engaged in agriculture, cotton, and silk weaving, japanning, and the manufacture of porcelain. The chief towns are Tokio, Yokohama, Kioto, Osaka, Nangasaki, Kagosima.

5. Describe the character of our South African possessions.

The British possessions in South Africa occupy the whole of the south portion of that continent, from Cape Frio on the west to the river Limpopo on the east, and include Cape Colony, Natal, Basutoland, Griqualand West, Namaqualand, Damaraland, Zululand, and Kaffraria. The coast, which includes many harbours and bays, is about 1,500 miles in length. The surface rises from the coast to high lands in the interior. Several ranges of mountains run parallel with the coast, the highest being the Nieuveltdt and Sneeuw Bergen range. The colonies are only ill-watered, owing to the irregular and scanty rains, and the rivers are not navigable to any extent. The Orange River, formed by the union of the Nu Gariep and Vaal, is the largest, and is about 1,000 miles in length. It forms the northern boundary of the colony. Other rivers are the Oliphant, Breede, Gauritz, Gamtoos, and Great Fish River. The climate is warmer than that of England, but is healthy. Gold, diamonds, coal, and copper are found in abundance. The specimens of heath are very numerous, and there are innumerable species of geraniums, iris, gladiola, and orchids.

HISTORY.

1. Give dates to the following events:—Trial of the Seven Bishops; Battle of Aghrim; Treaty of Paris; Battle of the Nile; Invention of the spinning-frame; Repeal of the Corn Laws; Indian Mutiny.

	A.D.
Trial of the Seven Bishops	1688
Battle of the Aghrim	1691
Treaty of Paris	1763
Battle of the Nile	1798
Invention of the Spinning Frame	1768
Repeal of the Corn Laws	1846
Indian Mutiny	1857.

2. Give some account of the government of James II.

One of James's first acts was to break his word. He promised to respect the laws, and immediately attempted to abolish the laws which excluded Roman Catholics out of office and Parliament. He dismissed all the judges and officers of State who did not favour his schemes, and then by the advice of his Roman Catholic counsellors he made a Roman Catholic Dean of Christchurch and a Roman Catholic President of Magdalen College. As he failed in securing the allegiance of the Tory part, he turned to the Protestant dissenters, and issued a *Declaration of Indulgence*, suspending all penal laws against them and dispensing with religious tests. He then dissolved the Parliament, but in endeavouring to influence the elections, he was everywhere resisted. In 1688 he issued a second declaration, which he ordered to be read in all churches. Against this order seven bishops petitioned, for which they were summoned to the King's Bench. The trial ended in a verdict of acquittal. The rejoicing of the soldiers at the result was such as to cause James considerable uneasiness. The birth of his son hastened the downfall of James, for the Protestant malcontents now invited William of Orange to come to the country. When he found that invasion was intended, he tried to conciliate the people by restoring the charter of the City of London, by undoing the mischief at Magdalen College, by abolishing the ecclesiastical commission, and by replacing the lords-lieutenant whom he had dismissed. It was, however, too late. William landed, the people assisted him, and James fled.

3. Name some of the notable men in literature and art who flourished in the reign of George III.

Among the most famous were Dr. Johnson, the dictionary compiler and essayist; Garrick, a famous actor; Boswell, Johnson's biographer; Horace Walpole; Oliver Goldsmith, poet and novelist; the writer of the 'Letters of Junius'; Adam Smith, the author of the 'Wealth of Nations'; William Robertson, the Scotch historian; Edward Gibbon, the author of 'The Decline and Fall of the Roman Empire'; Brinsley Sheridan, whose 'School for Scandal' is still popular; William Cowper, the poet; Robert Burns, the song-writer of Scotland; Robert Southey, Samuel Taylor Coleridge, and William Wordsworth, the lake poets; Thomas Campbell, Sir Walter Scott, Lord Byron, Percy Bysshe Shelley, Maud Edgeworth, and Jane Austin, all familiar names. In art, Sir Joshua Reynolds, Richard Wilson, Thomas Gainsborough, Benjamin West, Sir David Wilkie, and Joseph Turner, are famous; Thomas Bewick, as a wood-engraver, and Flaxman as a sculptor.

LOGIC.

NOTE.—The references in these questions are to the 'People's editions' of Mill's *Logic*, dated 1884.

(Continued from page 95.)

BOOK I. C. 1.

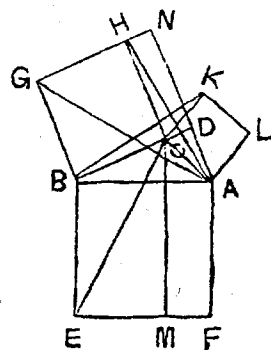
Of Names and Propositions.

66. What is Mind? p. 40.
67. How are attributes usually distributed? p. 41.
68. Why is it supposed that *quality* and *sensation* cannot signify the same thing? p. 41.
69. What are the qualities of a body? p. 42.
70. What does the attribute called a Relation denote? p. 42.
71. What did the Aristotelian logicians mean by the expression *fundamentum relationis*? p. 43.
72. What are the simplest cases of relation? p. 44.
73. What is quantity? p. 46.
74. How may attributes of bodies which are classed under Quality or Quantity be defined? p. 46.
75. On what are the attributes of minds grounded? p. 47.
76. Of how many sorts are feelings? p. 48.
77. What can we know of Matter? p. 48.
78. Into how many kinds are attributes divided? p. 48.
79. How are qualities known to us? p. 48.
80. How do we obtain a knowledge of the attributes of Relation and Quantity? p. 48.
81. How does Mill classify all nameable things? p. 49.
82. What is a subjective fact? p. 49.
83. What is an objective fact? p. 49.
84. Does the employment of the word *is* as a copula necessarily include the affirmation of existence? p. 50.
85. What are affirmative and negative propositions? p. 51.
86. What is meant by the *modality* of propositions? p. 51.

87. What are simple and complex propositions? p. 52.
88. What are disjunctive, conditional and hypothetical propositions? p. 53.
89. How can a disjunctive proposition be resolved into a conditional proposition? p. 53.
90. What is a categorical proposition? p. 53.
91. Why are hypothetical propositions important in logic? p. 54.
92. What are universal, particular, indefinite, and singular propositions? p. 54.
93. What is an indefinite proposition? p. 54.
94. When is a general name said to be distributed in logic? p. 55.

(To be continued.)

MATHEMATICS.



PROPOSITION 12, Bk. II.

(A New Solution.)

1. Let ABC be an obtuse angled triangle having the obtuse angle at C ; and from A let AD be drawn perpendicular to BC produced. The square on AB shall be greater than the squares on AC , CB by twice the rectangle BC , CD .

On AB , BC and CA describe the squares AE , BH and CL ; Draw CM parallel to AF ; produce AD which is parallel to BG , (I. Bk. 27) to meet GH produced in N .

Join CE , AG , AH and BK .

In the triangles BCE and BGA , the sides BC , BE are equal to the sides BG , BA respectively, and the angle CBE is equal to the angle GBA .

Therefore the triangle BCE is equal to the triangle BGA . [I. 4.] But these triangles are halves respectively of the rectangles BM and BN . [I. 41.]

Therefore the rectangle BM is equal to the rectangle BN . That is to the square on BC together with the rectangle CN .

But the rectangle CN is twice the triangle ACH .

Therefore the rectangle BM is equal to the square on BC together with twice the triangle ACH .

Similarly it can be shown that the rectangle AM is equal to the square on AC together with twice the triangle BCK .

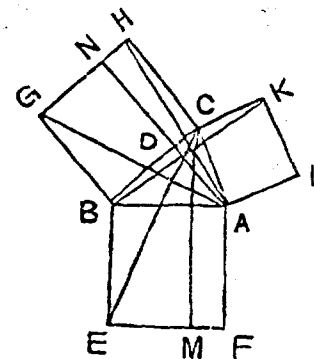
But the triangles ACH and BCK have the two sides AC , CH of the one equal to KC , CB of the other each to each and the contained angle ACH is equal to the contained angle BCK .

Therefore the triangle ACH is equal to the triangle BCK . [I. 41.] Therefore the rectangles BM , AM are equal to the squares on BC , AC together with 4 times the triangle ACH . That is together with twice the rectangle CN .

But the rectangles BM , AM make up the square AE ,—the square on AB .

And the rectangle CN is contained by BC , CD for BC is equal to CH .

Therefore the square on AB is greater than the squares on AC , BC by twice the rectangle BC , CD .



PROPOSITION 13, Bk. II.

(A New Solution.)

2. Let ABC be any triangle, and the angle at C an acute angle and on BC one of the sides containing it, let fall the perpendicular AD from the opposite angle. The square on AB opposite to the angle C shall be less than the squares on BC , CA by twice the rectangle BC , CD .

First, let AD fall within the triangle ABC;

Make the same construction as in the 12th proposition.

Then it can be shown, as before, that the rectangle BM is less than the square on BC by the rectangle CN—that is—by twice the triangle CAH; and that the rectangle AM is less than the square on AC by twice the triangle BCK.

But, as before, the triangle ACH can be shown to be equal to the triangle BCK. Therefore the square on AB is less than the squares on AC, BC by four times the triangle ACH—that is—by twice the rectangle CN—that is—by twice the rectangle contained by BC, CD.

Secondly, let AD fall without the triangle ABC, as in the figure of the 12th proposition.

In this figure it has been shewn that the square on AB is equal to the squares on AC, CB together with twice the rectangle CN.

To each of these equals add the square on BC.

Therefore the squares on AB, BC are equal to the square on AC together with twice the square on BC and twice the rectangle CN.

But the square on BC and the rectangle CN make up the figure BN which is the rectangle contained by DB, BC.

Therefore the squares on AB, BC are equal to the square on AC and twice the rectangle DB, BC.

Lastly, let AC be perpendicular to BC.

Then it is clear that the squares on AB, BC which contain the acute angle at B are equal to the square on AC and twice the square on BC. [I. 47.]

3. To show that

$$(n)_1 + (n)_2 + (n)_3 + \dots + (n)_n = 2^n - 1.$$

$(n)_r$ denoting the number of combinations of n things taken r at a time.

The combinations of n things $a, b, c, d, \&c.$, taken r at a time must consist of the combinations of $n-1$ things $b, c, d, \&c.$, r at a time and of the combinations of the $n-1$ things $r-1$ at a time with a taken along with each combination.

$$\therefore (n)_r = (n-1)_r + (n-1)_{r-1}$$

$$\therefore (n)_1 = (n-1)_1 + 1$$

$$(n)_2 = (n-1)_2 + (n-1)_1$$

$$(n)_3 = (n-1)_3 + (n-1)_2$$

$$(n)_{n-1} = (n-1)_{n-1} + (n-1)_{n-2}$$

$$(n)_n = (n-1)_{n-1} + (n-1)_n$$

$$\text{but } (n-1)_n = 0$$

$$\therefore (n)_1 + (n)_2 + (n)_3 + \dots + (n)_n$$

$$= 2 \left((n-1)_1 + (n-1)_2 + \dots + (n-1)_{n-1} \right) + 1$$

$$\text{Let } (n)_1 + (n)_2 + (n)_3 + \dots + (n)_n = (n)$$

$$\text{Then } (n)_n = 2 \left((n-1)_n \right) + 1$$

$$\therefore (1)_1 = 1 \dots \dots \dots = 2^1 - 1$$

$$(2)_2 = 2[(1)_1] + 1 = 2^2 - 1$$

$$(3)_3 = 2[(2)_2] + 1 = 2^2 + 2 + 1 = 2^3 - 1$$

$$(4)_4 = 2[(3)_3] + 1 = 2^3 + 2^2 + 2 + 1 = 2^4 - 1$$

$$\therefore (n)_n = 2^n - 1.$$

ORGANISATION OF HIGHER EDUCATION.

By MISS BEALE.

THE subject of school organisation is so large that one knows not what to select for a twenty-minutes' paper, and the circumstances of schools are so varied that what is good for one is unsuitable for another. All I can do is to speak of what we aim at doing in my own school, omitting as far as possible those details with which I have dealt in previous papers. I have explained therein the machinery of the college—how it is divided into three departments, with a head-mistress over each. I can give this paper, and one upon a curriculum, to any specially interested. To-day I shall speak of *organisation* proper, as distinguished from *machinisation*, and dwell, in the brief time at my disposal, on the means employed in the moral training. The essential difference between solitary study and *vivâ voce* teaching is this, that in the latter case the living personality is brought to bear upon the learner, and the means are adapted to the special case. In a good school, a child will not only be disciplined by external rules: his energies will be quickened, and the power of personal influence increased and multiplied. Concurrent intellectual and moral forces will be brought to bear, and it is upon the right use and the proper organisation of these forces that the excellence of a school mainly depends.

The great danger of a girl is lest intellectual vigour be destroyed by instruction, and the moral energies, by the substitution of another will for the inward guide, the law for the spirit—the problem is how to organise forces at command, how to provide such food and exercise, intellectual and moral, as may develop to vigorous health all that is good. Once doctors and educators set themselves chiefly to purge away evil—now we have got hold of the essentially Christian thought—that it is more life and fuller that we want. One need not fear for the vigorous every draught, nor those

destructive agencies which fasten upon enfeebled tissue. People have learned for their boys, and are learning from their girls, that the main object of education is to invigorate, and that one cannot invigorate by shutting up the young in a narrow sphere; that it is better (as Greek fables teach us) to send them out in spite of the dangers from which we cannot protect them throughout their life, than to have them feeble. The mediæval thought of discipline has been superseded by the modern idea of liberty, as the great means of education, and we are now more apt to lose sight of the complementary truth that the young need shelter and protection and thoughtful, watchful care, during the period of growth. The hardening doctrine, pushed to extremes, has been the death of many a child; and no sanitary boot-maker supplies such shoes as were recommended by Locke.

So I fear that now we may be too forgetful of the great need of individual care in the training of the character—the immature mind and heart need this no less than the immature body. It is sometimes imagined that in a large school there cannot be this care, but it may, and ought to be more complete than is possible generally under other conditions, because the influences brought to bear are more various, and can therefore be better adapted to individual needs. The only requisite is unity of purpose and proper organisation. Now there can be organisation only, if we regard the school as an organism; as in some sense the embodiment of living principles working harmoniously for one common end. There must be amongst those working together a common understanding regarding the ends to be attained; a power of united action, a common life. The same external results may be produced with less expense of energy by machinery than by organising. We have to be careful lest natural slothfulness makes us substitute a system of drill for a system of education. We must keep before us the final cause of a school, that though its orderly working is essential to its efficiency, it does not exist for its own sake, but only for the good of the individuals of which it is composed, and the object is through temporary dependence to render them fit for independence. And thus the real efficiency of a school is tested, not chiefly by its working, but by the lives of those who have proceeded from it.

As the school is an organism, so are the individual pupils. They have a life of their own, and therefore our work is not like that of the sculptor, who works towards a pre-conceived ideal; all we have to do is to nourish and invigorate and set free the inward forces, and then the organic life will develop according to the laws of its being, under the guidance of the All-comprehending Wisdom, its sustainer as well as its source. So the educator must not be a doctrinaire forcing his views: he has to watch over the processes of growth. The father of Pascal, who sought to prevent his learning mathematics, was acting in the most direct opposition to all true principles of education. The parent who says, "I wish my child to be a musician or a scholar," instead of seeking to develop the gifts bestowed, is trying to substitute his own will for God's. We may have a general idea, which will become clearer to us as the child develops, but it is not ours to have an

ideal for a child; and many a life has been marred because a parent has usurped an authority not his.

Thus as regards the individual then, we are not to formulate, but to educate, and the life will give form. And as regards the school through which we educate, we must have a true conception of its final cause. It is like a nursery garden, to use Froebel's simile. It exists that it may bring to bear upon each individual who enters it such forces and influences as will tend best to develop the life of each, according to his special type and individual peculiarity. The school is well organised when the *collective* forces—physical, intellectual, moral—of teachers and tutors, and heads of houses, and companions, are so *combined* that they act together for this development of the whole man. And the joy of a teacher's life is to see the mind expanding, the character developing, to forms ever new and varied as the flowers in sunlight; to trace in this varied development the inward force, the working of a Divine power, with which it is our happiness to co-operate.

The chief *means* of organisation, *i.e.*, of developing the good in a school is carried forward principally by—

1. School economy.
2. The teacher's influence.
3. Intellectual culture, teaching, and examination.
4. Companionship.
5. Gymnastics.

1. *School economy* must differ greatly in different schools. I can only here describe what we have found well adapted in my own college. The end being the right development of the character of each pupil entrusted to us, all other things are subordinated to this, and treated as means for this end. I have elsewhere spoken of the division of our college into departments, each with its own head-mistress, and of each division into classes of from twenty-five to thirty children. Over each class there are two teachers. The senior takes the Scripture and one or more of the Kultur-Studien or Humanities, sharing also in the other work. The junior assists in the general management, and shares in the teaching. We prefer the class system to subject teaching. Specialists may have a more complete knowledge of the subject, but having a less intimate knowledge of the child they are less able to adapt themselves to her needs, and often, therefore, obtain less good intellectual results even. Still there is a good deal of special teaching, even in lower classes, for foreign languages, science, music, drawing, and singing. One of the class teachers is usually present at special classes in junior divisions, and gives perhaps a *vis à vis* after. She feels instinctively (as she knows her children) whether they understand the lesson, and is able to speak to the specialist if his or her lessons are unsuited. She has to see that no specialist sets more than her children can do. If anything goes wrong, it is she who is blamed by the head-mistress of her division. Should a difference of opinion arise, the matter is laid before the head-mistress, and ultimately, if necessary, can be brought to the principal.

In higher classes the teaching is more by specialists, and increasingly so, as pupils become more independent; in the highest classes, *e.g.*, in those for the intermediate and final B. A. Examinations, entirely so. The close supervision which is good for juniors is unnecessary and undesirable for seniors, though thoughtful observation, and help in self-discipline, should never be altogether omitted. It is the duty of the class teacher to arrange the work of all her pupils. She prepares a time-table, not only for college, but for home lessons, and informs the specialists of the time assigned for preparation. The day pupils' time-tables of home work have to be signed by the parent. There is a printed notice on each card, requiring them to write to the principal if the work set is found too much or too little. Of course there is a general curriculum for each class, but perhaps there is not one single child for whom some deviation has not been thought good, and entered on her time-table. Thus each child is placed under the immediate care of one teacher, whose duty it is to watch over her character, and to provide for her moral training, chiefly through the instruction and discipline of college: to refer all matters of difficulty to her head-mistress; to consult, if necessary, with parents and house-mistresses. To her are brought by the specialists, each week, reports of the work.

Each week the list of marks is read by the head-mistress of the division, in the presence of the teacher and the class. She administers such advice, admonition, and encouragement as seems to her needed. No conduct marks of any sort are given. There is no taking of places in class, no prizes are given, except once a year for attaining a certain proportion of marks. Thus there is no competition, and a class may have no prizes or a great many. We try to keep habitually before the child that the best may be bad, and the worst in the class good; the only thing we care for being, whether the work is done as well as we think the child could do it—whether she is improving. There are no punishments. If a lesson has not been properly prepared, the pupil has to come in the afternoon and do it, but it is never increased in length. Those who are persistently disobedient or idle, or do not yield to the influences brought to bear, have to leave. It is very rarely that a child is unmanageable, since she is in the hands of a teacher who cares for her real good, and who has not her own influence and power only to rely on, but those of other teachers, of pupils who have learnt to desire to help others, of parents and house-mistresses, and heads of departments and ultimately of the principal.

The house-mistresses are constantly in communication, too, with the college teachers and heads of departments. They write the terminal reports of conduct at college, in conjunction with the class teachers. So far from finding parents troublesome, we have to persuade parents that we are anxious they should speak or write; that we *wish* to be told about anything that seems to them unsatisfactory, and we freely speak to them about things requiring alteration at home. It may be suggested that a class teacher may be inexperienced or incompetent. We never give the charge of a class to one who has not served an apprenticeship as junior, sometimes for several years. Besides, as the classes are habitually in the large room,

which they only leave for lecture lessons, and even these have glass doors, the head-mistress would soon observe anything wrong. She is frequently present at lessons. She sees the exercise and note-books, and the terminal examination papers. Teachers are usually glad of this supervision, and of suggestions from their heads: it forms part of their training. Gradually, as students rise in the college, we relax the strictness of rules, and endeavour to bring in more and more the sense of responsibility towards others. Especially do we impress on all, but particularly on the seniors, that it is their duty to prevent wrong as far as it is possible: 1, by speaking to the offender; 2, by bringing public opinion to bear; 3, in a last resort, by giving fair warning, and then, if necessary, speaking to a teacher. This is almost never necessary, and is a very different thing from the cowardly tattling which is done slyly. It requires much courage, and need almost never be resorted to.

(To be continued.)

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THE NEW TERM FEES AND ADVENTURE SCHOOLS.

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It seems at first sight almost absurd that a serious controversy should take place on the question of the best method of collecting school fees. To one unacquainted with the history of education in India it no doubt appears a matter of complete indifference whether the fees of a term are levied monthly or in three or four unequal instalments. All, however, who have any experience in Indian educational matters, and especially those who are connected with the practical management of Schools or Colleges, judge, and judge rightly, that this question, so far from being one of petty detail, is in reality one of the most momentous questions that have arisen for some time. The history of the question is already known to our readers, so it is needless here to do more than touch upon it. About two years ago Government introduced the new Term Fee System. The system was not received with favour, but it has been persisted in, in spite of the determined opposition of almost all practical educationalists in the Presidency, and in the beginning of this year a notification was issued, enforcing its provisions and intensifying some of its worst faults. The conduct of Government has not, we are glad to see, been left uncriticised. The Managers and Principals of the leading schools in Madras, a body of men deeply interested in all educational matters, and who are by their position well fitted to judge of the merits or demerits of any educational scheme, have forwarded to Government a strong protest against the new system. This protest is worthy of consideration: it not merely gives expression to the opinion of those from whom it has emanated, but it reflects the feelings of almost the entire teaching staff of the Presidency. Upon the reception accorded to it will depend, to a very great extent, the progress of education in South India during the next quarter of a century. It is hard to see what

reasons the Board of Education can find sufficiently cogent to justify them in rejecting—if they do reject it—the counsel of those who are most deeply interested in this matter, and are undoubtedly, by their practical experience, best qualified to judge of it. It cannot be that Government views with consternation the spread of higher education, and thinks it time to throw some barriers in the way of those seeking it, lest the country be overrun by hordes of penniless B. A.'s, F. A.'s, and Matriculates, unable to obtain situations, too proud to work, and ashamed to beg. The action of Government certainly tends to hinder the possibility of such a catastrophe by limiting the number of those who can obtain a higher education.

The new fee system was introduced to counteract certain abuses, and to provide for the better enforcement of school discipline. It was thought by compelling pupils to pay a considerable sum in advance, security would be given for their regular attendance during the whole term. In this way, school discipline would be much improved, and there would be a considerable increase in the revenue derived from school fees. Above all, it was hoped that the system would prevent pupils from leaving school two or three months before an examination in order to prosecute their studies in private. This practice does undoubtedly prevail in some schools, but where it does, the fault lies, we believe, not in the method of collecting fees, but in the character of the teaching. If teachers are thoroughly qualified for their work pupils will not be long in discovering that it does not pay to withdraw from their guidance as an examination approaches; if they are not qualified, if pupils can prepare for an examination better in private than at school, then, it matters not how the term fees are collected, we cannot expect lads to risk the possibility of failure by remaining at school in order that they may complete a term. The true remedy for irregularity of attendance, and indeed for most of the defects in the working of our school system, is to provide a staff of thoroughly trained and competent teachers and leave the regulation of all minor matters in their hands. The new method of collecting term fees may check irregularity of attendance, and put a stop to the practice of leaving a school in the middle or towards the end of a term, but even if it does, the remedy will undoubtedly prove worse than the disease, and the patient will, in all likelihood, be hurried into a rapid decline by the ill-chosen nostrums of physicians.

Although the new system has been only a short time in operation, its evil results have already become but too apparent. Not only has the number of pupils in Government Aided Schools very seriously

decreased, but in many cases there has been a serious diminution of the annual income derived from school fees. This is not to be wondered at. A very large number of those studying in the Middle and High School Classes are the children of poor parents, who can ill-afford to contribute to the cost of their education. It is not without a hard struggle that these lads win their way. By pleading with their friends, by begging from those who are charitably disposed, by doing work of various kinds at odd hours, they manage to scrape together sufficient to pay a monthly fee. They simply cannot comply with the requirements of the new system, and must either discontinue their studies or seek the help of some usurious money lender. Debt is one of the greatest plagues of India, it has cast a blight over the masses of her people, and keeps them weak and helpless and utterly unable to rise above the level of a bitter grinding poverty. It is hard enough for a poor student to escape the contagion of this plague; it is intolerable that the Board of Education should force it upon him.

The desire for a higher education has happily been created in South India, and somehow or other this desire will find satisfaction. If a large number of lads are to be debarred, and they are practically debarred, from receiving an education in schools aided and controlled by Government, they will seek an education elsewhere, and they will find it. The demand is sure to create a supply. It has done so already, and a large number of adventure schools have sprung up, mushroomlike, throughout the Presidency. These schools offer their pupils education on terms which they can accept, and consequently have not only attracted a large class of boys, who had been compelled to discontinue their studies for a time, but have attracted and are attracting large numbers of boys from aided schools. This is a serious matter, and one which we cannot but view with grave concern. We do not wish to judge hardly of these adventure schools, we wish them every success, but we cannot believe it at all likely that they will do much to advance the cause of education. Such schools can and do attract pupils; they cannot and do not attract teachers of ability and experience. They cannot offer sufficient inducement to such, and as a consequence their teachers are for the most part untrained and incompetent. The action of Government is strongly inconsistent. While on the one hand it is striving by the development of the Normal School system, by the institution of a teaching degree, by every means in its power, to supply the schools under its control with thoroughly trained teachers, it is, on the other, doing all it can, to empty the class-rooms of those whom it has trained, and to place the education of the country in the hands of men whose chief recom-

mentation is that they have the common sense to see the absurdity of attempting to enforce a practice obnoxious to the public and the source of much hardship to the poor.

The adventure schools offer at the best an indifferent substitute for the education to be obtained in Government aided institutions, and yet they are prospering wherever they have been started, and the managers of aided schools are beginning to find difficulty in competing with them. The loss of pupils and of fees through this newly developed competition is already severely felt in many places, especially in some small mofussil towns where the Municipal authorities have recently taken upon themselves the burden of local education. There are several struggling Municipalities, which, under considerable pressure from Government took over the control of a local High School only to find their half-year's income from school fees Rs. 500 or Rs. 1,000 less than they had been led to expect. It is a question if such Municipalities will not be compelled before long, in order to escape the heavy burden laid upon them, to yield the field to rivals unhampered by Education Codes and Government Standing Orders.

We believe that the education of the country should be, to a great extent, under the control of Government, and for this reason we deplore the suicidal action of the Educational Board. If this new Term Fee System be not abandoned, or at least considerably relaxed, the schools now under Government control will, we believe, be compelled in self-defence to assert their independence and reject Government aid and Government control. Ultimately no doubt, Government will yield to the force of public opinion but the danger is that, before it does yield, the development of education will have been thrown back several stages.

CORRESPONDENCE.

CAMBRIDGE.

To

THE EDITOR,

"Educational Record," Madras.

SIR,

Having been asked to send a contribution to your Journal, I think I could not write on a better subject than the one above.

I should advise any student intending to enter the University to take up his residence in October; a native proceeding from India to England, with a view of reading at one of the Universities would do well to time him-

self to arrive in England in July or August; he would then not feel the cold so much as he would if he did not arrive till October. He might occupy his time in touring about and seeing something of England before entering on his University career.

There are three terms and consequently three vacations; in the Long vacation, however, which lasts from the beginning of June to the beginning of October—students, who are reading for Honors (and not for an ordinary Pass, which so many do) are allowed, if desirous of going up, to read for about 8 weeks. Your coach or private Tutor is in residence also; and you read "solely" under him. I say "solely" because during term time you are burthened with lectures which you are expected to attend.

Students work in the mornings and evenings; the afternoons being set aside for recreation of some kind. Every student should be a member of the Boat, Cricket, Football or other Club. He will in this way make more friends, and will not find the time ever hangs heavily on his hands, which might otherwise be the case.

All the different Colleges can be seen competing with each other on the river. The May Races are, on the whole, the most enjoyable—the weather is then warm and agreeable—the banks of the river are lined with spectators in the most varied costumes, and the whole scene is one of the greatest excitement. Each College Boat has its own backers, all eager that their own boat should win. In this term also all the best Cricket Clubs can be seen competing with the University eleven. Bicycling too is a great source of amusement; the country about Cambridge being level, is well adapted for bicycling. Races are held annually in which representatives from the best Clubs compete.

A student can have rooms in or out of College—as he prefers—; both have their advantages, but for a hard-working man it would be preferable to have rooms in College.

You have a College Tutor, who is highly paid and whom you see, as a rule, at the beginning and at the end of Term. Why he should receive such handsome pay has always been a mystery to me. The pay of your College Tutor is nearly equal to that of your private Tutor, but the work of the former is simply "nil" in comparison with that of the latter.

Degree day is always looked forward to with immense pleasure by the undergraduates. I will narrate two or three amusing events which I have seen take place in the Senate House. (1) I remember well when Professor Darwin took an honorary degree, seeing a monkey carefully strung across the Senate House, which was kept dangling over his head for some time before he took his degree. The Proctors—(whose duty it is to keep order on these occasions) tried their utmost to get hold of it—but the undergraduates, being packed in the gallery like sardines in a box were unable

to reach the monkey, much to the delight of the undergraduates amongst whom the proctor is no favorite. (2) A wooden spoon is given annually to the best man in the mathematical tripos. If he takes the spoon in good humour, he is vociferously cheered, but, on the other hand, if he refuses to take it, he is hooted and hissed. (3) Occasionally a "fellow of a College has the bad grace to come into the Senate House wearing his hat, he soon finds that his best plan is to remove it, as money, in the shape of copper, is showered upon him freely, nor does this stop till he has the good sense to remove the hat; during the whole of the time the hat is kept on he is hooted and hissed, but immediately he meets the wishes of the undergraduates, he is heartily applauded.

Each College has its own Debating Society; there is also the Union—where the University Debates are held—to which it is advisable a student should belong. He can see all the best papers, and do any writing which may be necessary. It is often convenient to run in after dinner—which is over about 6 o'clock—for a few minutes and remain till time for chapel at 6.30. Dinner must be taken in College and a certain number of Chapels must be attended weekly.

I am, &c.,

CAMBRIDGE GRADUATE.

(To be continued.)

MADRAS MATRICULATION ENGLISH TEXT FOR 1886.

NOTES ON

SCOTT'S "ROKEBY."

This poem of Rokeby was written by Walter Scott in 1812. The scene is laid in the beautiful scenery of Rokeby, near Greta Bridge in Yorkshire, and shifts to the adjacent fortress of Barnard Castle and to other places in that district. The incidents narrated in the 6 cantos are supposed to last five days, three of which are supposed to elapse between the end of the fifth and the beginning of the sixth canto.

The date of the supposed events is immediately subsequent to the great battle of Marston Moor, July 3rd, 1644. Sir Walter tells us that this period of public confusion was chosen without any purpose of combining the poem with the military or political events of the Civil War, but as affording a degree of probability to the fictitious narrative now presented to the public.

It has been said that the secret of the success of Scott's poetry lay partly in his subjects, partly in his mode of treating them and partly in his versification. He sketches the Knight and the Castle, the Camp and the Court. He is no less fond of adding descriptions of beautiful scenery. His char-

acters are sometimes from history and sometimes from his imagination. But his historical characters are largely idealised and he associates the hero of his imagination with men and women already known to us in the pages of history. He has almost magic power to kindle emotion and excitement.

Scott's versification is based upon an eight syllabled rhyming metre; but in his various poems great variety is introduced by a frequent admixture of other kinds of English metre, especially the six syllabled line to follow a couplet or triplet of eight syllables."

"Scott is the poet of romantic history," I am sensible, he says, "that if there be anything good about my poetry or prose it is a hurried frankness of composition which pleases soldiers, sailors, and young people of bold and active dispositions."

Was wont.—Wont, a perfect participle from O. E. *wunian*, to dwell, hence to continue, to be used or accustomed. Notice the infinitives that follow *was wont*; to rouse is the simple infinitive following a verb: to pay is the infinitive of purpose, originally the dative of the infinitive. The prose order would be to pay her duteous orisons.

Orisons.—Old French *orison*, *oreison*; French *oraison* derived from *orationem*, the accusative of the Latin *oratio*, a prayer.

Broke used for broken.

Keep and tower are nominatives to lie: an inversion common in poetry. Carefully distinguish the verbs lie, lay, lain = to recline, lay, laid, laid, to put down and lie, lied, lied, to tell an untruth.

But, here an adverb=only. Sometimes it is a preposition as all but John were present. The instances of inversion are very numerous in Scott's poetry; we should write in prose, "to trace each well remembered spot."

"The weekly dole was dealt there."

Dole and deal.—Dole is a dialectical variation of deal; middle English dole, dale, A.-S. *dál*, *gedál*, a portion.

Drew, used intransitively = came.

Perched is a perfect participle qualifying the word *tercelet*.

Tercelet, spelt also *tiercelet*, *Cushat* A.-S. a wild pigeon was seen to trace. An infinitive usually follows "to see" without any preposition as I saw you go; after the passive voice the participle is more common. He was seen reading a book.

Rueful, rue is from A.-S. *hreowan*.

As none its floor had trod: as for as though. Trod poetic for trodden.

To pass the parting pledge might be to drink to their last expressed resolution, or to their next success, or their next meeting; no doubt it was that sentiment given in the next line

"To Rokeby's treasure vaults."

Doffed, a favourite word of Scott's; short for do off.

Rehearsed, repeated by way of preparation. The root of the word is from M. E. herse, originally a triangular arrow: then a triangular frame for supporting lights at a church service, then a carriage for removing the dead.

Phantom: M. E. Fantome: old Fr. fantosme, Latin phantasma, frantic = wild, terrified, M. E. frenesye, L. phreneses.

Quest, search: from Latin quæro.

Mattock A.-S. mattuc a hoe.

Aghast, mis-spelt for agast, short for agasted, past participle M. E. agasten, to terrify.

I marked. I observed, I knew that you and Denzil were taken prisoners.

Dungeon M. E. dongeon, O. F. donjon the chiefflower in a castle.

Hold is the object of the verb sought.

Were I. The subjunctive mood is always dependent upon some sentence to which it is subjoined. The clause containing a condition is called the Protasis; the clause containing the consequence, is called the apodosis. Here the usual introductory conjunction is omitted. "If I were disposed," &c.

But for , = if it had not been for , except for

Save, sometimes saving, is often used as a preposition. It can be considered as a participle; as there is no one there save the king = the king being saved or excepted, there was no one there.

Brat = child, compare Welsh brat a rag and Irish brat a cloak.

But as a prisoner: only as a prisoner on parole.

Proffer to offer, O. F. proferrer, to produce, Latin proferre to bring forward.

Were = should be: subjunctive mood after even though I refused until Wycliffe swore over and over again that he would spare his prisoner's life.

Garrison. Soldiers who defend the castle. M. E. garnison, O. F. garnesen, O. F. garnissant, past participle of *garnir* to store.

Mark = make out.

Scaffold M. E. scafold, O. F. escafalt, modern French *escafaud*, a scaffold.

Wed, subjunctive after unless, also in 263 after "as if."

Who told: who said that it had been recently left.

Fell, an adjective, A.-S. *fell*, cruel, dreadful.

Wot is from O. E. wittan to know, compare to wit, wittingly.

Wist, the s was probably inserted to connect the t of the root with the te of the past tense and then superseded the first t.

Unguerdoned. O. F. guerdon, Low Latin wider donum compounded of Old High German widar back, and donum a gift.

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course for 1887.)

BY

WILLIAM E. MILLER, B.A., F.S.Sc. (LONDON),

Principal, Agra High School.

(Continued from page 122.)

The sloop.—Ger. *schlupe*, a sloop. A sloop of war is a vessel of war rigged as a ship or brig, and mounting from eighteen to thirty-two guns—now disused.

Cot.—A sea-cot is a hammock with a wooden frame in it, to keep it rectangular.

Climate. Lat. *clima*, Gr. *klima*, a zone of the earth, from *klinein* to slope, to incline.

The Armed Neutrality.—In 1779, the Northern European powers Russia, Denmark, and Sweden, entered into a confederacy, known as the *Armed Neutrality*, to resist the system of maritime laws upheld by Great Britain. Amongst other maritime rights, the English exercised that of seizing an enemy's property even when carried in neutral vessels; and their claim to visit and search merchant ships for such property, or for contraband of war, was the cause of much irritation on the part of the neutrals. The Northern powers now contended that free ships make free goods, that is, that an enemy's goods cannot be seized in a neutral ship. Neutrality from *Lat. ne*, not and *uter*, either.

Elsineur.—Or Elsinore, a fortified town in Zealand, Denmark, on the Sound. Long. 12° 35' E. Lat. 56° 0' N.

Their force.—Their strength as ships of war.

Its soundings.—The depth of water in a channel when measured is called a sounding.

Sailer.—That which sails; not to be confounded with *sailor*, a seaman.

The Downs.—That portion of the North Sea or German Ocean enclosed by Kent on the west and Goodwin Sands on the east, on the road, near Deal, for shipping in the English Channel. From A.-S. *dun*, Fr. *dune*, a bill.

The vessels drove.—Were driven by the force of the gale in spite of having their anchors down.

Came athwart-hawse of the Albemarle.—Came right across the bows of the Albemarle. Athwart=across. Hawse or hawse-pipes are the holes cut in the bows of a vessel to permit of the hawser or cable running out.

Goodwin Sands.—Or more properly Godwin Sands, are sand-banks off the east coast of Kent, between the North and South Foreland. These Sands occupy part of the space that was formerly a large tract of ground belonging to Godwin, Earl of Kent, father of King Harold; which tract being afterwards given to the monastery of St. Augustin, at Canterbury, and the abbot neglecting to keep in repair the wall that defended it from the sea, the whole was submerged in 1,100, leaving these Sands, which are very dangerous to shipping.

Deal.—A seaport in Kent, between the North and South Foreland. It has no harbour; but the sea between the shore and the Goodwin Sands, called the Downs, is generally a secure anchorage for ships, where they usually ride upon their leaving or entering the Thames. Long. 1° 24' E. Lat. 5° 13' N.

Intrepid.—Lat. *intrepidus*, unshaken.

Guineas.—From *Guinea*, a country in Africa, abounding in gold.

Bowsprit.—A compound of *bow* and *sprit*. A large spar which projects over the stem of a vessel, to carry sail forward, and to stay the foremast.

Foremast.—The forward mast of a vessel, or the one nearest the bow.

Quebec.—An Algonquin term meaning, "take care of the rock." Situated on the St. Lawrence; the capital of Lower Canada; the seat of a Protestant and a Catholic bishopric; strongly fortified both by nature and art; called "the Gibraltar of America"; has an arsenal with arms for

100,000 men; steam-packets running daily between it and Montreal; the scene of the victory and death of General Wolfe at the heights of Abraham in 1759, after which the city surrendered. Long. 71° 10' W. Lat. 46° 47' N.

The Algonquins are the names given to several tribes of Indians spread over different parts of North America.

Surgeon.—O. E. *chirurgien*, Fr. *chirurgien*, from Gr. *cheir*, the hand and *ergon*, work; hence a medical officer well up in dissecting, and other manual operations.

Admiral Keppel.—Augustus, Viscount, a celebrated English admiral, was the second son of William, Earl of Albemarle. He accompanied Commodore Anson in his voyage round the world, and afterwards passed through all the gradations of the service, till he attained the rank of admiral. In 1778 he commanded the channel fleet, which on the 12th of July, in that year, fell in with the French, under Count D'Orvilliers, of Ushant. A partial action ensued, which the English admiral thought to have renewed in the morning, but the enemy had retired. This affair gave great dissatisfaction to the nation, which was aggravated by Sir Hugh Palliser, second in command, preferring a charge against Admiral Keppel; but he was honourably acquitted by a court martial at Portsmouth. Sir Hugh was then tried and censured. In 1782, Admiral Keppel was raised to the peerage; he was also at two separate periods first Lord of the Admiralty. Died 1786.

Admiral from Arabic *Amir-al-bahr*, Commander of the sea.

Lord Sandwich.—Who, together with Bishop Warburton had been reflected on, and ridiculed by, the celebrated Wilkes in his *Essay on Woman*.

An indelicacy.—A want of propriety. Lat. *in* and *delicia*, delight.

Canada.—An Indian word signifying a collection of huts; a village, a town. Canada is a large country in North America, discovered in 1497, and settled by the French in 1608. It was conquered by the English in 1759, and confirmed to them by the French by the Treaty of Paris in 1763. In 1791, this country was divided into two provinces, Upper and Lower Canada, which have since made great progress in agriculture and population.

Cruise.—From Dutch *kruisen*, to move crosswise or in a zig-zag, from *cruis*, a cross. A voyage made without a settled course.

A fishing schooner.—D. *schoner*, A.-S. *scunian*, to avoid, to shun. A schooner is a small, sharp-built vessel, usually having two masts, with fore and aft sails. A fishing schooner = a schooner employed in fishing.

Master.—Here *Master* denotes the person, who is too often erroneously called the *Captain*, which is a Commissioned Officer's title and belongs exclusively to the navy.

Boston Bay.—The west end of Massachusetts Bay on which Boston is situated.

Certificate.—Lat. *certus*, certain and *facere*, to make.

Came off.—Came off from the shore on board the ship. The adverb off here denotes distance.

Hazard.—Fr. *hasard*, from Lat. *casus*, fall, chance, or Italian *azzardo*, from Arabic *sehar*, *sar*, with the article *Al*, which means the?

Poultry.—From *poult*, contracted from Fr. *poulet*, the diminutive of Poule, a hen, a fowl, and the suffix *ry*, usually denoting state, condition, or quality, and having collective force, as in gentry, peasantry, slavery.

Scurvy.—A.-S. *scurf*, from *sceorfan*, to gnaw, bite. A disease characterized by livid spots of various sizes, paleness, languor, depression of spirits, general exhaustion, pains in the limbs, spongy and bleeding gums, and bleeding from almost all the mucous membranes.

The ship's company.—The crew.

A fresh meal.—A meal of fresh food or edibles.

Boston.—Originally St. Botolph's town. Situated on Boston Bay, that is Massachusetts Bay, is the capital of Massachusetts. Its foreign and domestic trade is very considerable. Long. 71° 58' W. Lat. 42° 23' N.

Relic.—*Relinquere*, to leave behind. A memorial.

Sail of the line.—Ships of war.

Chase.—Fr. *Chasse*, hunting, from Lat. *capere*, to seize.

Saint George's Bank.—The name of a shoal off the island of St. George, one of the Caribbee islands, 30 leagues N. W. of Tobago.

Pilotage.—From Fr. *pilote*, Ger. *pilen*, *peilen*, to measure, gauge, sound, and *lot* plummet.

Manœuvre.—A French word from Fr. *main* hand, and *œuvre* work. Dexterous movement in naval or military tactics.

Warily.—A.-S. *waer*, cautions. Cautiously.

Shortened sail and hove to.—Stopped the progress of the vessel by furling the sails.

Frenchman.—The sailor's way of speaking of a French ship.

Consorts.—Here means companion ships. From Lat. *con*, and *sors*, a lot.

Anchorage.—Lat. *anchora*, an anchor. The suffix *age* sometimes denotes place or residence, as in parsonage, vicarage.

A very pretty job.—Pretty is ironically used to mean despicable, contemptible.

Sandy Hook.—A small island on the coast of New Jersey, one of the United States of America, near Long Island. Long 74° 2' W. Lat. 40° 30' N.

Prize-money.—Fr. *pris*, from Lat. *prehendere* to seize. In the army and navy prize-money is the total value reckoned in money of what has been captured, as in taking the enemy's camp, town, vessels, &c. Also, the share accruing to each officer, soldier, or seaman from the division of the proceeds of captured vessels, &c.

Is the station for honour.—Nelson replied to his superior officer, Admiral Digby, that the West Indies was the place where honours could be gained, meaning thereby that he valued honour more than prize-money.

Lord Hood.—Samuel, Lord Viscount, the son of a clergyman *at Thorncombe, in Devonshire, was born there in 1724, and entered the royal navy at the age of 16. By his bravery in the capture of a 50-gun ship, in 1759, he acquired the rank of post-captain, and he was present, as rear-admiral, at the famous defeat of De Grasse, by Rodney, April 12th, 1782, when his services on that occasion were rewarded with an Irish peerage. In 1784 he was elected into Parliament for Westminster; but in 1788 he vacated his seat on being named one of the lords of the admiralty. In 1793 he signalled himself by the taking of Toulon, and afterwards Corsica; in reward of which achievements he was made a viscount, and governor of Greenwich Hospital. Died 1816.

Detachment.—Fr. *detacher*, from Lat. *dis* and the root of Eng. *tack*, to fasten. A body of troops or part of a fleet detailed for special service.

Rodney.—George Brydges, Lord, a gallant English admiral, was the son of Captain Henry Rodney, a naval officer, who, at the time of his son's birth, was commanding the yacht, in which the king, attended by the Duke of Chandos, used to pass to and from Hanover: hence he was christened George Brydges, the names of his royal and noble god-fathers. He entered the navy early in life, and obtained the command of a ship in 1742. In 1749, he was appointed Governor of Newfoundland; and on his return, in 1793, he married the sister of the Earl of Northampton. In 1759 he was made Admiral of the blue; and in the same year he destroyed the stores prepared at Havre de Grace for an invasion of England. In 1761 he served on the West India station with such activity, that, at the conclusion of the war, he was made a baronet. In 1768 he was elected into parliament for Northampton; but the contest ruined his estate, and he found it necessary to retire to the continent. The French Government made some overtures to him, which would have recruited his fortune. These he rejected; and, the fact having transpired, he was placed in command of a squadron destined for the Mediterranean. In 1780 he fell in with Langara's fleet, off Cape St. Vincent, and completely defeated it; and on the 12th of April 1782, obtained a decisive victory over the French fleet under De Grasse, capturing five and sinking one of his largest vessels. A barony and a pension of £2,000 were bestowed upon him for his services; and on his decease, in 1792, a monument was voted to his memory, at the national expense, in St. Paul's Cathedral.

Reluctantly.—From Lat. *re*, against and *luctari*, to struggle.

Prince William Henry, the Duke of Clarence.—Afterwards William IV of England, reigning from 1830—1837, was the third son of George III, and was born 21st August 1765. At 14 years of age he entered the navy, and was afterwards called the sailor king.

Naval tactics.—The science and art of disposing naval forces in order for battle, and performing naval evolutions. Applied also to military movements. *Naval* from Lat. *Navis*, a ship. *Tactics* from Gr. *taktike*, (Sc. *technē*) from *taktikos*, fit for ordering or arranging.

Merest boy.—The veriest boy. Mere has the force of *simple*, meaning only this, and nothing else.

Waistcoat with long flaps.—A waistcoat worn as was the fashion in those days, loose and long.

Lank unpowdered hair.—Lank means drooping and dishevelled. It was the custom in Nelson's time to powder the hair.

Hessian tail.—The hair was tied up with a ribbon and fell down the back in the shape of a tail. It was called a queue. *Hessian* is used probably because the fashion was introduced from Hesse, a country of Germany, in the circle of the Upper Rhine.

Address.—Manner of speaking. Lat. *ad*, to and *dirigere*, to direct.

Enthusiasm.—Gr. *enthousiasmos* from *enthousiazēin*, to be inspired or possessed by the god.

Bahamas.—Or Lucayo islands, in the Atlantic ocean, subject to the British. They are nearly 500 in number, extending along the coast of Florida to Cuba. The largest of these islands is called Bahama; it is unin-

habited, and contains much fine timber, but is difficult of access. The only articles cultivated in these islands for exportation are cotton and coffee.

Bahama Keys.—The channels or passages between the Bahamas; so called because they were difficult to navigate.

Puerto Cabello.....*Venezuela.*—Also written Porto Cavello. Together with La Guayra, Porto Cavello is the chief outlet for the Venezuelan trade.

Venezuela is Spanish for Little Venice, so named on account of some Indian villages which the first conquerors found built on piles in Lake Maracaybo. Prior to 1831 Venezuela together with New Granada and Ecuador formed the Federal Republic of Colombia. Each is now an independent republic.

La Guayra.—A seaport of Venezuela.

Under French colours.—Flying the French flag. Nelson was sailing "under false colours," as a naval stratagem.

King's launch.—A launch in the service of the king. A launch is the largest sized boat belonging to a ship. From Fr. *lancer*, *lanchier*, to throw as a spear.

Hailed.—Ger. *haloo*, to call; allied to Lat. *calare*, to call.

The German Empire.—The "German Empire," formed in December 1870, embraces only a portion of what was designated Germany in Central Europe. It now consists of the kingdom of Prussia, together with all the minor states formerly known as Western Germany. The number of the latter is now reduced to 25, Prussia having in 1866 absorbed Hanover, Hesse-Cassel, Nassau, Schleswig-Holstein, and Frankfort. In addition to these the Empire now embraces Alsace and a portion of Lorraine, wrested from France in 1870. Its total area is 213,009 square miles.

Electorate of Bavaria.—The territory of an Elector, one of the princes of Germany formerly entitled to chose the emperor or king. From Lat. *e*, and *legere*, to chose.

Bavaria, anciently *Boiaria*, i.e., the country of the Boii. It is a circle of Germany, containing 17,500 square miles, and includes Bavaria Proper, the Palatinate of Bavaria, the principalities of Ratisbon, Freisingen, and Passau, and the duchies of Newburg, Sultzbach and Salizburg.

Preliminaries.—Lat. *præ*, before and *limen*, a threshold.

To enter for her immediately.—To volunteer themselves for enrolment.

Presented at Court.—Introduced to the sovereign.

Lincoln's Inn.—At London, the palace of the Bishop of Chichester, about 1226; converted into an inn of court, about 1310.

The word "Inn" formerly meant the town residence of a nobleman, bishop, or other dignitary. By an 'inn of court' is meant a corporate association or college of lawyers and students of law.

The Chambers.—The private rooms of a lawyer. Lat. *camera*, an arched room.

St. Lawrence.—A large river of North America, proceeding from Lake Ontario, from which it runs north-east above 700 miles to the Gulf of St. Lawrence, in the Atlantic. The upper part of this river is sometimes called the Iroquois.

(To be continued.)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on one side of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"

Educational Record, Madras.

ALGEBRA.

Find the value of r for which n_r is greatest, n_r being the number of combinations for n things taken r at a time.

In the series $n_0, n_1, n_2, n_3, \dots, n_n$, we know that $n_0 = n_n$, $n_1 = n_{n-1}$, $n_2 = n_{n-2}$ and so on.

(a.) If the series contain an even number of quantities, i.e., if n be odd and $= 2m + 1$ then the whole series may be divided into two groups, one containing the first $m + 1$ quantities $n_0, n_1, n_2, \dots, n_m$; and the other the latter $m + 1$ quantities $n_{m+1}, n_{m+2}, \dots, n_{2m+1}$,—the quantities in one group being severally equal to those in the other taken in a reverse order.

(b.) If the series contain an odd number of quantities, i.e., if n be even and $= 2m$, then the series $n_0, n_1, \dots, n_n$ will consist of two groups similar to those above mentioned, (each now containing m quantities) and of an extra quantity viz., n_m besides.

In case (a) where $n = 2m + 1$, we have to determine which quantity is

$$\text{greatest of } n_0, n_1, n_2, \dots, n_m. n_0 = \frac{|2m+1|}{|2m+1|}; n_1 = \frac{|2m+1|}{|1| |2m|}; n_2 = \frac{|2m+1|}{|2| |2m-1|};$$

$$\dots \dots \dots n_m = \frac{|2m+1|}{|m| |m+1|}.$$

Now $|m| |m+1| < |m-1| |m+2| < |m-2| |m+3| \dots < |2m|$
 $< |2m+1| \therefore n_m > n_{m-1} > n_{m-2} \dots > n_0.$

But as $n = 2m + 1, n_m = n_{m+1}.$

$\therefore n_m$ and n_{m+1} are greater than any of the other quantities, $n_0, n_1, n_2,$
 $\dots, n_{m-1}.$

$\therefore n_r$ is greatest when $r = m$ or $m+1$, i.e., $\frac{n-1}{2}$ or $\frac{n+1}{2}$ when n is odd.

In case (b) where $n = 2m$ we have to determine which is greatest of $n_0,$

$$n_1, \dots, n_m. \quad n_0 = \frac{|2m|}{|2m|}, \quad n_1 = \frac{|2m|}{|1| |2m-1|}, \dots, \quad n_m = \frac{|2m|}{|m| |m|}$$

$$|m| |m| < |m-1| |m+1| \dots < |2m|.$$

$$\therefore n_m > n_{m-1} > n_{m-2} \dots > n_0.$$

$\therefore n_r$ is greatest when $r = m$ or $\frac{n}{2}$, when n is even.

TRIGONOMETRY.

If O and O' be the centres of circles circumscribed about and inscribed in a triangle ABC and R, r be their radii, then

$$OO'^2 = R^2 - 2Rr.$$

Describe the circumscribed circle and produce AO' to meet it in E.

Join OE which will bisect BC at right angles at F, because arc BE = arc EC.

Join CO and EC and draw O'G at right angles to FO. Join OC.

$$\angle EO'C = \frac{1}{2}(A + C)$$

$$= \angle O'CF + \angle BCE.$$

$$= \angle O'CE$$

$$\therefore EO' = EC.$$

$$OC^2 = EC^2 + OE^2 - 2.OE.FE.$$

$$OO'^2 = EO^2 + O'E^2 - 2.OE.GE.$$

$$\therefore R^2 - OO'^2 = 2.OE.(GE - FE) = 2Rr \therefore OO'^2 = R^2 - 2Rr.$$

If O' be the centre of one of the escribed circles and r' be its radius, then by a similar construction we shall obtain

$$OO'^2 = R^2 + 2Rr.$$

(2.) To shew geometrically that $\sin \theta$ is greater than $\theta - \frac{\theta^3}{4}$, θ being the circular measure of an angle less than a right angle.

Take a circle ABC and at its centre O take the angle BOC to represent θ .

Produce BO to meet the circumference in B'.

Join B'C, and BC.

Draw CD perpendicular to B'OB, and BE, CE, touching the circle at B and C, and produce BE and B'C to meet in T.

Now as TCB is a right angle and $BE = CE$, $BT = CE + BE$.

$\therefore BT$ is greater than the arc CB.

$\therefore \frac{\sin \theta}{\theta}$ which is $= \frac{CD}{\text{arc CB}}$ is greater than $\frac{CD}{BT}$ (i.e.,) is greater than

$\frac{B'D}{B'B}$

But $\frac{B'D}{B'B} = 1 - \frac{BD}{B'B} = 1 - \frac{BD.BB'}{B'B^2} = 1 - \frac{CB^2}{4.OB^2}$ (VI. 8) which is greater than $1 - \frac{\theta^2}{4}$.

$$\therefore \frac{\sin \theta}{\theta} > 1 - \frac{\theta^2}{4} \text{ or } \sin \theta > \theta - \frac{\theta^3}{4}.$$

$$\text{To show that } \cos \theta > 1 - \frac{\theta^2}{2}, \cos \theta = \frac{OD}{OC} = 1 - \frac{BD}{OB} = 1 - \frac{2BD}{B'B} \\ = 1 - \frac{2.CB^2}{4OB^2}.$$

$$\therefore \cos \theta > 1 - \frac{\theta^2}{2}.$$

CONIC SECTIONS.

1. If QV be a semi-ordinate to the diameter CP of an hyperbola and if the tangent QT at Q cut CP in T, then CT, CV = CP².

Draw the tangent PL at P meeting the asymptote at L.

Produce VQ to meet the same asymptote in R.

Draw LM touching the conjugate hyperbola in M, and RNZ parallel to LM, cutting the conjugate hyperbola in N and CM-produced in Z; join CN.

It is obvious that CM is parallel to PL and CN to TQ* and LM to CP.

$$* N.E. - RV^2 - QV^2 : RZ^2 - ZN^2 :: RV^2 : RZ^2$$

$\therefore NQ$ is parallel to ZV and is therefore bisected by the asymptote CR.

$\therefore CN$ is parallel to TQ.

∴ The triangles CNZ and QTV are similar to each other.

∴ TV : QV :: NZ : CZ

∴ TV : NZ :: QV : RV,

∴ NZ : RZ

∴ NZ : CV,

∴ CV. TV = NZ²

= RZ² — ML²

= CV² — CP²

∴ CP² = CV. CT.

2. If CP and CM be two semi-conjugate diameters of an hyperbola of which S and H are the foci,

$$SP, HP = CM^2$$

Draw the asymptotes and the tangents LPl at P bisecting the angle SPH and cutting the axes at T.

$$Pl = PL = CM$$

(Drew's Conic Sections).

Because SPH is bisected by TP,

$$SP. HP = PT^2 + ST. HT \text{ (Euclid).}$$

$$= PT^2 + CS^2 - CT^2$$

$$= PT^2 + CL. Cl - CT^2$$

$$= PT^2 + LT. IT$$

$$= PL^2$$

$$= CM^2$$

LOGIC.

NOTE.—The references in these questions are to the 'People's edition of Mill's Logic, dated 1884.

(Continued from page 128.)

BOOK I. C. 1.

Of Names and Propositions.

95. What view did Descartes, Leibnitz and Locke hold regarding the nature of a judgment? page 56.

96. What was Hobbes' view of the nature of the predicate in propositions? p. 57.

97. What analysis is true of all propositions? p. 58.

98. In what does the meaning of names generally reside? p. 59.

99. In analysing any proposition, why is it necessary to look to the connotation of the predicate and the subject? p. 59.

100. Do connotative names precede or follow the attributes which they connote? p. 59.

101. What is the most generally received notion of Predication? p. 60.

102. What is the *dictum de omni et nullo*? p. 60.

103. What is generally the object of belief in a proposition? p. 64.

104. In what does the obscurity of a proposition usually lie? p. 64.

105. What is a *noumenon*? p. 65.

106. Do propositions, in which objects are referred to a class, assert resemblance? p. 66.

107. What do we affirm when we predicate a general name? p. 66.

108. Why is it sometimes convenient to extend the boundaries of a class so as to include things which possess in a very inferior degree the characteristic properties of the class? p. 66.

109. Why are sensations of white classed together? p. 67.

110. What is asserted or denied in every proposition which is not merely verbal? p. 67.

111. How many kinds of propositions of co-existence does Professor Bain distinguish? p. 67.

112. Why is a co-inherence of attributes a case of co-existence of states of consciousness? p. 68.

113. When we predicate any of a concrete name, what do we in reality predicate of it? p. 68.

114. What one of five things is always predicated in all propositions of which the predicate is a concrete name? p. 68.

115. Can a proposition expressed in abstract terms be transformed into an equivalent proposition in which the terms are concrete? p. 69.

116. What are *essential* and *accidental* propositions? p. 71.

117. What were the dogmas of *substantiae secundae*? p. 71.

118. Why did the schoolmen misunderstand the real nature of those Essences which held so conspicuous a place in their philosophy? p. 71.

119. What is the nature of *essential* propositions? p. 72.

120. To what is the ambiguity of the copula due? p. 72.

121. Does an accidental affirmation imply the real existence of the subject? p. 73.
122. What are the only useful kind of essential propositions? p. 73.
123. Why have individuals no essence? p. 73.
124. What did the schoolmen mean by the essence of an individual? p. 73.
125. What two sorts of essences did Locke distinguish? p. 74.

(To be continued.)—

EXTRACTS.

The introductory lecture of the new Professor of Poetry at Oxford, Mr. Francis T. Palgrave, on the Province and Study of Poetry, fails to do justice to the finely cultivated critical powers of the lecturer. Dealing with a subject so vast as to be practically limitless, he too often becomes vague, indefinite, and weakly eclectic. "So far as I know," says Mr. Palgrave, "this is the only Professorship in any civilised country—in any European country, at least—which has for its exclusive subject the whole field of Poetry, from old Homer in the Isle of Chios to our own venerable Epic Poet in the Isle of Wight." Thus conditioned as to subject-matter, it is not surprising that the Professor's first lecture should leave on the mind of the reader a feeling akin to that produced by viewing the Nebulae through an instrument of moderate magnifying power, capable of revealing to the observer only a confused luminous appearance, as of patches of phosphorescent matter, or heaps of glittering dust.

This is not the feeling that the teacher should seek to leave on the minds of his pupils. Listening to barren commonplaces about Poetry as the finest of the fine arts, and to showy generalities as to the nature of the influence of Poetry on the world, will not greatly enlighten the minds of the listeners. What the student, in so wide a field of study, needs most, is a trustworthy guide to set him on the right road for attaining adequate knowledge of all the chief poetic productions, and to supply him with a clue to their relative values.

One of Mr. Palgrave's distinguished predecessors, Mr. Matthew Arnold, has laid down, with admirable directness, the qualifications of such a guide:—

"He ought to be clear. He ought to be brief—as brief as is consistent with not being dry. For dry he must not be; but we should be made to feel, in listening to him, as much as possible of the power and charm of the literature to which he introduces us. His discourse, finally, ought to

observe strict proportion, and to observe strict sobriety. He should have one scale, and keep to it. And he should severely eschew all violence and exaggeration; he should avoid in his judgments even the least appearance of what is arbitrary, personal, fantastic."

Now, setting aside purely æsthetic criticism, let us consider, from the point of view of the practical teacher, one or two of Mr. Palgrave's oracular judgments. He says, justly enough, that "English Literature calls loudly for full and free recognition as one of the studies of an English University"; but then comes these amazing sentences:—"If ever so recognised, I claim for Literature—Art though it be—the whole rights and methods of scientific pursuit. And for those who thus may pursue it, I claim also in the highest measure all that Science, in the latest and widest sense of the word, offers in the way of intellectual advance, of moral invigoration and pleasure, as the reward of her votaries."

Surely the Professor of Poetry labours under a strong delusion. The methods, problems, discipline, satisfactions of Science are not the methods, problems, discipline, and satisfactions of Literature. They are neither identical, nor have they a common measure. They cannot be expressed in terms of each other. The assumption that they are essentially distinct is at the base of our modern educational curriculum. If Literature were capable of yielding all here claimed for it, would it not be folly to teach anything but that one subject in our Schools and Universities? Such a deduction from Mr. Palgrave's position will be at once recognised as its *reductio ad absurdum*.

We find it still more difficult to yield assent, when Mr. Palgrave thus lays down, as essential conditions for the systematic study of English Literature:—"First, the thorough study of English Literature, as such—Literature, I mean, as an Art; indeed, the finest of the fine arts is hopeless unless based on equally thorough study of the literatures of Greece and Rome. But, secondly, when so based, adequate study will not be found exacting either of time or labour. To know Shakespeare and Milton, is the pleasant and crowning consummation of knowing Homer and Aeschylus, Catullus and Virgil. And upon no other terms can we obtain it." This last would be a hard saying to English-born men and women, if it were true. It tells them that, until they have overcome the formidable *chevaux de frise* of grammar and exercise-book that bar the approaches to the masterpieces in two dead languages, and then conquered the masterpieces themselves, they cannot hope fully to know their own Shakespeare and Milton. The genius and art, the beauties and glories, of the poet of "small Latin and less Greek," can only be fully understood and enjoyed through the medium of much Latin and much Greek. Shakespeare's creations—Dogberry and Justice Shallow, Falstaff and Touchstone, Benedick, Hamlet and Macbeth, the irredeemable villain, Iago, the relentless, remorseless Shylock; and then his women—Mrs. Quickly of the Boar's Head Tavern, the Nurse of Juliet, Beatrice, Imogen, Rosalind, Ophelia, Cleopatra, Lady

Macbeth, Desdemona, Portio, and the rest; not to speak of Wolsey, Hotspur and Prince Hal, and the other characters, men and women, in the English historical plays,—can we see these truly only, in all their astonishing variety of colouring and portraiture, in the mirror of the *dramatis personæ* of Aeschylus and Sophocles? The answer assuredly is not doubtful, if we follow Mr. Arnold's advice, and avoid in our judgments "the least appearance of what is arbitrary, personal, fantastic."

There is, perhaps, no question of greater importance in relation to the future of India, than that of the reform of the education of Indian women. If we are to continue to "hold the gorgeous East in fee," we must rely less upon our soldiery, and more upon our instructors—and especially upon the teachers of the maiden youth of our vast dependency. It is satisfactory to find, therefore, that the efforts of those who are actively interesting themselves in the social welfare of the Indian people are being seriously devoted to the solution of the problem of female education. An influential meeting, convened by the National Indian Association, and presided over by the Duke of Connaught, was recently held at Willis's Rooms, to solicit public interest and support in furtherance of this object.

There are obviously many difficulties to be encountered in dealing with the question. When we remember how far the Western nations still are from the realisation of anything like an epicene ideal, it seems almost hopeless to expect that it will ever be possible in the East. If, however, we cannot as yet hope for this desirable consummation, we can nevertheless go courageously forward in the way which leads to it. This is what the National Indian Association propose to do. The chief obstacles to their progress are, of course, the existing Indian marriage customs, and the prejudices and superstitions fostered by the Caste system. Professor Max Müller, who seems to think that caste serves the purpose of a "social police," tells us that its abolition would be tantamount to a complete social disorganisation. Undoubtedly its sudden abolition would, but nobody has ever been mad enough to propose its immediate disestablishment. We must trust for its disappearance to the process of evolution; and whether that is to be speedy or slow depends upon the perseverance, tact, and sympathy which the teachers trained in the science of the West display in the attempt to acclimatise it in the East. The progress that is being made by the movement inaugurated by Lady Dufferin, for the education of lady doctors in India, encourages the hope that the reform of female education generally in the dependency is not impracticable. We wish, therefore, the National Indian Association all the success which the most sanguine of its members anticipate, in the promotion of the great object so ably advocated at the recent meeting.

One very unwelcome and unlooked-for product of the diffusion of Education and the institution of a cheap press, is a very sensible decline in popular estimation of subjects requiring for their complete mastery severe

and continuous thought. "We must educate our masters," is the well-known advice of a Liberal statesman who opposed the extension of political power to the indigent and uneducated. But what if the education we give "our masters" is only sufficient in kind and amount to generate desires that find their satisfaction in devouring the details of a poisoning case or a divorce case, or some other of the sensational stuff daily provided in the newspapers! Such a consummation would not be one very greatly to be desired.

There is, however, only too much reason for suspecting that commonly it is the one attained. The knowledge of one subject in particular—Political Economy—was regarded as the antidote to those dangerous errors that lead to attacks on capital and property, and to communistic legislation; but Political Economy is one of those subjects that has waned in public estimation—is indeed now, by the degree, or with the approval, of our foremost statesman, in exile on the planet Saturn. Before its banishment, a distinguished political economist, the late Mr. Walter Bagehot, thus explains its unpopularity:—"One principal cause of this is the set—the most mischievous set, in my judgment—which is being made against abstract reasoning in general. This is due to the rise of an immense class of readers who find, as everybody ought to find, abstractions difficult; and who, being incessantly told that they are the great reading public, and the judge of everything, instantly begin to judge that what is unpleasant to them cannot be very valuable. The great rise of Physics ought, of course, to have prevented this. Our railways were made, so to say, out of abstract Geometry, abstract Algebra, abstract Mechanics."....."A very rapid diffusion of popular knowledge necessarily brings with it a certain dislike and distrust of that abstract reasoning which never can be popular, and which people are only too glad to think unnecessary."

In popularly governed countries, the value of a general principle is visibly diminishing. When a piece of legislation is meditated, the statesman responsible for it invites opinion from all quarters, especially from those affected by the contemplated legislation; and then, by counting opinions, or weighing them, the opinion of the odd man decides the matter. This process relieves the statesman from the necessity of reasoning down deductively from general principles; and assures him beforehand—which is most important to him—of the strength of opinion on his side. This habit of deferring to the opinions of the majority on all matters, generates what a contemporary calls the "flabbiness of opinion." Hence, all the social forces of the hour make against high thinking. We have not mentioned what we regard as also seriously contributing to the same evil result—the tendency in schools of the present day to require children to learn only what can be made easy and interesting, thus training up a race who, in later years, will be incapable of applying themselves to dry and irksome studies, no matter of what importance to their well-being.—*Educational Times.*

MULTUM IN PARVO.

It is said that G. P. R. James, a voluminous novelist quite popular thirty years ago, used to compose two novels at the same time. His habit was to dictate while walking up and down a long room, at each end of which sat an amanuensis.

Alexander Dumas would carry on several works of fiction; but then he only outlined the plot and scenes, and left the "stuffing" to be filled in by literary hacks, whom he employed as journeymen.

Rev. T. Starr King, the eloquent clergyman, was in the habit of dictating his sermons. Some times, when in the mood of composition, he would dictate sermon after sermon for several days in succession. The supply would allow him to attend to other matters, until the last one was preached, when he would resume his dictation.

One of the best known of all Longfellow's poems is "Excelsior." The word happened to catch his eye late one autumn evening, in 1841, in a torn piece of newspaper, and straightway his imagination took fire at it. Taking the first piece of paper at hand, which happened to be the back of a letter received that night from Charles Sumner, Longfellow crowded it with verses.

Mr. Canning, an English prime minister, could not bear to dictate, because no one could write as fast as he composed. He was himself a very rapid writer, but his mind would compose with precision much more rapidly than he could commit his ideas to paper. On one occasion, however, when he had the gout in his hand and could not write, he stood by the fire and dictated at the same time a despatch on Greek affairs to one clerk and on South American politics to another. Each clerk wrote as fast as he could, while Mr. Canning turned from one to the other without hesitation.

De Quincey, the author of "The Confessions of an Opium Eater," was a man whose eccentricities were almost as wonderful as his genius was brilliant. He had no idea of the proper value of money, though he wrote a book on political economy. He borrowed books from public and private libraries, and never thought of returning them. A book creditor once forced his way into the "den" where the genius wrote, and read his borrowed books. The creditor saw a sort of ruffle-work, inner wall of volumes, with their edges outward, while others, bound and unbound, the plebeian sheepskin and the aristocratic Russian, were squeezed into certain tubs, drawn from the washing establishment of a confiding landlady. When visiting, he rarely appeared at the family meals, preferring to dine in his own room at his own hour, not unfrequently, as Mrs. Gordon tells us, turning night into day. His tastes were very simple, though a little troublesome—at least to the servant who prepared his repast. His favorite meat was a piece of mutton from the loin. The cook, who had an audience with him daily, received his instructions in silent awe, quite overpowered by his manner, for had he been addressing a duchess, he could scarcely have spoken with more deference. He would couch his request in such terms as these: "Owing to dyspepsia afflicting my system, and the possibility of any additional disarrangement of the stomach taking place, consequences incalculably distressing would arise—so much so, indeed, as to increase nervous irritation and prevent me from attending to matters of overwhelming importance—if you do not remember to cut the mutton in a diagonal rather than in a longitudinal form."

Sir William Scott the famous English lawyer and a graceful writer, had a most lucrative practice at the bar, but was niggardly even to meanness in his expenses. When he was elevated to the peerage, as Lord Stowell, it was expected he would change his style of living to conform to his new dignity. But his old habits were too deeply rooted to be modified. He continued to live as meanly as before, in a home destitute of all appliances of comfort no less than luxury. He had no society and no wish for it. Sir Henry Holland states that he never saw but one pen in the house, with which he wrote prescriptions from year to year, and he doubts if Lord Stowell ever had another. The peer, after retiring from public business, rarely used a pen, even for writing letters.

The work done by successful authors is well shown in the following items: David Livingstone said: "Those who have never carried a book through the press can form no idea of the amount of toil it involves. The process has increased my respect for authors and authoresses a thousandfold. I think I would rather cross the African desert again than undertake to write another book." "For the statistics of the negro population of South America alone," says Robert Dale Owen, "I examined more than a hundred and fifty volumes." Another author tells us that he wrote paragraphs and whole pages of his book as many as forty and fifty times. It is said of one of Longfellow's poems that it was written in four weeks, but that he spent six weeks in correcting and cutting it down. Bulwer declared that he had re-written some of his briefer productions as many as eight or nine times before their publication. One of Tennyson's pieces was re-written fifty times. John Owen was twenty years on his "Commentary on the Epistle to the Hebrews;" Gibbon on his "Decline and Fall," twenty years; Adam Clarke on his "Commentary," twenty-six years. Carlyle spent fifteen years on his "Frederick the Great." A great deal of time is consumed in reading before some books are prepared. George Eliot read one thousand books before she wrote "Daniel Deronda." Alison read two thousand before he completed his history. It is said of another that he read twenty thousand books, and only wrote two.

Peck, of the Milwaukee *Sun*, who has leaped into wealth and a certain kind of fame by his history of the "Bad boy," is said to receive a larger yearly income from his newspaper work than Emerson realized during his entire life.

Mrs. Frances Hodgson Burnett, the successful novelist, gives the following directions how to write a novel: "You must have pen, ink, and paper. Use the first with brains, the second with imagination, and the third with generosity."

F. C. Burnand, the editor of *Punch*, is fifty-eight years old, and was educated at Eton, where, at fifteen, he wrote his first popular farce. He is today, says Mr. Labouchere, the best rewarded writer of plays living. He has been a contributor to *Punch* since the days of Mark Lemon, and at least one of his productions was credited to Thackeray. In private life he is popular and full of mirth.

A bit of genuine enthusiasm is sometimes very refreshing. Lafayette on parting kissed Josiah Quincy on both cheeks. A lady to whom Quincy related his experience declared: "Had it been me, I would never have washed my face as long as I lived."

The largest private reading institution in Germany is the property of M. Borstell, a Berlin bookseller, who has a circulating library of over 600,000 volumes.

"Auld Lang Syne" is popularly supposed to be the composition of Burns; but, in fact, he wrote only the second and third verses of the ballad as commonly sung, retouching the other from an older and less familiar song.

Washington Irving, speaking of system in making notes for his histories, said: "I never had any. I have my little budget of notes, it is true—some tied this way and some another—which I think I come upon in my pigeon-holes by a sort of instinct."

Godfrey Turner says: "The simplest words are always best; and so unerringly does their habitual use indicate a clear mind, an earnest meaning and a sincere intent, that he will always be better worth listening to who never says 'arrive' when he should say 'come,' nor 'proceed' when he might say 'go.'"

The editor of a Japanese newspaper apparently does not find it an easy matter to fill its columns. A recent number appeared with a large space left entirely blank. The editor apologized by saying that at the last moment he found what he had written was entirely wrong, and hence it had to be taken out. He had no time to obtain matter enough to fill up the vacant space.

In about three-fourth of the novels written by women, the heroine commences by disliking the hero.

Johnson said a man who would make a pun would pick a pocket! What was Joan of Arc made of? *Maid of Orleans.*

Senator Bayard started in life as a clerk in a Philadelphia hardware store, Senator Beck began as a farm hand, Conger as a lumber hand, Davis, of West Virginia, as a brakeman, Dawes as a school-teacher, Fair as a bartender, Farley as a coach-driver, Gorman as a Senate page, Jones, of Florida, as a carpenter, McDill as a department clerk, Morrill as a country store-keeper, Plumb as a printer's devil, Sawyer as a laborer, Sherman as a surveyor, and West as a reporter.

Mrs. Lester Wallack is the sister of Millais, the great English painter, and comes of an excellent family. Wallack ran off with her when he was a young man, and advertised himself largely by his brilliant stroke. He was then an ensign in the English army, and it was his army life which gave him the English lingo that he has always used with such unction since. He was born in Varick Street, New York, but his father sent him to England to school, whence he went into the army.

Upon the death of Carlyle, William Black became the greatest literary smoker in England.

Pope was the first man who made an independence by literature.

The fragment of Beowulf, as edited by T. Arnold, in 1876, consists of 6,357 lines.

Charles Sprague, who lived to be eighty-three, was on a railroad train but once in his life.

It is said that Buckle gave his life to reading history, read 40,000 volumes, wrote two, and then died.

Carlyle talked best directly after supper when under the influence of his half dozen cups of strong tea; with pipe in mouth, an additional stimulant, he would pour forth a continuous stream of rich thought high equal to his writings.

Our most learned poets were classed by Joseph Warton, a very competent judge, in the following order: 1. Milton; 2. Jonson; 3. Gray; 4. Akenside. Milton and Gray were of Cambridge; Ben Jonson was a short time there, not long enough, however, to catch much of the learning of the place; but Akenside was of no college—it is believed, self-taught.

The original members of the "Literary Club," which was organized 1764, were Reynolds, Johnson, Burke, Nugent, Beauclerk, Langton, Goldsmith, Chamier, and Hawkins; among the prominent persons who afterward joined it we may mention Percy of "Relique" fame.

Lamb was the slave of quip and whimsey; he stuttered out puns to the detriment of all serious conversation, and twice or so in the year he was overtaken in liquor. Well, in spite of these things, perhaps on account of these things, we love his memory. For love and charity ripened in that nature as peaches ripen on the wall that fronts the sun. Although he did not blow his trumpet in the corners of the streets, he was tried as few men are, and fell not. He jested that he might not weep. He wore a martyr's heart beneath his suit of motley.

Hiawatha reached a sale of 50,000 in less than two years after its publication.

The thoughtful, cast-iron essays of John Foster were originally written as love epistles to the lady who afterward became his wife.

Buffon said that, of great geniuses of modern times, there were but five,—"Newton, Bacon, Leibnitz, Montesquieu, and Buffon."

It is said that John Bunyan, seeing a drunkard staggering along the street exclaimed, "There, but for the grace of God, goes John Bunyan!"

Bean Brummel, at one time the ideal of English patricians, was the son of a petty lodging-house keeper, and the grandson of a menial servant.

The total number of periodicals and newspapers published throughout the world is estimated at 37,274, with an aggregate circulation of 116,000,000,000. It is calculated that the daily papers of the United States issue 1,051,200,000 copies yearly, and the other periodicals bring the total up to 2,000,000,000 copies per annum.

When John Dryden was congratulated on the brilliancy of his famous "Ode on St. Cecilia's Day," he replied: "You are right, a nobler ode was never produced, and never will be."

The only paper of the "Rambler" which had a prosperous sale, and may be said to have been popular, was one which Johnson did not write.—No. 97, by Richardson the novelist.

Wendell Phillips once said that there are two kinds of education; that there is the education of Harvard and Yale, and there is the education of New York Tribune and the New York Post.

Sterne was hair-brained, light-hearted and sanguine—pleased with himself, his whims, follies, and foibles—he treated misfortune as a passing guest, and even extracted amusement from it while it stayed.

As Salmasius, Milton's great opponent, was conversing one day in the royal library with Gaulmin and Maussac, "I think," said Gaulmin, "that we three can match our heads against all that there is learned in Europe." To this Salmasius replied: "Add to all that there is learned in Europe, yourself and M. de Maussac, and I can match my single head against the whole of you."

Moliere the famous French humorist, and writer of comedies, bore himself with habitual seriousness and melancholy; while Young, the author of the "Night Thoughts" was known as the gayest of his circle of acquaintances.

Northcote being once asked by Sir William Knighton what he thought of the Prince Regent, he replied, "I am not acquainted with him." "Why his Royal Highness says that he knows you." Knows me! Pooh! That's all brag."

Cuvier's memory was enormous. It was a vast mirror of knowledge, embracing at once the grandest and minutest facts in natural science. He died, he said, with three books in his head,—the materials all ready and arranged, but not written down.

Chatterton was so slow at learning in childhood that he was sent home to his mother as "a fool, of whom nothing could be made." His mother was equally unsuccessful in teaching him; yet he afterwards learned fast enough when he began the task of self-culture.

When the author of "Corinne" visited Germany, the leading men of letters there shuddered at the approach of this impersonation of volubility. Schiller groaned over "the weary hours he had to pass" in her company, and Goethe was both annoyed and disgusted with her.

Who can think without a smile of a fat man in love? Who can read without merriment the story of Gibbon, the fat historian of the Roman Empire, going down on his knees to make love, and finding it impossible to get up till the lady rang the bell for the footman to help him?

The poet Gray, though he laughed at the sorrows of Shenstone, was equally unhappy in the old courts of the Cambridge Pembroke; but his melancholy "wears a serener aspect, and the shadows that seem to hang about him only lend a more mellow and solemn beauty to his character."

Fontenelle, famed for his universality, lived a century, and when asked at the close of his long and brilliant career if he felt pain, replied, "I only feel the difficulty of existing." As he was nearing his hundredth year, a friend who was ninety said to him: "Death, I think, has forgotten us." "Hush!" said Fontenelle, putting his fingers to his lips; "He may overhear us."

Sir Walter Scott had the credit of having "the thickest skull in the school" when he attended the High School in Edinburgh, and disgusted his kind master by his negligence and frivolity. If there was any "bicker," however, or fight with the boys of other schools, "Wattie Scott" was sure to be a ringleader, and in the very thickest of the fray. Even at the University he did no better, and went by the name of "The Great Blockhead."

Mr. Charles Toppan, an eminent engraver of New York, has engraved the Lord's Prayer with its title, and the Ten Commandments with title and numbers, and his own initials, within a circle of less than 41-hundredths of an inch in diameter. The number of letters and figures on this plate is 1550, and as its area is a trifle over an eighth of a square inch, the number of letters to the square inch would be 12,000.

Sir Walter Scott declared that he could believe anything of dogs. He was very fond of them, studied their idiosyncrasies closely, wrote voluminously in their praise, and told many stories of their unaccountable habits. Once, he said, he desired an old pointer of great experience, a prodigious favorite, and steady in the field as a rock, to accompany his friend, Daniel Terry, the actor, then on a visit to Abbotsford, and who, for the nonce, voted

himself for a sporting excursion. The dog wagged his tail in token of pleased obedience, shook out his ears, led the way with a confident air, and began ranging about with most scientific precision. Suddenly he pointed, up sprang a numerous covey. Terry, bent on slaughter, fired both barrels at once, aiming in the centre of the enemy, and missed. The dog turned round in utter astonishment, wondering who could be behind him, and looked Terry full in the face; but, after a pause, shook himself again and went to work as before. A second steady point, a second fusilade, and no effects. The dog then deliberately wheeled about and trotted home at his leisure, leaving the discomfited venator to find for himself during the remainder of the day. Sir Walter was fond of repeating the anecdote, and always declared that it was true, while Terry never said more in contradiction than that it was a good story.—(*Queries.*)

ORGANISATION OF HIGHER EDUCATION.

By MISS BEALE.

(Continued from page 135.)

2. *Personal Influence.*—It is about as difficult to define personal influence as to define life. It acts through the personality of the teacher, and yet it is not given out from the teacher; in fact, one who feeds the moral nature of a child from her own life makes that child a sickly parasite, unable to live apart from her. It requires no great gifts or great excellencies to draw after us a crowd of weaker natures. We need only flatter their vanity—move them by the lower part of their character. If we would help any truly to live and grow, we must bring them into the sunlight, not the candlelight. If we wish their ideas to be high, we must look up ourselves, not down to them, for admiration.

"I looked on Beatrice, and she on Heaven." A teacher who says, "my pupils will do anything to please me," has pronounced her own condemnation; children must learn to do their duty to those whom they do not like; there must be recognition of functional authority, or there can be no right organic life, but all will be disorder.

There is, however, a right use of personal influence. We are not leading an isolated life; as the analogy of material things suggests, virtue should go forth of us. It will never be undervalued as a means of God's appointment by those who believe in the Christian Church. But a healthy influence is not one that isolates; it is one that quickens the nature, so as to make it more actively receptive of all that is good, and true, and noble in any other. Do you know the feeling of spring tide, when the whole atmosphere seems to breathe life into one's veins? What is it that makes us feel this? It is, I think, the sympathetic life in quickening nature; no plant feeds any other, but each helps to stir those living forces, to quicken the life of all. Such is the moral atmosphere of a healthy school. Each

child is made more alive to all the influences breathing through the souls of teachers and companions; more able to receive the teaching of those who have passed out of sight, but who live and speak to us through the power of the poet, or the historian, or the philologist. A right personal influence does not absorb the energies, it quickens the sympathies with all.

3. *Culture*.—I have put culture next, because it is not very different from personal influence. It is chiefly the bringing to bear on our pupils of the great personalities, the great thoughts, the great feelings which have quickened the life of the world. There is a teaching which provides for children only the outside husk; it is a miserable thing to be ever occupied with the mere clothing of thought. If they are properly taught, their lessons are a benefit to them. Of course there is hard labour to get all the buried treasures; there must be the learning of grammatical forms, the working out of results in mathematics; but the labour is sweetened by hope and ennobled by the sense of duty, and sustained by faith.

It is a miserable thing for children to learn to think that knowledge and wisdom are to be sought only for the material good it will bring; a miserable thing for teachers to assume that the love to gain is stronger than the love of ideal good; and it seems to me that there is no more palpable lie going about in the world as current coin than the assertion that base motives are stronger than the noble ones; it is contradicted by every page of history, as well as by our own daily experience. Those who observe life, must surely see that the instincts, the selfish motives resting upon no intellectual basis, are feeble indeed, compared with the distinctly human forces, and that the moral powers are supremely strong.

To these we must appeal, if we would make them powers for good; we must show them by example as well as precept, that we care nothing for mere success. I have elsewhere spoken of the great evil of the modern slave-trade in so-called scholarships,—of the buying up of clever children by rival schools. I can only allude to it here as demoralising to all concerned.

Those who know what girls' schools were in old times will not condemn examinations; but the responsibility of examining bodies is great, and unhappily many teachers feel that some of those most in vogue are almost prohibitive of true culture.

I earnestly hope that, through the Teachers' Guild, or some other means, examinations, especially those of the London University, will be brought into greater harmony with the judgment of those who desire real education.

4. *Companionship*.—This is a most fruitful source of good. One of the vulgar errors that we sometimes act on is this, that evil is stronger than good. "O Devil," we say, "thou art right, thine is the kingdom and the power." Nothing is clearer to those who observe, than this, that evil is transitory, evanescent; that good influences work slowly, but surely; that

evil is by its very nature self-destructive. A friendship which is founded on selfishness cannot last, whereas a good friendship deepens and grows. We know in the world the marvellous, far-reaching leavening power of one noble life. Some of us can recall such, whilst hundreds of baser lives die out in the darkness, the good lives on, and grows up in the sunlight and becomes a great tree, and the fowls of the air lodge in the branches of it. So in a school, if it is at all what it ought to be, what it generally is, the good influences are lasting, are prevailing; they are the organising, the active power, the actual (to use Hinton's word), whilst the others are the negative, the passive; through reaction against which our personality must be developed. It is ours to keep the channels of life free, we must have no stagnation, and that this may be so, I hold strongly with Dr. Arnold that we must weed out all who, by laziness or mere passiveness, hinder true progress; for their own sake, as well as that of others, they must go to some place where there is less companionship, or more drill, some moral sanatorium, for, if they are not sharing in and quickening the life of the school, they are hindering it and introducing disease. It ought to be understood that children are not necessarily expelled when we advise and require parents to place them elsewhere.

5. *Exercise and Discipline*.—It is no longer necessary to insist on the need for healthy out door exercise for girls as well as boys; the influence of the body on the mind has been sufficiently dwelt upon of late, that of the mind on the body has been too much overlooked. There is a practical materialism, a Lucretianism, which regards thought as a function of the brain, the moral nature as the product of the organisation. There is doubtless action and reaction, but surely the Platonic view is the right one; it is confirmed by our daily experience, that the inward life fashions the outward.

People sometimes speak as if they had to choose between health or intellectual attainments, or a life of strenuous moral vigour, and that, though they see health daily ruined through a low moral ideal; women weak, languid, hysterical, who would become vigorous and healthy if roused to forget self and live for others.

We see it daily proved, that he who seeks his life loses it; those whose moral standard is high will not, through vanity, or carelessness or indolence trifle with health.

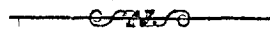
Already we have a considerable mass of statistics to show that good education contributes to bodily health, and I trust that the gathering of more will be one of the functions of the Teachers' Guild.

It is quite impossible that teachers in day schools should undertake, as some doctors have suggested, the taking of weights and measures, the study of scientific dietaries, &c.; but there might be sanitarians attached to schools, who should make these things a special study. Such, to a great extent, have our heads of boarding-houses become under the direction of

our Medical Referee and our Boarding-House Committee. These ladies are *never* college teachers. Not only are they desirous to do their duty by the children, but they are paid by results, since they lose their patients when they are ill. Great is the emulation amongst the heads of our ten houses, to show the fairest bill of health, and we find the average absence from ordinary ailments is less than three days a year. It were much to be desired that there were a higher idea of health. That is, not health for man in which his typical superiority is effaced by the animal organism; the organism exists not for its own sake, but for sustaining the man himself during the process of developing the powers by which alone, and not by physical superiority, man has secured and maintained his supremacy over nature, replenished the earth and subdued it. There can only be a perfect healthy man in the fullest sense when there is harmonious development of the whole being, the intellect devoted to the highest ends of existence.

One seems uttering truisms, yet one does meet those who talk and act as though the supremacy of the moral being were not the first requisite for perfect health, as though the regulation of the emotional nature by the culture of the power of thought were not the great safeguard for the harmonious action of physical organism.

We need then, I think, a better organisation of all the forces brought to bear on the training of the young.—*Journal of Education.*



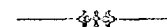
THE EDUCATIONAL RECORD.

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[Vol. II.]

TECHNICAL EDUCATION.



ONE of the most encouraging things in connection with education in this country is the attention that is now being directed to the subject of technical education. It seems as if the public, and the press, and the Directors of Public Instruction, were beginning to awaken to a sense of the vast importance of the subject. Let us hope that the discussions, and resolutions, and notifications that we hear of are signs of a true awakening, and not merely preludes to another fit of slumber. There has been a great deal of talking and writing about technical education, and now the question is what is going to be *done*? What has been already accomplished by private enterprise, and what has been attempted, show the importance of the question, and give some hints as to its magnitude.

It is impossible for any one who has given the slightest consideration to the subject to deny the immense advantages that would result if labour were brought into its true relation to science and art. Every society is founded on manual labour, and, whether it be at a high or a low stage of development, is civilized in exact proportion to the knowledge and skill of those who occupy what is considered its lowest place. By the houses, the farms, the tools, the common household utensils of the common people, a nation's progress may be traced, and the character of these is of course determined by the quality of the labour that is expended upon them. Now labour is of two kinds—mere toil, unreasoning and mechanical, such as is obtained from animals or machines, and constructive work, in which thought is embodied, and by which the more distinctively human faculties are called into play. Mere toil, if engaged in exclusively, tends to degrade; constructive work tends to elevate. For the former the sole requirements are stout arms and broad shoulders, but for the latter, where what is called skill is absolutely essential, excellence can only be acquired by a course of strict training. In distinguishing between these two kinds of labour we may seem to be limiting, and, under the present conditions of society, are limiting the sphere in which education is possible. But the limitation is not and cannot be a permanent

one, for as technical education becomes general, the sphere in which it is applicable will be greatly enlarged. Indeed it is possible by developing to its fullest the idea of technical education to abolish almost entirely the mere brute toil, and bring within the reach of all men work worthy of the employment of a man's powers. The effect of this would be not only a vast improvement in the condition of the workers themselves, but a great increase in the well being of all classes of society.

In this country the need of technical education is only too apparent. In some arts, such as weaving, a very high degree of excellence has been attained, but workmen are so heavily handicapped by their want of proper tools and appliances, that, however good their work may be, it is being pushed out of the market by the cheap machine-made rubbish which Manchester manufacturers are sending forth in such quantities. Far and wide other arts, such as blacksmithery and carpentry, are still in a very primitive state. There is scarcely a mofussil town in which one can find a blacksmith or carpenter able to do anything except the roughest kind of work. It is not that there is any want of art power among the people, but the power needs to be drawn forth, and brought into contact with proper tools and materials, before it can achieve good results. In every branch of art or industry an initial training is of the greatest value. How much, for example, might be done in the way of increasing the resources of the country if the farming classes could be given some idea of the principles of scientific farming—of draining, of reclaiming, of fruit and vegetable cultivation, and of cattle-breeding. Some of our readers have no doubt heard of Oberlin, the French pastor and scientist, who towards the end of last century worked among the people of a wild mountainous district in Alsace. He, living among rude villagers, ignorant of almost all the useful arts, succeeded in training them so thoroughly in all the various branches—agriculture and industry, that the district, which had been among the poorest and most benighted, became one of the most flourishing in France. What has succeeded in one small district might in time succeed in a presidency, if those in power had the courage to plan and to carry out a scheme of education which will take account of all the necessities of social life.

The development of such a scheme would not only add greatly to the material well-being of the nation, by increasing the quantity and improving the quality of its productions, but would at the same time contribute largely to the higher development of national life. There is a danger of over-estimating the importance of merely professional study—we use the word profession in its widest sense, as including all the various employments by which men earn a livelihood—and regarding all training as worthless which does not directly contribute to what is termed "advancement in life." There is, as Ruskin reminds us, "an education which in itself is advancement in life," an education which is to be sought for wholly apart from the question of material gain or loss, but this education so far from being opposed to,

should include such special training as would fit a man for special work. "The character of men," says the great economist, to whom we have just referred, "depends more on their occupation than on any teaching we can give them, or principles with which we can imbue them." Technical training not only makes men better workers, more efficient agents in the production of wealth, but in making them better workers, it tends to make them better men. It gives clearness of insight and fineness of touch; it calls forth in the mind, ideas of law and beauty; and, what is most important of all, it encourages habits of self-restraint and self-direction. It is not in itself a complete education, but it is a most important branch of education, and influences very markedly the development of character. To combine a liberal with a technical education so that both shall coöperate in evolving to the fullest the powers and capacities of a man, is the great problem that awaits solution.

In this country, and in most so-called civilized countries, the idea is widely prevalent that work is in itself something degrading, and that it is altogether beneath the dignity of an educated man to engage in any commercial pursuit or manual labour. A more false and foolish notion there could not be, or one more pernicious in its effects. "All work, even cotton spinning, is noble; work alone is noble;" and work is to be judged not by the reward which it brings, or does not bring to the worker, but by its own intrinsic character. The most noble work is that in which a man can find an end beyond himself, and lose all thought of material gain in delight at the progress and completion of his plans. We must confess we should like to see the old Jewish custom that every boy must learn some trade or handicraft, adopted and enforced in this and other countries. If it were, we should have less of the pride that looks down on honest labour, and the meanness that makes so many men choose to be a burden to their friends and parasites on society, rather than work for their bread. We look forward to a time when the worth and dignity of labour will be recognized, and educated men will no longer think it beneath them to engage in any useful calling. The development of technical education will, we doubt not, do much to bring this about.

The time will certainly come, sooner or later, when it will be no longer possible for all who have received a liberal education to find employment in connection with law, or medicine, or teaching, or the revenue department. These pursuits offer employment only to a limited number, and as education extends, an ever increasing number of educated men will be compelled to turn their thoughts in other directions. Some we have no doubt will engage in trade, but many we trust will be led to turn their attention to the productive arts. There is no need for them to engage in mere mechanical labour; there are a multitude of crafts to choose from, in which design is involved, in the pursuit of which an educated man would find ample scope for the exercise of his powers. The work of a potter, a goldsmith, a carpenter, a builder, is as honorable and as likely to call forth the best powers of hand and head and heart, as that of a clerk or lawyer, and we do not see why an educated

man should necessarily prefer the latter to the former. In this country especially there is room for the exercise of the highest powers in connection with the useful arts. India is famed for its goldsmith work, its pottery, its weaving; and yet in not one of these arts is there any sign of progress; all are in a state of arrested development, as if their evolution had been suddenly stopped by the touch of some enchanter's wand. This state cannot last for ever. Western civilization has touched eastern life; new thoughts, new ideals are every where at work, and no art or industry can escape the influence of the new forces that have come into being. Is there not here work worthy of men of high talents and pure culture—to devote themselves to the development of the arts and industries of their country at a time like this when every fine touch, every fair conception, every wise plan will have an influence, not in the present merely, but on the future history of art and industry? This is a critical period in the history of the arts of this country. They are entering upon a new period of development and this development may proceed in either of two very different directions. Western ideas may be introduced into all the useful arts, and Indian craftsmen taught to be mere imitators of western models. This would be a serious mistake, for although we would certainly cause a speedy improvement in almost all mechanical arts, it would just as certainly prevent for centuries any high development of art in this country. A borrowed art is by necessity conventional rather than natural, and in its conventionalism almost always reproduces the vices rather than the excellencies of that which it seeks to imitate. True progress is to be attained not by forcing western models upon our craftsmen, but by giving them instruction on broad general lines, teaching them to use finer and more delicate tools, bringing them so far as is possible into contact with nature, and then leaving them to themselves. There is no want of art power among Indian workmen. Give them better implements, train them to see and to think, and the change that will come over all the arts of life will be too great to be measured.

Sooner or later the old caste system of labour will perish; authorities so competent as Sir Monier Williams, tell us that it is already showing signs of decay and something must be put in its place. According to the present custom a son naturally adopts his father's calling, and learns in his own home how to practise it. When this custom dies out, unless some other channel be provided by which technical training may be received, all the ordinary arts of life are certain to deteriorate. We do not think it probable that the apprentice system will ever become popular; we hope it will not; the evils likely to be connected with it are too great and the promise of future progress contained in it too slight; it can never commend itself to those seeking a solution of the question. The only plan which seems to us to promise really good results is the establishment of a comprehensive system of technical education. In every mofussil town in the Presidency, schools should be started, where boys could receive a good practical training in any of the useful arts. These schools need not be on a very grand scale, but they should be able to turn out

men-skilled in carpentry, blacksmithery, pottery, and the more necessary arts. They could be worked in connection with, or as branches of, the at present existing Middle Schools, and thus the danger of an exclusively technical education could be guarded against. In large central towns there should be larger institutions, each connected with a High School or College, in which a much more comprehensive training would be given, and forestry, mining, agriculture, and the higher developments of the crafts could be studied. Boys who desired to study any branch not taught in a local school, and all who in any local school showed special aptitude in any subject, could be encouraged to proceed with their studies at one of these more advanced institutions. The development of such a scheme would of course be very gradual, but if rightly directed, its success would be undoubted.

Private efforts have already accomplished something, and can do much, but their sphere is far too limited. What is needed is a plan that will not only meet the wants of special localities, but will bring each locality into contact with some important centre, and thus unite the lower with the higher branches of training. Government alone can do this, and with Government the responsibility must rest. Government has already gone a certain length in the direction of encouraging technical education in this country, but it has certainly not gone very far. The notification which has lately been issued instituting examinations in the various branches of technical art and industry is very good in its way. It deals with the subject in a sufficiently comprehensive manner, and offers opportunities of undergoing examinations in almost every possible subject. Unfortunately however it is not a scheme of examination, but a scheme of education that is wanted, and to provide this something more than notifications is necessary. Government must be prepared to found schools and colleges and spare no expense in making them as efficient as possible. After a few years these institutions might almost be made self-supporting, but even if this could never be, money expended on them would assuredly not be wasted. No expenditure could be more justifiable, none wiser, for there is none that tends so directly to promote the good, not merely of a class but of the whole community. A nation of trained workers has as much advantage over a nation whose workers are not trained, as an army has over a disorderly mob. The difference is simply incalculable. Sometime, it may be after a few very bitter lessons have been learned, this will be generally recognized and acted upon.

CORRESPONDENCE.

THE UNIVERSITY CURRICULUM.

To
THE EDITOR,
"Educational Record," Madras.

SIR,

It is often said that the students, who take their degrees at the Indian Universities, possess a superficial knowledge of several subjects, but a thorough knowledge of none. But is not this result due rather to the

system which obtains in India, than to any defect on the part of the students themselves? If students were required to pass in only a few subjects, instead of in a large number, as at present, it is probable that better results might be obtained in future. I trust, therefore, that you will permit me to submit the following suggestions to the consideration of your readers.

First, then, with reference to the Matriculation Examination, I am of opinion that the only subjects, which should be required for this Examination are:—English (a high standard), Arithmetic, with *either* Euclid Books I and II, or, Algebra up to simple equations, and a second language. History, Geography, and Elementary Science might be taught in schools, but should not be required at the Matriculation Examination.

For the B. A. Examination there should be several distinct courses, and students should be required to pass in only *one* of these. The courses, to which I refer, are:—Mathematics, Philosophy, Language, History, Science and English.

Under the head of Mathematics, the following subjects should be studied:—

Algebra.
Trigonometry, Plane and Spherical.
Theory of Equations.
Analytical Geometry.
Differential and Integral Calculus.
Statics, Hydrostatics.
Dynamics, Spherical Astronomy.

Under the head of Philosophy the following books should be read:—

Sir W. Hamilton's "Lectures on Logic."
Mill's "Logic."
Aristotle's "Ethics."
Plato's "Republic."
Bain's "Mental and Moral Science."
Bentham's "Principles of Morals and Legislation."
Sidgwick's "Method of Ethics."
Kant's "Critique of Pure Reason."
Herbert Spencer's "Data of Ethics."
Schwegler's "History of Philosophy."

Under the head of language, (supposing Latin is the language chosen) the following books should be studied:—

Virgil—six books of the "Æneid."
Tacitus—six books of the "Annals."
Horace—the "Odes."
Livy's History of Rome—the first six books.
Cicero's "De Finibus"—the first three books.

Under the head of History the following books should be read:—

Freeman's "Old English History."

Froude's "History of England."
Stubbs' and Hallam's "Historics."
Macaulay's "History of England."
Stanhope's "History of the reign of George I, and George II."
Mill's "Political Economy."

Under the head of Science, the following subjects should be studied, and the attention of students should be confined to two branches only:—

Naquet's "Modern Chemistry," translated by W. Cortis.
"Electricity," by F. Jenkin.
"Wave Theory of Light," by Lloyd.
"Heat," the Manuals of Maxwell and Tait.

In English, the present B. A. course might be extended so as to include some of the more modern authors, such as Ruskin, De Quincey, &c.

All candidates for the B. A. degree should be required to pass in some of Macaulay's "Essays," Jevons' "Elementary Logic" and Fawcett's "Political Economy," in addition to their special subjects. If students were permitted to devote the whole of the three years, during which they remain at College, to their special subjects, as suggested in this letter, the Indian Universities would probably turn out in the future far better scholars than they do at present, and the students themselves would, to a great extent, be free from that inordinate self-sufficiency which not unfrequently arises from an imperfect knowledge of several subjects.

OBSERVER.

MADRAS MATRICULATION ENGLISH TEXT, 1886.

NOTES ON

THE "HEROINE OF SIBERIA."

BY

LOUIS BLAZE, B.A.,

(Assistant Master, Boys' High School, Lahore.)

(Continued from p. 113.)

143. *Epoch*—A Greek word meaning a fixed point of time from which succeeding years are numbered; an era, *e.g.*, the birth of Christ, from which Christians reckon; the Hejira, or flight of Muhammad, from which Muhammadans reckon.

But the word means here a period when some important event took place. So we might speak of the battle of Waterloo as an epoch in British history.

143. *Entertained the idea*—Thought about this plan.

145. *The Emperor in person*—By seeing and speaking to the Emperor himself, and not by sending petitions, or asking influential friends to speak to him.

146. *Conceived*—Formed, planned, designed.

147. *Romantic project*—Romantic means adventurous and grand, but

at the same time extravagant. Prascovie's plan was daring and worthy of admiration; but the journey for a child seemed so dangerous, and the chances of seeing the Emperor were so small, that nobody could believe that the plan could be adopted.

147. *Animation*—Great cheerfulness; high spirits.

147. *Was infused into her character*—She became of a more cheerful disposition; she was more lively and happy.

149. *Account for*—Explain.

Note that the preposition *for* though it precedes the verb, is really connected with it, and makes it transitive. To *account for* a thing is to explain, or give reasons for a thing. In the text, *which* is governed not by *for*, but by *account for*.

150. *Wild*—Extravagant; fanciful, impossible. See note on *romantic project* (line 147.)

151. *Wood*—Forest, jungle.

152. *When leisure permitted*—When she had spare time.

Strength of mind—Firmness, courage.

154. *To carry into effect* has the same force as *to carry out*, i.e., to do, to perform.

156. *Strong enough*, i.e., in mind; brave enough.

157. *Persuasive words*—Words that would persuade her father to consent to her plan. She prayed that God would put into her mind such words as were most likely to induce her father to allow her to go to St. Petersburg.

160. *More sympathising*—Having more sympathy. Her mother would be more ready to listen to her daughter's plan, and perhaps would speak to the father on her behalf.

160. *Approachable*—More easily approached, as she was more gentle.

164. *Importunity*—Repeated and anxious requests.

168. *Gravity*—Seriousness. *L. gravis* heavy, of weight; hence, important, serious.

170. *Good news*—This is, of course, ironically said. The whole speech is ironical. Prascovie's plan appeared so wild and impracticable, that Lopouloff did not think it worthy of serious consideration.

171. *Protector*, meaning his daughter.

173. *To be so good*—A polite form of command. (See Rowe's *Hints*, p. 240.)

174. *Ado*—Trouble, fuss, cf. the title of Shakespeare's play—

"Much *ado* about nothing."

A is really an abbreviation of *at*, which was once the sign of the infinitive. *Ado* = *at-do* = *to-do*.

Lopouloff hints that Prascovie had no idea of the difficulty there was in getting to the Emperor at all. It seemed absurd to think that while his frequent petitions had proved useless, his daughter's mere request would induce the Emperor to grant a pardon, without any more inquiry or hesitation.

179. *Had fortified herself*—Had armed, or prepared herself.

Strong arguments—Good reasons.

181. *Annihilate*—Lat. *ad* to and *nihil* nothing; lit. to bring to nothing, to destroy, put an end to.

Prascovie was prepared to brave the anger of her parents, or to convince them with good reasons that her plan was the best. But she did not expect that they would think so little of the plan as to make it only worth laughing at.

183. *Ordinary severity*—The stern, serious disposition which was most usual with him.

186. *Table cloth*—Cloth for covering the table with, before food is laid on it.

187. *You shall depart*—This was said ironically. *Shall* here implies not command, but permission; it is equivalent to *may*. Or if there is any determination expressed, it is a determination on the speaker's part to allow her to go.

More leisure—Implying that she had quite enough work to do without wasting her time in idle fancies like these.

188. *Was better calculated to disgust*—Was a more certain way of disgusting; was more likely to have the effect of disgusting.

Calculate is said to be derived from the Latin *calculus* a pebble, because pebbles were used in counting; hence it meant to count, to make an estimate, to intend.

189. *Humiliation*—Shame, the state of being made humble. Humility is the state of being humble.

192. *The ice was broken*—The first step had been taken; the first difficulty had been removed. The subject which she was afraid to talk about, was at last mentioned, and could now be discussed.

Dr. Brewer says that the allusion is to the Roman practice of breaking ice for bathers.

193. *Returned to the charge*—Spoke again about it. An army though once repulsed, may make another *charge*, or attack.

195. *Importunate*—Persistent, urgent. *L. in* not, *portus*, a harbour, i.e., like a ship without a harbour, or port, and therefore in great need.

196. *Losing patience*—Getting angry.

203. *Till more favourable times*—Till the anxieties and troubles caused by her mother's illness passed away.

204. *Her ordinary prayers*—The prayers she used to say regularly every day. *Supplication* is the objective case, after the verb *to join*.

205. *Would put it into her father's heart*—Would influence her father.

Allow of—The preposition does not seem to be quite necessary here. It denotes, however, the object referred to by the verb, viz., the *mission*. So in the phrase *approve of*. (See Rowe and Webb's *Hints*, § 407, e.)

206. *Mission*—*L. mittere* to send. Hence, the business upon which a person is sent.

207. *Her growing experience*—The increasing knowledge and wisdom she displayed as she grew older.

208. *Greater weight*—More importance. Her father ridiculed her proposal when she was a child; now that she was older, and had shown herself so sensible and clever, he could not treat it with the same contempt.

209. *Discuss*—Talk about. See the advantages and disadvantages of.

212. *After the character has been formed*—When the child grows old enough to think and act for himself; old enough to show signs of what his character as a man will be.

213. *Energy*—Earnestness.

Urged—put forth, made.

215. *Suffered*—Prascovie was so disappointed at her repeated failures, that she began to grow melancholy and ill.

217. *Pleasantry*—Jest, amusement, lively talk. The state of being pleasant is *pleasantness*.

Dissuade—To advise against a plan.

222. *Resolution*—Determination. To *shake a resolution* is to make a person less determined to do anything he has resolved to do.

224. *Meditations*—Thoughts,—about going to St. Petersburg.

225. *Far more real*—More substantial, more effectual, more to be feared. This new difficulty was not to be got over so easily as the opposition of her parents.

226. *Passport*—An Italian word, meaning permission to pass into or from a port or harbour; then a written license granting liberty to travel through a country.

229. *Drawing up*—Preparing, writing.

Document—L. *doceo*, I teach. Hence, a paper containing written instructions. The term is now applied to any important writing.

234. *His own personal affairs*, i.e., stating his case, and begging that his punishment might be modified.

235. *From this moment*—Because her parents had not virtually consented to let her go, and a beginning had been made.

239. *Presentiment*—L. *præ* before, *sentire* to feel, perceive; a feeling beforehand. An apprehension of something about to happen.

243. *Hope deferred*—See note on line 125. (*Ed. Record* for April, p. 113.)

245. *Scarcely knew bounds*—Was unlimited, i.e., exceedingly great.

248. *Favour*, i.e., a favourable answer; mercy from the Russian Government.

254. *No discouragement*, &c.—Neither her father's outburst of anger nor any other difficulty could make Prascovie give up her pet scheme.

To damp her ardour—To make her great earnestness any less. *Ardour* literally means *burning*, from L. *ardeo*, I burn.

Give new life to—Revived; made her hope again for permission to go.

Superstitions, i.e., idle belief in religious matters; vain fancies about supernatural things. Probably derived from *super* above, over, and *stare* to stand; that which survives, or remains of an old, false religion. A truly religious man—one who believes that God rules over, and directs the affairs of the world—cannot be superstitious.

The Greek Church—A division of the Christian Church, subject to a "Patriarch" at Constantinople, just as the Roman Church is subject to the Pope of Rome. The Russians, Greeks, and Turkish Christians belong to the Greek Church.

Tenets—Peculiar doctrines. Lit. that which is held, or maintained, or believed in; from L. *teneo*, I hold.

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course and Bombay University previous Examination, 1887.)

BY

WILLIAM E. MILLER, B.A., F.S.Sc., (LONDON),
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CHAPTER II.

(Continued from page 150.)

A speck in my character.—A stain in my character. A.-S. *specca*, character, from Gr. *charassein*, to make sharp, to engrave.

True honour, I hope, predominates in my mind far above riches.—I have a higher respect for honour than for riches.

Economize.—Gr. *oikos*, a house, and *nomos*, a law, a rule, hence to manage household expenditure with frugality.

St. Omer's.—A fortified town of France, in the department of Pas de Calais, in the province of Artois. Long. 2° 15' E., Lat. 50° 44' N.

Upon weighing the evils of a straitened income to a married man.—On discussing the misfortunes of a limited income with a married man.

Something in his accounts, i.e., something wrong in his accounts.

Leeward Islands.—The islands off the coast of America in the Atlantic Ocean, known as the Lesser Antilles, are divided into two groups—the Leeward Islands and the Windward Islands, so named with regard to the prevailing east wind. Leeward = towards the lee, or the part away from the wind, i.e., westward. Windward = towards the wind, i.e., eastward, or rather south-east. The principal Leeward Islands are the Virgin Islands, Guadeloupe and Dominica.

A cruiser on the peace establishment.—A vessel fully equipped for, and deputed to, the protection of commerce during times of peace.

The school room.—That portion of the vessel reserved for teaching midshipmen their duties.

At noon he was always the first on deck with his quadrant.—It is the custom on board of every ship for the officer responsible for the navigation of the ship to make what are called observations of the sun every day at noon. By means of these observations the ship's time as shewn by the clocks on board is regulated, and the distance travelled during the past 24 hours is also determined. All midshipmen are present when these observations are taken, in order that they might learn how it is done.

A quadrant is an instrument for taking the altitude of the heavenly bodies, constructed in the form of a quadrant, i.e., the fourth of the area of a circle, with two straight limbs, and one arched limb to which is appended a graduated scale of 90°, or, as in Hadley's reflecting quadrant, of 45°. By a sight or a small telescope the eye of the observer is directed to the horizon; the observed body is reflected from a mirror attached to the upper end of a movable limb, the other end of which indicates on the scale the point or degree at which the body is reflected on the horizon; the degree thus marked gives the altitude.

In navigation the quadrant has been superseded by the *sextant*, which has additional appliances of shading and magnifying glasses for more accurate observations. In astronomy the instrument known as the *mural circle* has taken the place of the quadrant.

A visit of ceremony.—A visit entailed in consequence of one's official position. Lat. *ceremonia*, a form, a rite.

Barbadoes.—The easternmost of the Carribee islands, exporting sugar, rum, cotton and ginger. This island was colonized by the British in 1624, from which time it has been in their possession. It has suffered much from hurricanes. It is one of the Windward Islands. Barbadoes is said to have derived its name from the long beard-like streamers (Lat. *barba*, a beard) of moss hanging from the branches of the trees.

He found himself.—Himself is here a reflective pronoun.

The noun *self* and the plural *selves*, are sometimes added to the possessive case of pronoun of the first and second persons, and to the objective case of the pronoun of the third person, to render them emphatic; as, He did it *himself*, that is, He did it, and no other person. Pronouns thus formed are called *emphatic pronouns*.

When pronouns denote that the actor and the object of the action are the same, they are called *reflective pronouns*; as, He hurt *himself*.

English Harbour, Antigua.—English Harbour is the name given to that portion of the harbour of Antigua where English ships lie at anchor.

Antigua is an island in the West Indies. In Spanish, Antigua means old, ancient; connected with Lat. *antiquus*.

A broad pendant hoisted.—Pendant is also written when used in the sense here used as *pennant*. The etymology of the word is uncertain. It is variously stated to be derived from Lat. *pendens*, hanging down, Lat. *penna*, a feather, Lat. *pannus*, cloth, and Fr. *pennon* or *fanion*. Here pendant means the long narrow piece of bunting, or cloth of which flags are made, worn at the mast-head of vessels of war.

Emergency.—Lat. *e*, out and *mergere*, to dip. An unforeseen occurrence.

Lords Commissioners of the Admiralty.—The ministers appointed to look after the navy of England.

The post-list.—The list of post captains.

Concluding therefore pendant.—Being of opinion that a Resident Commissioner, an officer, who held a civil appointment only, was not justified in accordance with the usages of the navy to hoist a broad pendant.

Dockyard.—Lat. *doga*, a sort of vessel. A yard or magazine near a harbour for all kinds of naval stores and timber.

His pendant had been struck.—The nautical way of saying that his flag had been removed.

Was riding at anchor.—Was anchored.

Nevis Roads.—One of the Carribee islands. Long. 62° 40' W., Lat. 17° 8' N. The narrow channel dividing Nevis island from the east end of St. Christopher is called Nevis Roads.

Passed to leeward.—Toward the lee, or that part towards which the wind blows.

Martinics.—Also spelt Martinique, is one of the Windward islands, belonging to France. It produces sugar, coffee, cotton, ginger, indigo,

chocolate, aloes, pimento, plaintains, and other tropical fruits. The island is populous, and it has several safe and commodious harbours, well fortified.

Two general officers.—Two officers of the rank of general.

Engineers.—Lat. *ingenium*, natural capacity. *Er* is an affix denoting the agent or doer.

To make a survey of our sugar-islands.—To make an official examination of such of the British West India islands as yielded sugar, with the design of ascertaining their condition, quantity, or quality.

Survey from Fr. surveoir, from *sur*, over and Lat. *videre* to see.

St. Eustatia.—One of the least of the Carribee islands, yet for its size, it is the most valuable of them all. It is a mountain in the form of a sugar-loaf, of which the top is hollow; tobacco is cultivated on its sides to its very summit; and hogs, kids, rabbits, and all kinds of poultry, are produced in great abundance. Long. 63° 5' W., Lat. 38° 28' N.

At about two cables' length on the frigate's quarter.—At a distance of about the length of two cables from the frigate.

Cable, from Lat. *capulum*, *caplum*, a rope, is the name given to the large chain by which the anchor is attached to the vessel. It is about 120 fathoms long, and sailors are accustomed to judge of short distances by saying that they are so many cables long.

A ship's quarter is that part of the ship's side between the aftermost end of the main chains and the sides of the stern.

Treacherous.—Fr. *tricher*, to cheat, to trick.

To beat up for Martinico.—To beat up is a nautical expression signifying to make progress against the direction of the wind, by sailing in a zigzag line, or traversely.

This is the adverbial use of the word *up*. The other use is the prepositional form as in, *up the stream*.

The Americans were at this time.....subjects.—America had lately been declared independent. Previous to the declaration, all American ships were registered as British ships. These registers they were now using in trading with these islands.

Nova Scotia.—A British province of North America, which formerly included the province of New Brunswick. It has several lakes, and a vast number of small rivers. Though situate in a favourable part of the temperate zone, the atmosphere for a great part of the year is clouded with a thick fog, and for four months it is intensely cold. A great part of the country lies in forest; and the soil in general is thin and barren. Its name means New Scotland. In 1621, Sir William Alexander, a Scotchman, obtained from James I, a grant of the country. The "*loyalists*" spoken of in the preceding line are Sir William's descendants.

Embroided.—Fr. *embrouiller*. Thrown into.

The carriers of these colonies.—Those employed to carry the commerce of these colonies. Ship-owners, whose vessels would do all the conveyance of the trade to and from these colonies.

Cargoes.—From Spanish *cargo* and *carga*, a burden, a load, from *cargar*, to load, to charge. The lading or freight of a ship.

The plural of nouns ending in *o* takes *es*, as *calicoes*. But this is a mere caprice of spelling as the pronunciation is not affected.

Molasses.—Lat. *mellucens*, honey-like. Molasses though plural in formation is always singular in use, and is the name given to the viscid,

uncrystallizable syrup which drains from sugar in the process of manufacture, generally called treacle.

Americans by connection and by interest.—Americans by consanguinity of blood, i.e., relationship and by having all their personal advantages invested in America.

The usual enquiries concerning wood and water.—Concerning the procuring of supplies of wood and water.

His friend Collingwood.—Cuthbert, Lord Collingwood, a celebrated English Admiral, was born at Newcastle-upon-Tyne, in 1748. He entered the navy when only 13 years of age, and his services were long, arduous, and valuable. In the action of June 1st, 1794, he was flag-Captain to Admiral Bowyer on board the *Prince*; and at the battle of Cape St. Vincent, in 1797, he commanded the *Excellent*. Having attained the rank of Vice-admiral of the blue, and being second in command at the battle of Trafalgar, where the hero of England's navy fell, the command of the fleet devolved upon Admiral Collingwood, whose gallant conduct at the onset had called forth an exclamation of delight from Nelson, and to whose admirable skill and judgment, after the battle, the preservation of the captured vessels was chiefly attributable. For this and his other important services he was promoted to the rank of Vice-admiral of the red, and elevated to the Peerage. He was brave, indefatigable, just, and kind; strictly preserving discipline, while he gained the love of his compatriots, and merited all that a grateful country could bestow upon him. His letters published since his death, which took place while cruising off Minorca, in 1810, show him to have possessed considerable literary ability.

Statutes.—Lat. *statutum*, from *statuere*, to set, ordain. Laws.

St. Kitt's.—One of the West India islands belonging to Britain.

Customs.—Has two meanings in the plural—(1) habits; (2) revenue duties, which is the meaning in this passage. 'Custom' is often used collectively or abstractly in the second sense of the plural form. The second meaning is a rhetorical extension of the first.

The planters were to a man against him.—All the planters, without exception, were against him.

Egress and regress.—*Egress*, from Lat. *e* and *gradi*, to go, = right or liberty to depart. *Regress*, from Lat. *re* and *gradi*, to go, = right or liberty of returning back.

Ingress from same root = right, liberty, or means of entrance or access.

"Trimmed up and silenced."—Confuted by argument and caused to be still.

A delicate business.—A matter requiring nice handling.

Unequivocal sense.—Not admitting doubtful or different interpretations. From Lat. *equus*, equal and *vox*, word or voice.

To supersede Nelson.—Lat. *supersedere*, to be superior to. To displace Nelson from his appointment.

A court martial.—A court of military or naval officers for the trial of offences against military or naval laws.

The plural of compound nouns is generally formed by inflecting the principal noun, as courts-martial, Lieutenant-Governors, goings-out, &c.

Admiralty court.—This is a maritime court, for taking cognizance of all offences on the high seas, and of prize vessels taken in time of war. These Courts were instituted in 1347 and incorporated in 1772.

The island colours.—The flag adopted as the national ensign of the islanders.

Abettors.—Also written abettors. From O. Fr. *abeter*, from A.-S. *batan*, to bite, and connected with *bait*. Supporters.

Defensive law.—Law providing for the resistance of attack or aggression.

Sentry.—Lat. *sentire*, to perceive. *Sentry* is an abbreviation and corruption of *sentinel*.

Laid their damages.—Estimated their losses. Lat. *damnum*, loss, through the French.

The marshal.—Fr. *marechal*, from Ger. *marschalk*, from *mahr*, horse and *shall* servant. In this passage *marshal* denotes a ministerial officer, whose duty it is to execute the process of the courts of the United States. It also means a Commander-in-chief.

Address.—Lat. *dirigere* to direct. Dexterity.

Cast for the whole sum.—Condemned to pay, mulcted in, the whole sum.

Duress.—A French word from Lat. *durus* hard, signifying the state of compulsion or necessity in which a person is induced by the restraint of his liberty, or menace of bodily harm, to do some legal act, or commit a misdemeanour.

(To be continued.)

CALCUTTA UNIVERSITY ENTRANCE EXAMINATION, 1887.

NOTES ON

Selected portions of the English Course prescribed for the Calcutta University Entrance Examination of 1887.

By M. DUNN, B.A.,

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(Continued from page 83.)

PAGE 11.

The sun descending in the west.—This construction is termed a nominative absolute, an ablative absolute, or a detached dative. In the analysis of sentences it would form an extension of the predicate being an adverbial.

The evening star doth shine.—This is the planet Venus, called Lucifer as the star of the morning.

Mine.—Of the two forms of the possessive, the shorter (*my*, *our*, &c.), is used when the noun is omitted, the longer (*mine*, *ours*, &c.) when the noun is expressed.

Silent.—Lat. *sileo* (to be quiet.)

Flower.—Lat. *flos* (flower.)

Bower.—A.-S. *Bâr*, (bower).—A shady recess. It differs from *arbour* in that it may be round or square whereas an *arbour* is long and arched. Bower has also the meaning of private room or apartment.

*The moon, like a flower,
In heavens high bower,
With silent delight,
Sits and smiles on the night.*

As a flower planted in a bower diffuses beauty and fragrance around

it, so does the moon set in the sky silently pour her beautiful light upon the earth upon which night has descended.

PAGE 12.

Silent moves.—*Silent* is here an adverb. The singular *moves* is incorrect.

Thoughtless nest.—A nest the inmates of which are not disturbed by thought.

Shire.—Sax. *sciran* (to divide.) Originally a division of a kingdom under a count or earl whose authority was entrusted to the *sheriff* (*shire-reeve*.) It is synonymous with *county*.

Cardigan.—One of the western maritime counties of Wales.

Full five-and-thirty years.—When in expressing a numeral, the larger number is placed first, the connective *and* is used. The noun *years* is in the accusative case as denoting extent of time.

A running huntsman.—A huntsman that hunted on foot, or managed the chase on foot. The *s* in the word denotes the genitive or possessive case. Thus we also have *swordsman*, *salesman*, *Wednesday*, *Thursday*, *points-man*, &c.

Cherry.—From *Cerasus*, a city in Pontus near the Euxine, from which it is said the tree was first imported into Italy. Words of similar derivation are *sherry* (*Xeres*), *port* (*Oporto*), *muslin* (*Mosoul*), *cashmere* (*Cashmere*), *bilbow* (*Bilboa*), *hollands* (*Holland*), *to Japan* (to varnish after a style adapted from the Japanese), &c.

Him.—Dative case after *like*. The only other adjectives that govern a case are *unlike*, and *worth*.

Horn.—The huntsman's horn.

Glee.—Melody, mirth. Sax. *glie* (sport, music.)

Bandied.—Sent. The shout of Simon Lee was echoed back from hill and valley.

Husbandry.—The occupation of a farmer. Sax. *hus* (house) and *buend* (inhabitant).

Tillage.—The operation of preparing ground to receive seed.

Blither tasks.—Merrier work or occupation, viz., hunting.

Blithe is from Sax. *blidhe* (joyful).

PAGE 13.

Could out-run.—Could run faster than.

Ruled.—Staggered.

Stone-blind.—Blind as a stone, totally blind. Compare *stone-hearted*, *stone-dead*.

Chiming hounds.—Hounds barking in consonance.

Are out.—Are hunting.

But O the heavy change! But O what a great change came about.

Bereft.—Perfect participle of *bereave*; deprived of. Sax. *be* (of) and *reafian* (to deprive.)

Health, strength.—In these two nouns the suffix *th* denotes condition.

Kindred.—Relatives. Sax. *cyn* (nature.)

Old Simon to the world is left, in liveried poverty.—Old Simon is left to the charity of the world poor and in the garb of a huntsman. Fr. *liver* (to deliver.)

Survivor.—Lat. *super* (above), *vivere* (to live.)

Lean.—Thin.

Dwindled.—Diminished in size.

Avery.—Crooked, twisted. Sax. *wriþan* (to writhe.)

Dry.—Shrivelled, shrunken.

Common.—A field or plain; a tract of ground the use of which is not appropriated to any individual person. Lat. *communis* (common.)

Moss-grown.—Overgrown with moss.

Heath.—A place overgrown with heath, a species of shrub.

Enclosed.—Surrounded with a fence. Lat. *in* and *claudere* (to shut.)

What avails the land to them.—Of what benefit is the land to them. Avail from the Lat. *valere* (to be of worth.)

PAGE 14.

For she, with scanty cause for pride, is stouter of the two.—She is stouter than her husband, but has no reason to be proud in being so, both being so wretched in body.

Wean.—Detach. Sax. *wenan* (to accustom.)

Few months...store.—He has but a short time to live.

Still.—Always.

The more he works.—*The* is here in the ablative case corresponding to the Latin *quo*—*eo*.

Had you in your mind.
Such stores as silent thought can bring.

Were your mind filled with the thoughts which reflection along can beget.

You must kindly take it.—You must kindly accept what remains to be told.

Should you think.—Were you to reflect.

Mattock.—Axe. Sax. *mattuc*.

Tottered.—Shook.

Vain.—Useless. Lat. *vanus* (empty).

PAGE 15.

"Your overtask'd, &c."—The indirect speech would be "I told him that he was overtasked and asked him to give me his tool."

Proffer'd.—Offered. Lat. *pro* (forward) and *fero* (to carry).

Tangled.—Knotted. Welsh *tagu* (to choke.)

I've heard of hearts unkind, kind deeds
With coldness still returning.

I have heard of ungrateful men repaying benefits with coldness.

Has oftener left me mourning.—The gratitude of men oftener than their ingratitude has made me feel sorrowful.

PAGE 51.

Who would true valour see.—Whoever would wish to see a truly brave man.

Constant.—Constantly, an instance of an adjective used as an adverb. Lat. *con* (with) and *stare* (to stand).

Come wind, come weather.—In any kind of weather, good or bad.

Relent.—Repent of.

Avowed.—Proclaimed. Lat. *vocare* (to call).

Pilgrim.—Fr. *pelerin*. Lat. *per* (through), *ager* (country).

Intent.—Intention, resolution. Lat. *in* and *tendere* (to stretch), literally the stretching of the mind to some purpose.

Who so beset.....stories.—Those who relate to him dismal stories about the life he must lead.

But.—Only.

Confound.—Put themselves to shame. Lat. *con* (together) and *fundere* (to pour).

His strength the more is.—His resolution becomes all the greater.

Fiend.—From the same root as *foe*.

Daunt his spirit.—Dishearten or intimidate him.

Shall life inherit.—Shall enjoy everlasting happiness in heaven.

Fancies.—False notions.

J. Bunyan.—(1628—1688). Author of the *Pilgrim's Progress*.

PAGE 52.

How happy.....utmost skill.—That man has been happily born and educated, who does not cringe to the pleasure of another, whose honesty is his best protection and the only art he possesses acting strictly in accordance with the truth.

Whose passions.....private breath.—Who does not allow his passions to enslave him, who is always ready to die, and does not trouble himself about the opinion which private individuals or the public at large have of him.

Who envies.....rules of good.—Who does not envy the man, elevated by fortune or crime to some important position, who has never experienced the truth that flattery wounds deeply, nor ever in his conduct to others has made use of craft but has always been upright.

PAGE 53.

Who hath.....accusers great.—About whose manner of life no untruthful reports can be spread, who can fall back upon his conscience to justify all his actions, whose condition in life is such that flatterers can gain nothing by their adulation, and whose downfall would bring no preferment to his detractors.

Entertains.—Fr. *entre* (between) and *tenir*. Lat. *tenere* (to hold), amuses or engages himself during the day.

Harmless day.—A day spent harmlessly or innocently.

This man.....to fall.—This man is not enslaved by the hope of becoming great or the fear of being ruined.

Bands.....—Here equivalent to *bonds*.

Watson, Sir Henry—(1568-1639).—He wrote *Farewell to the Vanities of the World*, *Journey into France*, and *Farewell to the Fairies*.

PAGE 54.

Leveller.—One who destroys distinctions and reduces all to an equality.

The glories.....things.—The distinction which birth and rank confer is unreal and unsubstantial.

There is no armour against fate.—There is no protection for us from the fate that awaits all men.

Death lays his icy hand on kings.—Kings must die.

Sceptre.....spade.—Kings must die and returning to the dust from which they were made, be placed on a level with the poor peasant and labourer.

The instruments wielded are here by the figure of metonymy used for those who wield them.

Some men.....kill.—Some men may sweep whole armies off the field of battle and gain fresh fame on the field when they have slaughtered numbers.

They tame but one another still.—All that they do is to subdue one another in turn.

And must.....death.—And must die though they murmur to do so, when death laying his hand upon them, they tremblingly approach the end of their lives.

PAGE 55.

The garlands.....brow.—Your glories won in the field decay.

Upon death's.....bleeds.—Behold him who has conquered so many others slowly dying a victim to death. The metaphor may be expanded thus:—As the victim destined for sacrifice slowly bleeds to death upon the altar made purple by its blood, so this victor over so many others a victim to death slowly dies.

Smell sweet.....dust.—Leave a salutary effect behind them.

Shilley, James—(1596-1666). A dramatic writer in the reign of Elizabeth. His chief plays are the *Maids' Revenge*, the *Politician*, the *Cardinal*, the *Ball*, &c. The ode "*The Glories of our Blood and State*" is taken from his play entitled *Contention of Ajax and Ulysses*.

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"
Educational Record, Madras.

ENGLISH.

'The *very law which* moulds a tear,
And *bids it trickle* from its source—
That *law preserves* the earth a sphere,
And *guides* the planets in *their* course.'

1. (a) Paraphrase the above; (b) analyse it; (c) parse the words in italics.

(a) Small and great things are alike affected by the law of gravitation. It is that law that forms the little tear-drop, and causes it to roll down the cheek, and it is the same law that keeps the earth in a globular form, and controls the movements of the whole solar system.

(b)

SENTENCE.	Kind.	Con. Word.	Subject.	Pred.	Object.	Extension of Pred.
(a) The <i>very law</i> , that law preserves the earth a sphere.	Prin. Sent.		The <i>very law</i> , that law	preserves	the earth a sphere	
(b) Which moulds a tear.	Adj. Sen. qual. law in (a)		which	moulds	a tear	
(c) And bids it trickle from its source.	Adj. Sen. co-or. to (b) qual. law in (a)	And	which	bids	it (Direct), trickle from its source (Ind. Obj.)	
(d) And guides the Planets in their course.	Prin. Sen. co-or. to (a)	And	(that law)	guides	The planets (Direct)	in their course.

(c)

very—adj. qual. 'law.'

law—com. noun, neu. gen., 3rd per., sing. num., nom. case to 'preserves.'

which—rel. pro., neu. gen., 3rd per., sing. num., agr. with ante 'law,' nom. case 'moulds.'

bids—irreg. tran. verb, act. voice, ind. mood, pres. tense, 3rd per., sing., agr. nom. (which.)

it—pers. pro., neu. gen., 3rd per., sing. num., obj. case, gov. by 'bids.'

trickle—reg. int. verb, inf. mood, gov. by 'bids.'

law—com. noun, neu. gen., 3rd per., sing. num., nom. case to 'preserves' in app. with 1st law.

preserves—reg. trans. verb, act. voice, ind. mood, pres. tense, 3rd per., sing. ag. with 'law.'

earth—com. noun, neu. gen., 3rd per., sing. num. obj. case, gov. by 'preserves.'

sphere—com. noun, neu. gen., 3rd per., sing. num., obj. case, gov. by 'preserves' in app. to 'earth.'

guides—reg. trans. verb, act. voice, ind. mood, pres. tense, 3rd per., sing. num., agreeing with 'law.'

their—poss. adj. pro., neu. gen., 3rd per., sing., qual. 'course.'

2. Give the meaning of the Latin prefixes, ad, con, ex, in, and sub, and illustrate by examples how each of them may take different forms.

Prefix.	Meaning.	Modifications.	Examples.
ad	to	ac, af, ag, al, an, ap, as, ar, at,	account, affect, agglutinate, allay, annex, approach, ascertained, arrive, attempt, adhere
con	with, together with	co, col, con, com	co-operate, collect, connect, comply
ex	out of, out	e, ef	exodus, efface, erase
in	in, not	ig, im, il, ir	ignominious, improper, illiterate, irreverent
sub	under	suc, suf, sug	succour, suffer, suggest

3. What prefixes are used in the formation of adjectives of Latin origin. Give examples?

Affix.	Examples.	Affix.	Examples.
al	natural, artificial	an	german, human
ar	polar, globular	id	fervid, acid
ive	productive, attentive	ous	dangerous, riotous
ory	cursor, anatory	ine	masculine, feminine
ose	verbose		

GEOGRAPHY.

1. What are our chief imports from the peninsular countries of Europe?

Scandinavia—timber, fish, furs, iron, copper.

Denmark—corn (wheat, barley, rye, oats), oxen, horses, butter, rapeseed, salt meats.

Spain—wines, brandies, fresh and dried fruits (nuts, oranges, &c.), silk, wool, lead, quicksilver, cork, esparto-grass, olive-oil, skins.

Portugal—oranges, lemons, figs, wines, wool, salt.

Italy—olive-oil, southern fruits, almonds, wines, silk, (raw and manufactured), kid and lamb-skins, marble, sulphur, alum, straw hats and plait, liquorice, essences, and perfumery.

Various countries of Balkan Peninsula—cotton, tobacco, wines, opium, carpets, morocco leather, currants and other fruits.

2. Explain the meaning of Latitude and Longitude, and show in what way a correct knowledge about them is practically useful.

Latitude—is distance North or South of the Equator (a line drawn round the centre of the earth where it is thickest).

Longitude—is distance E. or W. of any fixed Meridian (a line drawn from one Pole to the other). The line we calculate from is the one which passes through Greenwich. Other nations choose one for themselves.

If we possess a correct knowledge of these lines, we can find any point on the earth's surface. Especially is it useful to sailors when out on the wide ocean with no landmarks to guide them. This knowledge and the mariner's compass is their only safety from the perils of the sea.

The scene of a wreck may be described in the newspapers as in Lat. 45° N. and W. Long. 6° .

Those who have no knowledge of Lat. and Long. will have no idea where this place is, while others, without the aid of a map, know that it is in the Bay of Biscay, W. of Bordeaux.

Again, the sun appears to move round the earth 24 hours, and, as the globe is divided into 360° , every place 15° E. of Greenwich sees the sun an hour earlier than we do, and, of course, in the opposite direction quite the reverse.

Calcutta is in Long. 90° East, therefore the people get day-light six hours before we do, and as St. Petersburg is in Long. 30° E., daylight appears four hours after sunrise in Calcutta. New York (Lat. 75° W.). People there are at breakfast when it is 12-30 P.M. with us.

HISTORY.

1. Write some account of the most important events in the reign of John.

The three important events in John's reign are—

1st.—His war with France and loss of Normandy. John was an usurper. His elder brother Geoffrey had left a son Arthur, who ought to have succeeded his uncle Richard I. The French King Philip II., glad of any excuse to go to war with England, maintained Arthur's rights, and openly denounced John as an usurper. A war ensued. At a skirmish before the castle of Mirabeau, in Normandy, Arthur was taken prisoner, conveyed to Rouen Castle, and there murdered, 1202. Whether the deed was done by hired assassins or by the King himself is still a matter of dispute. He was now accused of the murder of Arthur, and called before Philip to give an account of himself. No John appeared, and Normandy was declared confiscated. The English King seemed quite indifferent, and allowed these matters to go on smoothly until Normandy was secured by the French. All the once vast possessions in France had dwindled away, except Poitou and Aquitaine, the dowry of his Royal mother Eleanor (1204).

2nd.—Disputes with the Pope. It happened about this time that the See of Canterbury became vacant. The monks chose a Primate, and the King appointed John de Grey, Bishop of Norwich. Both were sent to Rome to be installed. The Pope at a loss to decide which, appointed Stephen Langton, a learned Englishman. John retaliated, expelled the monks, and appropriated their revenues. Pope Innocent III., to punish him, laid England under an Interdict. The churches were closed, and the religious ceremonies suspended for a period of eight years (1205-13). As John showed no signs of submission, the Pope excommunicated him, and finally absolved his subjects from their oath of allegiance, and called upon the King of France to take England. John, now thoroughly scared, agreed to submit, and Pandolph Pope's legate was sent to England to receive John's homage. England now was tributary to the Pope, to whom John annually paid a fee.

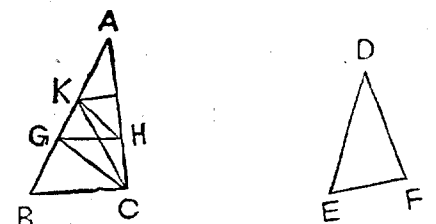
3rd.—Magna Charta, i.e., Great Charter, 1215. The Barons, indignant

at John's submission, with Fitz Walter at their head, demanded an interview with the King. They appeared, clad in armour, with armed retainers, asking for the King's signature to a bill which they had drawn up. The crafty King saw that it would greatly lessen his authority, and refused to comply. Unwillingly he was forced to add the Royal signature. After it was done he got the Pope to annul it, but with all his intrigues, the Charter remained firm. The people, clergy, and barons were all greatly benefited by it, and it is generally regarded as the foundation of an Englishman's liberty.

GEOMETRY.

Similar triangles are to one another in the duplicate ratio of their homologous sides.

Let ABC and DEF be two similar triangles having the angle A equal to D and the sides AB, AC respectively homologous to DE, DF.



In AB make AG equal to DE, in AC make AH equal to DF.

Join GH and CG.

Draw HK parallel to CG.

Join CK.

Since AG and AH are equal to DE and DF each to each and the angle A is equal to the angle D, the triangle AGH is equal to the triangle DEF.

Because AB is to DE as AC is to DF.

Therefore AB is to AG as AC is to AH (Constr. & Hyp.)

But because HK is parallel to CG.

Therefore AG is to AK as AC is to AH.

Therefore AB is to AG as AG is to AK.

That is AB has to AK the duplicate ratio of that which AB has to AG or DE.

But because KH is parallel to CG.

Therefore the triangle KGH is equal to the triangle HKC (I-35.)

Therefore the triangle CAK is equal to the triangle AGH or to the triangle DEF.

Therefore the triangle ABC is to the triangle DEF as the triangle ABC is to the triangle AGH, i.e., as AB is to AK.

But AB has to AK the duplicate ratio of that which AB has to DE.

Therefore the triangle ABC has to the triangle DEF the duplicate ratio of that which AB has to DE.

Q. E. D.

If a straight line stand at right angles to each of two straight lines at

the point of their intersection, it shall be at right angles to the plane in which they are.

Let the straight line EF stand at right angles to each of the straight lines AE and EB at the point of their intersection: EF shall also be at right angles to the plane in which AE, EB are.

Take AE equal to EB and take any point F in EF. Join AB, AF, BF.

First through E in the plane in which are AE, EB draw EG bisecting the angle AEB cutting AB in G. Join FG.

Because the sides AE, EG are equal to BE, EG each to each and the angle AEG is equal to the angle BEG.

Therefore AG is equal to BG and the angle AGE is equal to the angle BGE. (I. 4.)

Therefore each of these angles is a right angle. And because the sides AE, EF are equal to the sides BE, EF each to each and the angle AEF is equal to the angle BEF as they are right angles. (Hyp.)

Therefore AF is equal to BF. (I. 4.)

Because the sides AG, GF equal to the sides BG, GF each to each and the base AF is equal to the base BF.

Therefore the angle AGF is equal to the angle BGF and therefore each of these angles (I. 8) is a right angle. (Def. 10.)

Now because AEF is a right angle.

Therefore the square on AF is equal to the squares on EF, AE. (I. 47.)

But because AGF is a right angle, the square on AF is also equal to the squares on AG, GF.

Therefore the squares on EF, AG, GE are all equal to the squares on AG, GF.

Therefore the squares on EF, GE are equal to the square on GF.

Therefore FEG is a right angle. (I. 48.)

Next through E, besides EG, draw in the plane in which AE and BE are another straight line EH cutting AB at H. Join HF.

Because HGF is a right angle therefore the square on HF is equal to the squares HG, GF.

But the square on GF is, as above shewn, equal to the squares GE, EF.

Therefore the square on HF is equal to the squares HG, GE, GF.

Because the angle HGE is a right angle therefore the squares on HG, GE are equal to the square HE.

Therefore the square on HF is equal to the squares HE, EF.

Therefore HEF is a right angle. (I. 48.)

In like manner, it may be shown that EF makes right angles with every straight line which meets it in the plane in which AE, EB are.

Therefore EF is at right angles to the plane in which are AE and EB.

ARITHMETIC.

1. Find the simple interest on £535 16s. 8d. @ $2\frac{1}{2}\%$ per annum for $4\frac{1}{2}$ years?

If £100 gets £2 10s. in one year

∴ £535 16s. 8d. in $4\frac{1}{2}$ years gets

As £100 : £535 $\frac{8}{100}$:: £2 10s. : £60-5-7 $\frac{1}{2}$. Ans.

or thus

$$\text{Interest} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

$$= \frac{£535-16-8 \times 4\frac{1}{2} \times 2\frac{1}{2}}{100}$$

$$= \frac{£535-16-8 \times 9 \times 5}{100 \times 2 \times 2} = \frac{£4822-10}{80}$$

$$= £60-5s-7\frac{1}{2}d. \text{ Ans.}$$

2. If a man has £10,500 invested at $4\frac{1}{2}\%$ per annum, what will the income tax on his dividend amount to at 8d. in the pound?

£100 gets £4 $\frac{1}{2}$.

∴ £10,500 gets £ $\frac{4\frac{1}{2}}{100} \times 10500 = £472$ 10s. Dividend.

Income tax = $472\frac{1}{2} \times 8d. = 3780d.$ or £15 15s. Ans.

3. At what rate per cent. simple interest would £1350 amount to £1621 13s. 9d. in $5\frac{3}{4}$ years?

Interest gained = $(1621 \text{ 13s. 9d.} - £1350) = £271 \text{ 13s. 9d.}$

If £1350 in $5\frac{3}{4}$ years gains £271 13s. 9d., then £100 in one year will gain:

As £1350 : £100 :: £271 13s. 9d.

$5\frac{3}{4}$ yrs. : 1 yr. ::

$$= \frac{£271 \text{ 13s. 9d.} \times 100 \times 4}{1350 \times 5\frac{3}{4} \times 4} = \frac{£1086 \text{ 15s.}}{227} = 3\frac{1}{2}\% \text{ Ans.}$$

4. A person selling a house for £540 gained $4\frac{2}{3}\%$ on what he gave for it. The person from whom he bought it lost $4\frac{2}{3}\%$ on what it had cost him. What was the cost to the latter?

1st.—What was bought for £100 was sold for £104

As £104 : £540 :: £100 : 1st prime cost.

$$x = \frac{100 \times 540}{104} = \frac{6750}{13} = £519 \text{ 4s. } 7\frac{5}{13}d.$$

2nd.—What was bought for £96 cost £100.

As £96 : £100 :: £519 4s. $7\frac{5}{13}d.$: real cost.

$$x = \frac{25}{100 \times £519 \text{ 4s. } 7\frac{5}{13}d.} = \frac{£540 \text{ 17s. } 3\frac{8}{13}d.}{96} \text{ Ans.}$$

LOGIC.

NOTE.—The references in these questions are to the 'People's edition of Mill's Logic, dated 1884.

(Continued from page 156.)

BOOK I. C. 1.

Of Names and Propositions.

126. What is an essential proposition? p. 74.
127. What is a non-essential proposition? p. 74.
128. Why has the school logic been so long considered futile? p. 75.
129. What is the practical use of a proposition? p. 75.
130. Why is there a close connection between classification and the employment of general names? p. 76.
131. What are the Predicables? p. 77.
132. How are the words genus and species generally used? p. 77.
133. How were the words genus and species used by the Aristotelian logicians? p. 78.
134. Has the word essence any meaning as applied to individuals. p. 78.
135. What did the Aristotelian logicians understand by the *accidents* of things? p. 80.
136. What did the Aristotelian logicians understand by the expression *essential difference*? p. 80.
137. What is the meaning of the expression *infima species*? p. 81.
138. Why cannot a kind which is not divisible into other kinds be a genus? p. 81.
139. What does the word *differentia* denote in Logic? p. 81.
140. What did the schoolmen understand by the *essence* of a thing? p. 82.
141. In what is the distinction between *differentia*, *proprium*, and *accidens* grounded? p. 82.
142. Why must the species connote more than the genus? p. 82.
143. What are separable and inseparable accidents? p. 85.
144. What is the simplest and most correct notion of a definition? p. 86.
145. How may whiteness be defined? p. 88.
146. What names are unsusceptible of definition? p. 88.
147. How does a description differ from a genuine definition? p. 90.
148. Why cannot the distinction between nominal and real definitions be maintained? p. 93.
149. How does a definition differ from a postulate? p. 94.

FINIS.

EDUCATION IN ITS PHYSICAL RELATIONS, WITH SPECIAL REFERENCE TO PREVALENT DEFECTS IN SCHOOLS.*

By WILLIAM JOLLY, ESQ., F.R.S.E., H. M.'S INSPECTOR OF SCHOOLS.
(A paper read at Glasgow).

PHYSICO-MENTAL VIOLATIONS.

1. *Frequent Intervals in school work.*

The importance of these cannot be too much pressed. I am sorry to say emphatically, that it still seriously needs to be pressed, especially in our cities; and I speak decidedly for the portion of this great city with which I am associated. It cannot be sufficiently repeated, that there should be an interval, *at the end of every hour of the school day*, for the children to get out into the open air, to romp about; it need not be long, but it ought to be provided *without fail*. Yet in our schools, very sad to tell, it is not generally practised, the rule being only one interval in the forenoon and one in the afternoon, and the afternoon interval is sometimes dispensed with on account of the shorter meeting. I am glad to find, on the other hand, that an hourly breathing space is given in the High School of Glasgow, for example. Nothing could be more recuperative, or more wisely selfish, than such a practice. For myself, I feel active gratitude to the masters of the school in which I was educated, that they adopted such a healthy rule. The beneficial effects on teacher, pupil, and work are too numerous to mention in detail. In addition to physical benefits, such intervals invigorate the whole system, physical and mental, relieve strain and tedium, allow full ventilation of rooms, increase mental appetite and concentration, dissipate intellectual dullness and fog, which greatly arise from physical causes, lessen the need and amount of interruption for bodily relief incidental to long seditious, improve discipline in many ways, help to dispel irritation in both master and scholar, and give to both a new start with the new hour.

2. *The use of Alternatives in all school work.*

The central principle in the use of frequent intervals is the fact on which all organisms are based, that mind and body are in a constant state of change, which necessitates variety of employment; and that the brain, being imperfectly developed in a child, is incapable of sustained effort, in the same direction, for any length of time, without detriment. Continual change of effort is necessary for healthy development of both body and brain, and concentrated attention in one direction for too long a period involves possible danger; and the younger the child, the greater is that danger. Physiologists who have studied the educational relations of their subject (and happily these yearly increase in number) have investigated the length of time during which a child can healthily give continuous attention to one subject at a time. As formulated by Edwin Chadwick, and endorsed by physicians, they have arrived at the following conclusions:—That, from five years of age to seven, a child can attend to one subject, that is, to a single lesson, for only fifteen minutes; from seven to ten, about twenty minutes; from ten to twelve, about twenty-five minutes; from twelve to sixteen or eighteen, about thirty minutes; and that the total amount of work that ought to be exacted from any one in a day should not exceed a maximum of ten hours for young men, grading downwards to two and a half or three hours a day for children under seven.† Our daily practice in school is, I fear, a more or less constant violation of these wise and kindly results of science, and some reform of our procedure is urgently demanded for the sake of health and progress.

All this forcibly shows the need and wisdom of the regular use of what may be called *Alternatives* in all our school work, from the highest to the lowest; their number and variety to increase, the younger the child. Some of these alternatives I now proceed briefly to point out:—

(1) The most obvious is that of *frequent change of subject*, guided by the principle that *the subjects successively studied should exercise faculties as diverse and contrastive as possible*, for the sake of relieving the faculties already employed and exercising those that have been more or less idle. This should be the chief consideration in constructing the time-table of work for any class. Yet, though

*A Paper read before the Educational Congress, Glasgow.
†"School and Industrial Hygiene," by D. F. Lincoln, M.D.

this is, of course, a common-place in all text-books, it is not by any means sufficiently acted upon. Its neglect is a blunder in tactics, a source of weariness to teacher and taught, and a hindrance to progress.

(2) *Most lessons should be shorter than they generally are.* In the infant-room, as already seen, they should not last above a quarter of an hour at the same thing without a change; and, up to the Third Standard, not over half an hour. In fact, I am sure that we should obtain higher and better results by having no lesson on the same subject, even in the highest class, above half an hour in length. Better far, relieve the faculties employed during half an hour, and return again to the subject, than continue for another half an hour with waning power and interest.

(3) *Physical exercises should be regularly and frequently interpolated into all school study.* School lessons are, as a rule, more or less sedentary, and tend to produce restlessness, which increases according to the youth of the child—that is, as the organism is less developed. This restlessness arises from the non-use of certain organs, contrary to the law of development, that of exercise; and from the stream of poisonous, venous blood becoming sluggish, and from its purification in the lungs being retarded. The brain also becomes gradually over-charged with blood, by the work exacted from it. Hence the need of some easy means of accelerating the circulation, relieving pressure, and renovating the system. It is obvious that this can be best done by some muscular exercise. Such exercise, of necessity, at once creates an immediate flow of blood to the muscles brought into play, while dispelling the growing restlessness. This increases the movement of venous blood all over the body, relieves its pressure on the brain, returns it to the purifying lungs, where it receives new nutriment, and sends a healthy stream of the vital fluid to every part of the system, and specially to the brain, thus strengthening it for renewed effort. Hence the wisdom of interjecting at frequent intervals, certainly not less than half an hour, some physical exercises, which the children should stand and perform. These need not be long, but they should be smart, vigorous, and pleasant. As has been wisely said, by such a proceeding, by getting the blood out of the brain, and by the muscles, tingling with a hearty glow, both teacher and scholar "would go back to work so refreshed as to quickly make up, both in the quantity and quality of their work, for the time lost."*

But, though all this is so sensible and so obvious, how much is it practised in our schools? Alas! too little, far too little, by the wisest; and, in most cases, I fear, not at all. It is seldom done systematically, and of set aim, for relief and renovation.

(4) *There is no more effective or delightful renovator of waning energy than music.* Yet, will it be believed, in many schools, and not less in this city, it is never heard at all in the standard classes, except at the one hour or half-hour a week formally set apart for singing! I merely state a fact, however astounding, and draw attention to a neglect, both painful and unwise. The exhilarating, renovating, and elevating power of song at all times, and especially in school, with its trying sedentary work to children, is a hackneyed theme that surely needs here no new advocacy. But it is the old, old story of the divergence between faith and works, between doctrine and deeds. Again, again, and yet again, have I heard a teacher, when remonstrated with for the neglect of this vitalising and regenerating agent, gravely look me in the face and assure me, without a blush, that he had not time for such things! Waxing argumentative, he has told me that the pressure of work was so great that music could only be done at the time stipulated on the time-table! As well might a general contend that the daily marches required of his soldiers to gain a certain point of vantage were so severe, that he must silence the music that should strengthen them to reach it.

The neglect of music in our schools, for renovation and exhilaration, is simply serious. To this day, I have frequently to report in regard to it. No teacher in any class who is capable of singing should pass almost any hour without a bright burst of sweet and joyous song. No teacher should certainly be appointed to an Infant school anywhere who cannot sing; and yet this is not uncommon. The teacher that does not use music as a battle-march for his youthful army is throwing away his choicest means of victory.

*"How to get Strong," by W. Blaikie.

(5) *The continued Renewal of Interest during work* is an invaluable vitaliser. Much of school study that must be gone through is dry and dull, and no means should be neglected to dispel ennui and create pleasure. Nothing creates interest better than *the wise and pleasant exercise of intelligence* in all subjects, even the driest. A skilful teacher can, by his treatment of almost any subject, make it more or less interesting and pleasant, by illustrations and the like, and by the energising exercise of *intelligence*; and it is this power, more almost than any other, which distinguishes the true educator from his commonplace brethren.

But all teachers should make some effort to renew interest and energy, by special efforts for this end. There are various ways of doing this, such as the teaching of more interesting lessons between harder ones, as those of Geography or History, in all the lower standards, between the dry "three R's;" the telling or reading of a story, as a reward for good work done, especially if such story bears on some part of other lessons; the showing and explaining of a pretty picture, or other beautiful or interesting object, brought for the purpose. The whole aim is to relieve over-driven faculties in dealing with duller subjects, and thus secure fresher, firmer work, in accordance with mental and physical law.

In this connection, it has always been painful to me to see that the work of our younger pupils in the lower standards, as prescribed in Codes and practised in schools, still continues so exclusively confined to the melancholy grind of these mere tools to real work, reading, writing, spelling, and counting. The only light shed on their gloomy path is the cultivation of intelligence in the reading lessons, which is too often made mere mechanical memorising of weariness. Geography and History should certainly be simply taught in these standards from the first. One is glad to see, in England, some attempt made to correct this abuse of childhood in these early years, which so keenly craves for sweeter and more substantial food; in Scotland, this step yet remains to be taken.

It is also a pity that the interesting and training lessons of the Infant schools should, as a rule, be suddenly and finally stopped at the Infant room door. There exists, in our common schools, a sharp and foolish dislocation of the scholastic strata, a great fault in every sense of the word, between the Infant room and the rest of the school, in regard to such work. Few things require more urgent correction than this extraordinary blunder in real education and training. General gallery lessons of a wide range ought, beyond question, to be continued in all the standards, especially in the II. and III., as an important part of the daily work. Their teaching would more than repay itself by increased interest, intelligence and renovation, and even by standard results. I have been delighted to report in several cases, and I never fail to do so, that such general object lessons are being increasingly given in the lower standards, notably in several of the Govan schools.

(6) *The preservation of the cheerfulness and natural vivacity of children* in school work is of vital importance to training and success. All healthy activity is joyous in all creatures. Instinctive joy, indeed, seems a necessary condition of all real growth; and its suppression is a grievous mistake, both physical and mental. No child can be truly and healthily developed without gladness, any more than a plant without sunshine—so both physiologists and educationists tell us. As one says,—"Under the rule of cheerfulness, the intellectual faculties attain a quicker and more vigorous growth. With a cheerful spirit, we think and judge more acutely and accurately. Children bring cheerfulness and mirth as a natural gift into school, provided these have not already been suppressed by an unnatural education. At school such dispositions ought to be cultivated and encouraged."* The truth of these words all teachers feel. How sweetly everything moves, how pleasant is effort, how happy progress, when all is bright and cheerful in school, externally and internally. But how unhappy and unprogressive when work is done under a cloud of dullness and ill-temper! As Dr. Roberts truly remarked at the late Educational Conference in Manchester,—"There is no feature of educational discipline which is so injurious to mental and physical development as its tendency to suppress the joyous vivacity of childhood."†

*"The Systematic Training of the Body," by Schaible. (Trübner).

†"Manchester Conference on Education under Healthy Conditions."

In nothing do schools vary more than in the presence or absence of this undefinable element of cheerfulness. It is not at all so common as it ought to be; but I do think that, under our improved school conditions, with growing power and skill, it is gradually increasing. Under the old rigid rule of the ancient order of dominies, now almost extinct, it was far too often forbidden fruit. Where it exists, it is priceless; charming as summer air or the breath of Spring to teacher, pupil and examiner. I lately visited a school where I was constrained to use the unofficial word "delightful" in describing its genial tone. Would that it were universal! I dare say that it exists in schools more than we examiners perceive; for examination is, and must greatly be, attended with more or less constraint than ordinary work. But where it really exists, it must always be felt, even at inspection, if the Inspector has any faculty to catch its aroma. It is, perhaps, best described by that indefinite but expressive word "tone," as an element in discipline; and in "tone," the soul is geniality and cheerfulness, combined with high morals. Schools could be classified without much difficulty under this head—with, no doubt, curious and startling results; the high percentage establishments not generally standing highest here.

But the absence of cheerful geniality is not at all uncommon in schools. We enter schools where an east wind seems constantly to blow, where a moral and intellectual chill freezes all, as from the near presence of an iceberg, and where a smile is a crime. I speak in all seriousness—such schools exist. Do let us set ourselves to banish such cold from our schools, and allow the rays of joy to shine more and more in our own and our children's hearts. The source of such delightful warmth is the teacher, primarily, if not exclusively. Where he is sunny, the school is bright; where he is gloomy, the school is dark. This difference of tone is often strangely felt in different rooms of the same school; and even in the same room, with the same children, under different teachers. In this, and in all else, as is the teacher, so is the school.

(7) But this cultivation of cheerfulness might well and wisely be carried further than even genial schoolmasters seem to think possible. *The greater use of humour and laughter in all school work* is desirable, both as alternatives, and as trainers of neglected faculties. As was remarked above, "children bring cheerfulness and mirth as a natural gift into school, provided these have not already been suppressed by an unnatural education." It would be better for all schools if these were not suppressed when they enter there, but developed and utilised for educational ends. The popular opinion, it is to be feared, regarding schools and schoolmasters, is not one much associated with humour or mirth; though that opinion is gradually becoming pleasantly modified by facts, as the importance of joy in school life is appreciated and acted on, and as teachers are becoming less official and more human than of yore. Laughter should be more welcomed in all teaching than it seems to be; and humour should be specially cultivated. As a people, we Scotch, it must be confessed, are greatly lacking in spontaneous vivacity, and we should be all the better of having it more cultivated in look, speech, and manner; and the school is an excellent and open field for its training, with abundant present and future gains. Genuine laughter is as valuable a vivifying, brightening agent in school as out of it, and it should be actively stimulated by teachers for its admirable mental and physical effects. Yet it is not at all uncommon to see its spontaneous crackle at examination carefully, if not sternly, suppressed by the warning look and hand of the teacher.

The over-strict silence exacted in some schools is simply painful. It is the suppression of joyousness and the production of fear; and it is incompatible with healthy influence. One of my own teachers allowed, at intervals, a few minutes' talk to his pupils, when they could converse with their neighbours without restraint, and this was attended with happy results. I recommend the practice; it lets off suppressed steam, and it is a touch of nature amid much necessary formalism.

But more than this, I hold that *Humour, as a faculty, should receive special cultivation*. How little does this seem to be realised in our reading books! Letters such as Hood wrote to his grandchild at the seaside, I have occasionally seen in school books, but very rarely. Though these collections are yearly becoming brighter and broader, this element seems as yet not to be thought necessary or desirable. It ought certainly to be included, and would produce mutual

pleasure to all concerned. Children naturally delight in its exercise; and it would be a valuable human element in school work, too rarely present amid the pressure of school percentages and the pursuit of tabulated "results."

But what of the discipline, and, much more, the highest discipline grant, under such free and easy pleasantries? The discipline would be better and truer, and the grant more secure; provided always that the discipline is real and thorough at bottom, though crowned with this crest of sparkling foam. But it must be confessed that it requires a firmer hand to manage the vivacious steeds of childhood, if occasionally allowed such easy rein, than under the rule of the lash or the dominion of fear. But how much truer, deeper, more educative and valuable all work and discipline!

3. *The over-use of Memory—a physical, as well as mental, suppression and evil.*

Memory is the scholastic slave, the over-driven drudge, that is compelled not only to do her own work (which is hard and important enough), but the work of most other faculties. She has so many ill-assorted burdens to bear, that she soon loses strength and spirit, and, like all over-worked servants, is continually dropping the most valuable articles, generally when they are most needed; instead of being the bright and active help she is willing and fitted to become, if kindly used and properly fed.

Of course, memory is one of the most valuable faculties with which man is endowed, and one of the most important in education and culture; so much so, that Professor Bain bases his main definition of education upon it, when he says, "The leading enquiry in the heart of education is, how to strengthen the memory,*—though I am sorry he has placed memory so much in the foreground, with its prevalent and overwhelming abuse. But it is not sufficiently understood that *there is no separate special faculty of memory* in our constitution, as is generally conceived; but that each faculty possesses its own power of memorising—that is, storing—and of recalling its own impressions. What is generally called "memory" is merely verbal memory, or the memory of the faculty of Language; and it is this faculty that is so much abused in school work. Here it is that we have more real "over-pressure" than anywhere else in all school work. The grind to which the child is thus subjected, in the many subjects taught, becomes a slavery of the very hardest kind, and seriously affects his health, vivacity and joy. Indeed, as put by Mr. Charles G. Leland, the eccentric but wise educational philanthropist, "The disease of this day in education is over-taxing of the memory."† It does more than all else to deteriorate the mental and physical health. But, as he hopefully assures us, "for all diseases there are remedies."

What is the remedy for this memory disease? The chief cure lies in a practical recognition of what I have only hinted at—the psychological and physical fact, that every faculty, when exercised upon any subject, becomes its own natural memory. If we were wise as educators, we should exercise these other faculties more than we do. Retention, or memory, would be the natural result of such exercise, apart from the services of mere verbal recollection. Thus, we ought to employ the faculties of perception, observation, comparison, and reasoning, as the greatest instruments of our training; and these, by their very exercise, would become the real memory whose services we so much desire in education.

In nothing is the mistaken abuse of verbal memory, and the neglect of these higher and more important faculties, better seen than in the teaching of Meaning. Here one lingual coin is generally changed for another, both being equally unknown; while small change, or periphrastic meaning, is too little asked. We forget that every word is truly a coin, and bears an inscription which, in most cases, can be deciphered with more or less ease—requiring frequently, no doubt, to be rubbed up like other inscriptions, but seldom quite obliterated. It is our business, as teachers, to exercise the perceptive and reflective powers of a child in reading these lingual inscriptions, thus training intelligence, exercising faculty, and securing thorough retention; because the meaning is borne by each word itself, and not by the universal slave, verbal memory. In teaching the meaning

* "Education as a Science," p. 8.

† Manchester Conference.

of *appreciate*, for example, instead of making the child merely grind up—generally from a book, or worse, by the ear—that it signifies to think well or justly of a person, I should direct his attention to the fact that the word has in it another form of the word, *price*, which he knows, and that it tells, to the eye and ear, its own meaning—that of putting the true *price* or value on anything. In this way, the word itself becomes, as it were, its own memory, and carries its own meaning which the scholar is to decipher by the judicious and delightful exercise of observation and intelligence. This is a large and important subject, which I have treated elsewhere and cannot now pursue.†

I know nothing more calculated to cure the epidemic of diseased memory, so prevalent in our schools, than such educative exercise of the higher faculties, each willing and able to bear its own burden of recollection; with abused verbal memory as a willing coadjutor, when effectively utilised for its own invaluable function to real education, while kept in its subordinate place—that of labelling the real things conquered by other faculties. The true principle of guidance here is not so much *Res non verba* (Things not words), which is an excessive statement by way of protest against prevalent tendencies, as *Res cum verbis* (Things with words), realities first, and names affixed to these afterwards.

4. Pressure on our Infants.

It cannot be too strongly impressed upon our teachers that the work of the Infant section should consist much more in exercising the faculties, moral, æsthetic, and intellectual, than in conveying information and securing a certain dexterity in reading, writing, and counting. Intelligence exercised upon realities, with a sparing but growing use of difficult words (an evil far too common when object lessons are attempted) should leaven everything that is done. The dreary husks of the “three R’s,” instead of being made the staple or the whole of the child’s occupation, should form only an inferior, though an integral and increasing, part of the work, interpolated into the other more educative and attractive exercises. The best talent of the school should be employed in this department. Yet we have, in ignorance, been accustomed to allocate it to the most juvenile and weaker members of the staff, to embryo pupil-teachers and candidates.

If an adequate course, truly infantine and educative, with the increasing use of adapted kindergarten principles and practice, were introduced into all our schools, it would be attended with most important, if not surprising results. It would attract our children at an earlier age than is usual, lay a firmer foundation in actual acquirement for after work, prepare them for doing it with awakened faculties and active intelligence, and generally raise the thoroughness of the whole subsequent course. Such an early training would also remove the necessity for resorting to acknowledged imperfect methods for producing paying results, as in Arithmetic, and help to lessen or prevent the over-pressure in the lower classes that the want of such training is apt to induce.

B.—THE SYSTEMATIC TRAINING OF THE BODY—PHYSICAL EDUCATION.

It is now a good many years since I first drew attention to our national neglect of formal Physical education;* with, as yet, only very partial, but very gratifying effect. Several of our greater English School Boards have taken enlightened action on the subject, and established a more or less complete physical course, notably London, Birmingham, and Manchester.

The opinions expressed of the results produced by such exercises are, in all these quarters, most favourable; in some enthusiastically so. In Manchester, for example, they are systematically given by competent trained instructors in the Board Schools, the Grammar School, and in King Edward’s School. Dr. Watts, an uncommonly earnest and accomplished educationist, assures us that Gymnastics are universal under the Board, “with the best possible results,” and he testifies to a great improvement in the general bearing of the children, who “delighted in them.” “The teachers themselves,” another member tells us, “took great interest in the work, and supplemented the work of the sergeants with great advantage”; while the Headmaster of the Grammar School bears witness to there being “less listlessness, fewer pale faces and stooping shoulders”;

† In special letters on the subject; and, shortly, in the Blue Book for 1874.

* In “The Public School: its Organization, Management, and Teaching” (Laurie); “Physical Education for Common Schools” (Social Science Assoc., 1875); “Physical Education and Hygiene in Schools” (British Assoc., 1876), and elsewhere.

and another gives statistics showing “a marked development of muscular power, as well as an increased growth of the chest and arms,” in all who had taken part in such training.†

Altogether, at the recent Manchester Conference, on “Education under Health Conditions,” the consensus of opinion in favour of systematic bodily training in all schools was both abundant and powerful, from all parts of the country and all kinds of schools, and ought to give a new impulse to this neglected part of education, as the natural and essential basis of true educational advance.

There are two ways in which Gymnastics may be carried out—*either with or without apparatus*. The Rational Gymnastic System of the great Swedish educationist, Ling, is one of the most complete in existence, and is practised *without apparatus*, by what are known as Free Exercises, that is, exercises free or apart from apparatus; so that the best physical education can be secured for our children without any expenditure for costly plant, or even gymnasiums or special rooms; the open space in our school-rooms being quite sufficient. The one thing needed is an instructor that knows the system, which requires special knowledge.

The London School Board some time ago set an excellent example, which has been followed by others in England, by appointing Swedish teachers to instruct their own teachers especially the females, in these Free Exercises of Ling. That is a step that remains to be taken in Scotland. This, it is to be hoped, our greater Boards will speedily take, in the interests of our children; especially in the light of what has been here pointed out, of the vital need of more attention being given to the physical side of education, and the loss its neglect entails.

With such instruction, our own teachers could, at various times during the day, by way of desirable alternative, interpolate these valuable training exercises into harder work. Of Ling’s system, the greatest British exponent is Dr. Roth, of London, who was the first to advocate Scientific Physical education in this country, and who has for nigh forty years, in season and out of season, advocated its adoption in all schools, with rare and enlightened enthusiasm.

Where apparatus is used, there are several systems available, the best in this country being Maclaren’s, of Oxford, whose manual is admirable and easily available. In 1874, Mr. Maclaren prepared special and simple plans for me, adapted to common schools, which were published in my “Public School, its Organization, Management, and Teaching.” This may be had free from Mr. Thomas Laurie, publisher, who is also prepared to erect the apparatus at a cheap rate for any Board in the country.

For details to those interested regarding the history and nature of both systems, I would refer to papers by myself, where these are given in considerable fulness, with references to the existing works on the subject.* At the recent Manchester Conference, it formed one of the chief subjects debated, with unanimous and earnest recommendation of its universal teaching. In the proceedings of the Conference, full reports of the papers and discussions may be found, published by Heywood, with special discussions of the relative merits of the physical training carried out with and without apparatus.

In conclusion. We have lately heard a great deal about Over-pressure in education. In spite of exaggeration as to its amount, it is well that the cry has been so loudly raised, and that it has roused national attention, in the interests of teachers and children. It is beside the purpose of this paper to enter on this vexed question in its medical aspects, in which under-feeding has been found to have had more to do with the sad state of matters revealed, in certain parts of our population, than over-pressure in the schools. Over-pressure, however, no doubt exists, with most serious effects; but in Scotland to a minimum amount—except in the lower human strata of our large cities.

But there is one kind of pressure suggested, and, I should hope, proved in this paper, to be both possible and actual. It may shortly be described as *driving too hard and too straight for certain technical “results.”* The pursuit of these I maintain, should be less direct, and should be ameliorated by the introduction of certain recuperative elements. There would not only relieve the existing strain,

† Manchester Conference.

* See the papers already named.

but secure those very results more successfully and soundly, while broadening our school training and supplying the claimant neglect of important parts of our constitution. It would be our wisdom, as a people, to face the Physical education of our people in a vigorous and practical form.

It would be to our advantage, as teachers, to introduce into all our harder technical work, relieving, recuperating, and pleasing alternatives, herein described; for the sake of the educative alternatives themselves, and for the attainment of desired technical ends, and the improvement of national health and symmetry, happiness and progress. Of few can it be said—

"Right up Ben Lomond he could press,
And not a sob his toil confess."

To urge most men to imitate Allan Graeme in this, would be folly; to compel a child to do it, would be cruelty. Yet have we not unconsciously been doing something of this in guiding our children up the Ben Lomond of learning, which we desire them all to climb? Have we not driven too straight ahead up the difficult steep, and tired and harmed both them and ourselves? Would it not be wiser to adopt the old advice of *festina lente*—to hasten slowly? Would it not enable us to reach the summit more rationally, pleasantly, and successfully, if we were to lead the children by gentler gradients, to teach them to examine the wild flowers that adorn the hill, to admire the scenery that surrounds them, to examine the structure of the mountain itself, to view the wide landscape of life thus seen in truer proportions and in better relation to each of its parts and to the whole, to allow needed resting-places for quiet intercourse and pleasant human amenities, and at last to reach the top strengthened and instructed; the better prepared, vigorously and happily, to traverse the mountains and glens, the crags and bogs of the rugged plateau of after-life, in the search in which we are all engaged—that of permanent felicity.—*Journal of Education.*

ELIZABETH OF SIBERIA; OR, PRASCOVIE LOPOULOFF.*

(A story from the Girls' Own Paper.)

CHAPTER I.

"Abbandonate ogni speranza, voi ch'entrate."
All hope abandon, ye who enter here.

Such was the sentence Dante saw inscribed above the sombre portal in his immortal vision of the Inferno. Such might be the greeting fitly uttered to the unhappy Russian convict who crosses the frontier into the vast unvaried plain of Siberia.

Long, long has been his journey from all his heart holds dear; and now those monotonous levels, with the Ural Mountains rising grimly behind him like a giant barrier, must be the area of his uncongenial work, the scene of his unpitied death.

Few, indeed, escape from banishment, but one who did so about forty years ago, Rufin Piotrowski, has thus described a gang of outward-bound exiles:—

"The convoys I saw extended in some instances over several verst[†] along the road. An armed Cossack preceded the melancholy procession; then came the prisoners chained in couples by the hands or feet; then single prisoners, with their feet chained together; behind these ten or more were secured to a long iron bar by their wrists; others followed in irons. The whole convoy was surrounded by soldiers, while mounted Cossacks guarded them on either side. Perfect silence generally reigned, interrupted only by the clanking of the fetters. Deep misery or utter despair was on every face, and tears rolled down the cheeks of many of the prisoners, who wept as they dragged themselves along."

Near the close of the last century, under the reign of the Emperor Paul Petrovitch, thousands of political exiles were sent to Siberia, and in such a convoy there might have been seen an officer named Lopouloff, his wife, and infant child.

* "Prascovie" is more generally known as Elizabeth of Siberia, after the heroine of Madame Cottin's romance, "Elizabeth, ou les exilés de Sibirie." That story does not, however, profess to be a record of actual adventures, although the central incident is founded on fact. Count Xavier de Maistre, in "La Jeune Sibérienne" has told the story of Prascovie as it really happened, with much pathos and simplicity.

† A verst is five-eighths of a mile.

His birth, which was noble, probably exempted him from performing the journey on foot, a rough carriage, called a *kabitka*, serving as conveyance for the more privileged offenders. He would also have been considered fortunate by many unhappy wretches, inasmuch as he was not condemned to the horrors of the mines, or even to hard labour, and had his wife and child to share his doom. But Lopouloff had distinguished himself in the Ottoman campaign, and had expected promotion from his sovereign rather than disgrace. The decree of his banishment came upon him like a thunderbolt, and the cause, probably some unfounded suspicion, is even now unknown.

The village of Ischim, near the frontiers of Tobolsk, was the destination of this unhappy man; and with his wife and child he occupied a hut in the colony of prisoners there. A sum of ten kopecks a day, equalling about twopence of English money, was assigned to them by the Government as their daily allowance for food, and Lopouloff supplemented it by labouring in the fields during the four fertile months of the year, or performing such work as he could get in the village, while as his little girl grew up she earned a trifle by helping the washerwomen or farmers.

Ischim lies low on the banks of a river, and is often flooded. Situated in the depression of a vast tableland, it offers little attraction of natural beauty, and to the officer and his wife, accustomed to the luxury of life in St. Petersburg and association with the rich and great, their wretched cottage and life of drudgery seemed almost intolerable. They gazed with breaking hearts at their daughter, for whom they had dreamt of a far different lot, and whose delicate hands seemed unfitted for the hard toil of a peasant life; but the little Prascovie, remembering no other home, was cheerful and contented. Her mother, as time went on, settled down into quiet resignation, but Lopouloff could not reconcile himself to the loss of his profession, and the separation from friends and comfort, with nothing around him but misery and squalor. He petitioned the Czar for a remission of his sentence, and with the sickness of hope deferred, looked ever in vain for an answer.

As Prascovie grew older, she began to notice and to wonder at the heavy cloud that brooded upon her father's spirit. One day she came suddenly back from the fields where she had been working, and discovered her parents giving way to an outburst of grief, which was only intensified at her appearance. In a passion of despair Lopouloff lamented that he had ever had a daughter, since he must needs see her degraded to a serf. Then, in reply to her anxious questioning, he told her, for the first time, all his sad story.

The girl was now fifteen, and must have possessed an unusual amount of courage, for the idea straightway took possession of her that she would go to St. Petersburg, and seek an interview with the Czar to implore her father's freedom.

To appreciate the seeming madness of such a project it should be remembered that sixteen hundred miles of road, crossing the Ural Mountains, lay between Ischim and St. Petersburg. Towns and villages were thinly scattered on the way, and military posts were stationed to intercept fugitives. Prascovie had no means of conveyance, and no money to procure any; during a great part of the year travelling for a lonely pedestrian would be impossible by reason of the snow and fierce cold. And these were only a few of the obstacles that attended any such scheme, for how should a poor peasant girl, without money or patrons, gain admission to the dread presence of the Czar of all the Russias?

But Joan of Arc and Prascovie were alike in one point: having resolved upon a course of unselfish action, to all appearance wild and impracticable, neither ridicule nor expostulation could divert them from their purpose; alike also in this: that religious zeal gave earnestness and enthusiasm to the process of maturing the design. Prascovie implored Heaven that she might succeed, and, like Joan of Arc, though in far different scenes, she withdrew into the depths of a forest to meditate and pray.

At last, as her father sat by the cottage door smoking his pipe, she ventured to approach him with her scheme, and unfolded to him all that she had been dwelling upon in secret for months past. Lopouloff gazed at her in amazement, but let her finish what she had to say; then, taking the girl by the hand, he led her into the cottage, where her mother was preparing dinner.

"Wife," he said, in a tone of mock gravity, "I bring you good news. All

our misfortunes are at an end, for here is a great lady who is going to St. Petersburg and who will condescend to interest herself with the Emperor on our behalf."

"She had better attend to her work than talk such nonsense," quoth the mother, sharply. Then seeing that Prascovie was in earnest, and was crying bitterly, she kissed her. "Set the table for dinner, like a good girl, and then we will talk about going to St. Petersburg," said she.

One would have expected that the young girl, with her limited experience, and no knowledge of the Emperor, save as a tyrant ruling afar, and condemning multitudes to hopeless slavery, torture, or death, would listen to the voice of apparent reason, and abandon the scheme. She could not fail to hear continually of the long and dangerous way that took exiles twelve months to traverse, and no glimpse of encouragement could possibly come to her from without. She did not possess the passport without which she could not quit Siberia, and able neither to read nor write, how was she to obtain it?

For three years Prascovie nursed her plan in secret. She induced a fellow prisoner to send a written request for a passport to the governor of Tobolsk, and after six months' delay the courier brought her a sealed letter containing one. Her father angrily took it and locked it up, but she was not discouraged, and renewed her demand to be allowed to start for St. Petersburg.

The girl was now eighteen, strong, tall, and vigorous, for the bitter Siberian climate develops hardy natures. She had developed also mentally, and showed a decision and reasonableness that could no longer be laughed down. Her father and mother were aghast; they tried expostulation, argument, and entreaty, but all were as idle waves beating themselves against the rock of Prascovie's fixed idea.

It would be tedious to describe in detail the steps by which their resistance was overcome. Convinced that her health would give way if she were longer opposed, and expecting to see her soon return in discouragement, they yielded a reluctant consent to her departure. The other colonists laughed her to scorn, with the exception of two convicts, friends of her father, who, touched by her faith and hope, bade her God speed.

At the dawn of day on the 8th September, the cottage of Lopouloff witnessed a pathetic scene. With a look of inspired resolve upon her face, Prascovie stood in her peasant garb ready to start, while her father and mother wept beside her. Her whole provision for the journey consisted of a silver rouble (worth a little more than three shillings), which her father had forced her to accept. The two friendly convicts had come to set her forth upon her way. Kneeling before her parents, she received their blessing, and then tore herself from their heart-broken embrace. The two friends accompanied her as far as the restrictions of the settlement would allow them, and then, with sinking hearts, watched her trudge away into the unknown land beyond.

Prascovie knew nothing of the way she had to take, save that she must travel westward. At the close of her first day's pilgrimage she found shelter in the house of a friendly peasant, but the next morning she felt weary and forlorn. The story of Hagar in the desert came into her mind, and she took courage to start forth again.

"Which is the way to St. Petersburg?" the poor girl inquired of stray passers-by, when she came to a part where the roads were divided. She was laughed to scorn. St. Petersburg! It was so far away that it was absurd to think of walking thither. Yet, by dint of persevering inquiries, she managed to keep the direct road. She obtained hospitality and shelter from cottagers in the villages through which she passed, trying as far as possible to repay her hosts by helping in the household work. To all who entertained her she must have seemed a crazed visionary, for they well knew the enormous distance of savage, inhospitable country that separated her from the Russian capital, and the winter would soon come on.

Although the summer in Siberia is brief, it is intensely hot, and the quantity of electricity developed in the atmosphere produces storms of tropical violence. "The air and the earth shake as in fear of coming destruction," says an eye-witness. One of these tempests of rain and wind swept down upon the lonely wanderer at night, and laid a tree prostrate on the road in front of her.

Prascovie, in terror, rushed into a wood for shelter, where she remained all night, soaked through and through with driving rain, while the wind

howled fiercely in the tossing branches. In the morning, half dead with cold and fatigue, with her shoes literally hanging in shreds from their encounter with water and mire, she struggled back to the road, and fortunately found a peasant coming that way in a rough vehicle. The man took pity on her, and conveyed her, in a forlorn and dripping condition, to the nearest town.

What was she to do? Her state was such that she could not proceed, both because her clothes were ruined and her bare feet were swollen. In these straits the poor girl hobbled to the church, hoping that near the edifice consecrated to the remembrance of Divine Pity human pity would come to her rescue. But as she sank upon the step a mob of children began to hoot and jeer at her. A lady, attracted by the noise, came up and questioned her; then fetched the mayor, who found, after examination of her and her passport, that she was no impostor.

"You shall come home with me, poor child," said the benevolent lady, and for several days Prascovie remained with her friend, who supplied her with new shoes, clothing, and a little money.

Thus recruited, the brave girl started forth again; but her enterprise seemed more hopeless than ever. Snow often fell and delayed her, bitter cold prevailed, while a piercing wind howled across the vast steppes she had to traverse, yet she pressed on, obtaining hospitality in the villages through which she passed. Her method, on knocking at a cottage door, was first to ask for a piece of bread, then to appeal to pity by showing her fatigue, which generally led to an invitation to enter. Once within the house she would relate her story, show her passport, and win the belief that on a first encounter would certainly not have been accorded to her. She met with various kinds of treatment. Some peasants abused and sent her away; but even these would call her back on seeing her tears and evident distress. In the majority of cases she was favourably received.

One evening on arriving at a village she knocked at a cottage door, but was roughly sent away by the owner, an elderly man with an evil countenance. As she wandered down the road, hoping to find shelter elsewhere, she heard him shouting to her to come back, and after some hesitation she obeyed. Within his hut there was no one but an old woman, of still more unprepossessing appearance, and when the couple had her safe inside they locked the door and put up the shutters.

It was a gloomy interior, lit only by a few pine-boughs flaring in a hole in the wall, and Prascovie's heart sank as by the flickering light she saw the sinister gaze of her hosts fixed upon her.

"Where do you come from?" asked the old woman.

"I am on my way from Ischim to St. Petersburg."

"With plenty of money in your pocket, I'll be bound!"

"I have only eighty copper kopecks left."

"That is false!" shrieked the woman. "No one would start on such a journey with so little money."

Prascovie protested in vain; they scoffed at her, and she began to wish heartily that she could escape from their hands at the sacrifice of her remaining store. After giving her a few potatoes, the woman advised her to go to bed.

The term is rather figurative than literal, for in Russia peasants often sleep without undressing upon the stove that fills up a great part of their single room. Prascovie climbed upon this strange roosting-place, but left her pocket and travelling-bag below, that her hosts might ransack for themselves if they would.

With a heart beating violently, the poor girl tried to sleep, but it was in vain. She lay still, however, and soon heard her hosts whispering together.

"I saw the string of a little bag tied round her neck. She must have money in it. No one saw her enter, or knows she is here," were the fragments that reached her ears. Then came silence.

"They will murder me!" thought she. "They know they are safe from suspicion, for nobody will dream of asking them after me."

All at once the hideous head of the old woman appeared above the rim of the stove, scrambling up to Prascovie.

"Spare my life! I have no more money, indeed I have not!" begged the girl; but the hag answered nothing, and was not content until she had seen for herself that the little bag only contained a passport, and that Prascovie had no coins secreted about her.

The poor traveller was half-dead with fright. Locked up in a hut with robbers, neither of whom would apparently have much compunction in putting her to death, she gave herself up for lost; but after a time, finding that her hosts fell asleep and tormented her no further, she gradually dropped off into a deep slumber.

In the morning she was astonished to perceive that both husband and wife were much more cordial than the evening before. They declared they had only searched her because they believed her to be a thief; and that if she would count her money she would know they were honest. Prascovie was thankful when she was safe outside their hut, and did not stop to examine her store till she had put some miles between the gruesome couple and herself. What was her surprise to find that, besides the board and lodging they had given her, they had added forty kopecks to her purse! The girl's simple faith always accounted for their sudden change of behaviour by a direct interposition of her Heavenly Father, who, she believed, transformed their hearts towards her; and she liked to dwell on the story as a proof of Divine care. Another day, as she started for her day's journey at two in the morning, a band of fierce dogs set upon her. She actually felt the cold muzzle of one of them upon her neck, and was expecting he would kill her, when a peasant suddenly came up and drove them off. So all perils seemed smoothed away before her steadfast feet.

CHAPTER II.

The winter had now fairly set in, and a violent snow storm detained Prascovie nearly a week in a village on her route.

When the snow had hardened and the sledging season had begun, she would fain have started forth on foot, but the peasants in whose hut she was staying assured her it would be certain death, and she would never be heard of more if she ventured upon the vast frozen steppes without guide or conveyance. Just then a convoy of sledges bearing provisions to the town of Ekaterinburg for Christmas happened to halt in the village, and the drivers offered Prascovie a place.

Here was good fortune! but a difficulty presented itself. She had no sheepskin pelisse to protect her against the cold.

Thick fur is an absolute necessity for the traveller in those bitter regions. Prascovie wrapped herself in one of the mats used for covering goods, and journeyed thus for four days, but when the sledges stopped to change horses she lay benumbed, unable to stir, and with one cheek frost-bitten.

Clearly she could not continue in such a condition. The drivers of the sledges clubbed together and tried to buy her a sheepskin cloak, but no one in the lonely hamlet would part with this necessary of life, fearing lest he could not replace it. In the dilemma one of her companions hit upon an expedient.

"We will lend her our pelisses in turn, or she shall take mine once for all, and you must each lend me yours for a little while."

This was done, and Prascovie sped snugly over the snow towards Ekaterinburg, while one of her kind conductors gave up his coat at every verst.

At the foot of the eastern slope of the Ural Mountains lies Ekaterinburg, while a vast unvaried plain stretches away beyond the city. Prascovie was now four hundred miles from her home. How bewildered the peasant girl, penniless and roughly clad, accustomed to the life of a remote village, must have felt in the streets of the town!

"You had better apply to Madame Milin," quoth the landlady of the inn whither the friendly peasants conducted her; "she is a most benevolent dame, and will very likely help you."

Prascovie set forth to obey this advice, but went first to church. It was Sunday morning; she had never seen so many people gathered together at one time, and her strange costume and intense earnestness in devotion attracted some attention from the congregation. After the service a lady asked her who she was and whither she was going in the town. Prascovie told her.

"Madame Milin is not so benevolent as you suppose," said the stranger. "You had better come with me."

Dismayed and bewildered, Prascovie knew not what to do.

The lady, seeing her distress, said, "Well, I will show you her house: there it is, close by, but come with me if she does not receive you."

Prascovie knocked at the door, and inquiring of the servant "if Madame Milin were at home," discovered that the stranger, smiling behind her, was no other than Madame Milin herself.

"Oh, I knew Madame Milin *must* be good!" cried the girl, gratefully kissing the lady's hand. And the belief was justified, for her benefactress gave her a home during the whole winter, and taught her to read and write. Her parents imagining in the hopelessness of their perpetual exile that she could never rise to any higher position than that of a peasant drudge, had neglected to teach her anything.

Prascovie passed a happy winter in the society of benevolent, refined people, and the comfort of a well-to-do home, both of which advantages she enjoyed for the first time in her life. Her health, seriously shaken by the hardships she had undergone, was improved by care and nourishment; but her mission was never absent from her thoughts, and early in the spring she implored Madame Milin to let her set forth again upon her pilgrimage. Her patroness saw that the devoted daughter really possessed the "faith that can remove mountains," and did all she could to help her. She gave her letters of introduction to friends in St. Petersburg, provided for the needs of her journey, and placed her under the care of a merchant who was bound for Nijni Novgorod.

Prascovie and her conductor travelled northwards by water for some time, and then left the boat to cross the Ural Mountains, intending to resume their voyage on the other side when they reached the streams that flow into the Volga. Unhappily, the merchant fell ill on a mountain pass, and was obliged to remain behind in a little hamlet while Prascovie pressed on alone. She reached the European side of the mountains in safety, and then took passages in the cargo-boats trading to Nijni Novgorod. She had many rough experiences on her way. Once she was flung overboard, together with two other passengers, by the sweep of an oar, and narrowly escaped drowning, while the immersion added to a severe cold that she had never lost since the night in the forest.

At last the brave girl disembarked at Nijni Novgorod, the largest town she had ever seen, where she knew of no one to whom she could apply for shelter or help. Madame Milin had taken it for granted that she would have the merchant still with her as escort, and had charged him to make all necessary arrangements for Prascovie's journey to St. Petersburg; but she found herself alone and forlorn in the midst of a crowd. Here was a solitude more terrible to her than the solitude of the Siberian steppes. She was six hundred miles from Ekaterinburg, and had as yet only about half accomplished her journey to St. Petersburg.

Where should she find refuge? Above her on a hill stood a church and convent, whither she ascended to pray. The church seemed deserted, but from behind a grated screen came the sweet voices of nuns chanting the vesper hymn. The soothing strains thrilled and comforted the desolate girl as she listened.

When she went forth again the view from the church door arrested her attention. The rays of the setting sun were striking down upon a vast plain, where the waters of two great rivers, the Oka and the Volga, reflected the glowing radiance. The city, situated at the confluence of these streams, lay below her at the height on which she stood.

A feeling of oppression at the vastness of the scene and her own loneliness came over her; for the first time her heart failed her, and she burst into tears. She hurried back into the church, where a nun accosted her kindly, saying it was time to close the doors.

"Pray give me shelter for the night in your convent," implored Prascovie.

"We do not lodge strangers," answered the nun; "but our mother, the abbess, may give you alms."

"That I do not require," said Prascovie, showing a purse in which she kept the remainder of Madame Milin's gift. "I only beg for shelter this night."

The nun was touched with pity, and took the girl to the abbess, who gave her gracious permission to remain. She was quickly surrounded by the good sisters, who drew from her an account of all her adventures and the aim of her long and perilous journey. The effect that her simple story, told with unstudied eloquence, produced upon them was most impressive. They overwhelmed her with caresses,

and the superior obtained from her a promise that when her mission was accomplished she would take the veil. This had long been Prascovie's intention, and she soon fixed upon this convent as her future home.

But her journey was destined to be put off for awhile. The fatigue and exposure borne by the heroic girl produced their natural effect, and she was seized by an illness that confined her to her bed for many weeks, during which time the nuns nursed her tenderly.

On her recovery she was detained yet longer in the sisterhood. Between Nijni Novgorod and St. Petersburg extends a vast tract of level, low-lying country that is sometimes inundated in the summer by the melting of the winter snows, and that, in any case, Prascovie was not strong enough to traverse on foot, while her means were insufficient to allow her to take a private carriage. She therefore awaited the snow season, when, by the kindness of the lady abbess, she started in a covered sledge with other travellers for Moscow, two hundred and fifty miles further on her way. From the same friend she obtained a letter of introduction to a Moscow lady, who had influence at St. Petersburg.

Swiftly and uneventfully Prascovie sped over the snow towards Moscow, where she was at length kindly welcomed by the abbess's friend. This lady gave her a letter of introduction to a princess in the Russian capital, and provided for the final stage in her journey by securing for her a seat in the carriage of a merchant who was travelling thither.

In this luxurious and easy way Prascovie's pilgrimage, which had begun so roughly, was completed, eighteen months after her departure from Siberia. With indescribable feelings she entered St. Petersburg. Here, at last, she was within reach of the object of her heart's desire! But the wife of the merchant, her escort, in whose house she found a kindly home, showed not the slightest faith in the success of her mission to the Czar; and, in fact, a trifling circumstance enough delayed the accomplishment of her purpose.

It was February when Prascovie reached St. Petersburg, and the ice that all the winter long holds the River Neva in iron fastness was just on the point of breaking up. No one is allowed to cross at this time, and as the ladies of rank, to whom she had letters of introduction, lodged on the opposite bank, our heroine was obliged to put off her visit to them. In the meantime, she was advised to get a petition drawn up and to have it presented to the Senate by one of its members, a proceeding unlikely in itself to succeed, and rendered more so by the irregular manner in which the petition was framed.

With this useless document in her hand, the poor girl haunted, day after day, the steps of the Senate House. Timidly she saw the grand personages in uniform, armed with swords and gay with decorations on their breasts, pass and repass her. At first she dared not offer her petition to one of them, and when, at last, she ventured to do so, she was repulsed as a beggar. The only kindness she received was from an official who gave her a five-rouble note, but would pay no attention to her statement.

The floating blocks of ice on the Neva melted gradually away in the bosom of the flood, and the last obstacles in the way of the heroic daughter were soon to melt away likewise. Easter came; the spring sunshine gladdened all hearts; "Christ is risen," was on every tongue. Prascovie felt the reviving influence of the scene, and new hope arose within her. The bridge over the Neva was replaced by this time, and the merchant's wife drove her to the house of Mme. Milin's friend, Mme. de L—, to whom she presented her letter of introduction. "I had heard from Mme. Milin about you," said the lady; and her husband kindly interested himself in the case. He had a relative of influence at court, through whom he promised to appeal direct to the Emperor. This, he said, would be far more likely to be effectual than approaching the Senate with a petition. And Prascovie's letter of introduction from the abbess at Nijni Novgorod now gained her an invitation from the Princess T— to come and take up her abode in her palace. Success at last seemed near at hand.

CHAPTER III.

With a heart beating high in terror and in hope, Prascovie approached the magnificent palace of Princes T—. She curtsied low to the gorgeous lackey who opened the door, supposing that he was a senator of very high rank indeed.

The spacious, brilliantly-lighted *salon* into which she was ushered, with its groups of elegantly-dressed men and women scattered here and there, produced upon her a feeling of intimidation and awe; she had never seen anything like it before. Tremblingly she approached the princess, an elderly lady sitting at cards with three other personages, and fumbled for her letter of introduction.

All eyes were turned upon her; in her confusion she could not at once find the abbess's letter, and she heard laughing whispers from some of the younger guests. The nervous trepidation she endured was more formidable than many a bygone hardship by land or water; but the princess spoke kindly to her.

"You are a good girl and a devoted daughter. I will not forget you," said the great lady; and she signed to an attendant to take charge of her.

Prascovie was now installed in the palace, but found the life irksome and embarrassing, and seemed to come no nearer to the accomplishment of her heart's desire. She began to feel like a bird in a gilded cage.

At last release came. While she was staying with the merchant's wife on her first arrival at St. Petersburg, the Chancellor of the Empress Dowager had heard of her, and he now sent to inquire further into her case. She repaired to his house, charmed and astonished his wife and himself by the story of her adventures, and obtained a promise that he would present a request on her behalf to his Imperial mistress.

The answer was favourable beyond Prascovie's hopes, for the Empress signified a wish to see her at six o'clock the same evening. When the Chancellor made this known to the girl, she grew pale and faint; then, raising her eyes to heaven, she cried, "My trust has not been in vain!"

"What would my father say now, if he knew before whom I am going to appear? How delighted he would be!" she exclaimed, as she drove that evening towards the Imperial Palace with the Chancellor. She was still in her ordinary simple dress, and had no knowledge whatever of court etiquette, but with modest bearing she presented herself before the Empress-mother in her private apartment, and told her story with sincerity and homely pathos.

The Empress was deeply touched. Prascovie dwelt upon the justice of her cause, and asked, not the pardon of her father, whom she believed to be innocent, but the revision of his sentence.

Her Majesty promised to bring the case before the Czar, and with words of encouragement dismissed her, first giving her a purse of two hundred roubles.

"She has been to court!" ran from lip to lip that evening in the palace of Princess T—. Prascovie felt herself suddenly placed upon another level; the guests who had not dreamt of speaking to her while she was only a humble, unnoticed *protégée* of the great lady, now showed lively interest in her concerns. As for her own feeling, she thought she must have been dreaming when she awoke the next morning, until she convinced herself of the truth of her good fortune by looking at the money the Empress had given her.

This was only the beginning of success. A few days afterwards, the Empress-mother caused a pension to be assigned to her, and promised herself to introduce her to the Czar and reigning Empress. It would be difficult to describe Prascovie's emotions when the day for this interview arrived. She was about to enter the presence of an omnipotent sovereign over vast domains, whose decree was life or death to multitudes, and upon whose word hung the future of her father and mother. She was conducted through hall after hall of the imperial palace, all vast and splendid, till in a small room at the end she found the Emperor and Empress.

Here was, at last, the man, to supplicate whose pity she had travelled nearly two thousand miles and braved incredible hardships!

Fortunately for her, Alexander I., Paulovitch, who had now succeeded his father, Paul I., was gracious in his manner, generous in his impulses. In the shrinking girl before him he saw an example of intrepid resolve and daughterly affection he could not but appreciate. Perhaps, also, he was touched by the thought that the humbly-clad suppliant, with her imperfect education, would under ordinary circumstances, have been leading a soft, luxurious life as a maiden of rank and fashion at St. Petersburg.

The Empress spoke kindly to Prascovie, and bade her state her case, which

she did in her usual modest, gentle manner, pleading for the revision of Lopouloff's sentence.

"Your request is granted," said the Czar; and, turning to an attendant, he ordered that a present of five hundred roubles should be given her. Prascovie's heart was too full to utter thanks as she withdrew.

The Minister of the Interior was ordered to investigate Lopouloff's case, and meanwhile Prascovie explored the wonders of St. Petersburg. She was taken by two ladies of the court through the imperial palace, and did not recognise the apartments through which she had passed on her audience of the Czar, so great had her preoccupation been on that occasion. On being introduced into the throne-room she was overcome with emotion.

"That is actually the Emperor's throne, that I feared so much when I was in Siberia!" she murmured; and the thought of the wonderful manner in which she had at last been confronted with the symbol of that dread power caused her to fling herself on her knees before the empty throne and to kiss the steps, while her eyes streamed with tears.

At last the Minister himself informed her that the ukase for her father's release was despatched to Siberia, at the same time asking her if she had any further favour to demand for herself. She thought at once of the two prisoners who had encouraged her project and tried to help her with their little all.

"If His Majesty will grant me anything further after having overwhelmed me with happiness by my father's release," said she, "I would beg for freedom for two friends of mine." She then gave the names of the prisoners to the Minister, who obtained the Czar's consent to the unselfish request. The decree for their liberation was despatched a few days after the other.

And now Prascovie found that her success made her a sudden favourite in the society of St. Petersburg. Everyone was talking of the brave girl who had come so far and dared so much, and her head might easily have been turned by praise and popularity. But she seems to have been of a singularly transparent and ingenuous character. Gentle, firm, and of sound sense, she remained unspoiled in the midst of flattery, and took a naive pleasure in listening to the conversation of people wiser than herself. She had never forgotten her vow to enter upon a conventual life, and shortly after the despatch of the decree for her father's release she left St. Petersburg for Kiev, where she took the veil.

From Kiev she travelled to Nijni Novgorod, intending to establish herself in the convent there with her friend, the abbess; and as that town is on the high road from Siberia, she hoped to obtain news of her father.

After Prascovie's departure, Lopouloff and his wife had become intensely anxious about her fate, and as months rolled on their depression increased. They gradually lost all hope of seeing her again. The accession of Alexander I., which set many prisoners free, brought no news of deliverance to the unhappy little colony at Ischim; and the poor father and mother, bereaved of their only child, sunk into wretchedness and despair.

One day a special courier was seen coming along the road towards the officer's hut. "He will not stop here; all our good fortune is for ever gone," thought Lopouloff. But the courier paused before his door, and handed him a special missive. Could it be? Yes, it was the Czar's order for his release, enclosing a sum of money for his expenses to Central Russia. Almost fainting with joy, unable to believe the good news, Lopouloff and his wife fell on their knees and gave thanks to God for the marvel their daughter had accomplished.

And now all was stir and excitement in the little village. Congratulations on the possession of so heroic and persevering a daughter, as well as on the prospect of freedom, were lavished on Lopouloff by those whose own exile appeared all the more bitter by contrast with their comrade's good fortune. Especially were his two poor friends dejected at the thought of his leaving them, though they unselfishly strove to rejoice in his happiness. He tried to comfort them by a gift of part of the money he had received for his travelling expenses, but they refused to receive it.

The last evening before Lopouloff's departure had come. The two prisoners spent it with him; they felt they could not bear to see him and his wife depart from Ischim on the morrow, and bade them a heart-broken farewell when they parted for the night. For with the disappearance of the parents of Prascovie

a lingering spark of hope that they too might be released died out in the breast of the unfortunate exiles. They returned in deep dejection to their own wretched hut, and sank upon a bench in hopeless silence.

Suddenly, voices and steps were heard outside; a thundering knock came at the door, and a well-known voice cried, "Open! open! my friends. Pardon has come for you also!"

Unable to believe the good tidings, the exiles rushed to admit the messenger who, guided by Lopouloff, and escorted by a crowd of inhabitants, bore the decree announcing their release. A letter from Prascovie, containing two hundred roubles and explaining all, was enclosed. The scene that followed is indescribable, for the revulsion from despair to joy was almost more than the prisoners could bear. Loud were the praises on all hands of the devoted daughter and the faithful friend.

And now the true story of Prascovie's adventures is nearly at an end. When she arrived at the convent of Nijni Novgorod, her father and mother were already there to meet her, though she knew it not. "What news have you of my father?" she cried to the abbess. In reply, she was led into the waiting-room, where Lopouloff stood with his wife. Passionate joy, unspeakable gratitude, marked the meeting between the parents and their child.

Prascovie did not survive for many years the happy completion of her mission. The hardships she had undergone, especially her exposure to cold, had planted within her the seeds of consumption. During these last years she is thus described:—

"She was of medium height but shapely figure; her face, surrounded by a black veil which concealed her hair, was of a pure oval. She had deep dark eyes, an open brow, a certain melancholy tranquillity in her glance, and even in her smile."

From all around her she won the tenderest regard, and it was a source of much grief when the fatal nature of her illness was known. After lingering in a gradual decline for a few years, she passed away on the 8th December, 1809. So peaceful was her end that the nun who was kneeling beside her knew not when she ceased to breathe. Prascovie was gone, but she left behind her the remembrance of filial tenderness, steadfast courage, that will endure.

LILLY WATSON.

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[Vol. II.

WORDS TO TEACHERS.

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(Continued from page 75.)

IN speaking of Teachers it may be of advantage to turn over in our minds the different methods which different Teachers adopt in the treatment of their boys. We might divide Teachers into several classes.

The first specimen—somewhat of a rarity now-a-days—is the thrashing Teacher. This is the man who brings out his cane when the school-bell rings, and “sticks” to it till school is over. With him the rod, like a quack medicine, is a universal remedy—a cure for all evils, great and small. An outbreak of the grossest impertinence or a simple case of an unlearned lesson is to be cured, says the quack, by an outward application of this panacea. The medicine has its virtues, no doubt, especially in the case of junior boys, but a constant use of the cane—a cut here and a cut there—is a degradation to the scholastic profession, and is brutalizing in its effects. There are some men who exhibit a positive relish in acting the butcher towards their class; who pass their sentences of “six cuts” or “twelve cuts,” as the case may be, in the most judge-like style, and then act the executioner of their own decrees with the most unfeigned delight. This “reign of terror” system tends to degrade both master and boys. The master degenerates into an unfeeling tyrant, whom the pupils committed to his guidance hold in such dread that they shrink from his approach, and would never dream of coming for sympathy and advice to the very man whose duty it is to give it. And it is a fact, proved, I am sure, by experience, that the cane of a master and bullying amongst the boys go hand in hand. As we remarked in a former article, boys are always inclined to copy their

master most exactly, and, if they are being constantly treated in school with examples of the strong tyrannizing over the weak, they will be doing the same thing with interest amongst their juniors in play-time.

A second specimen—and a very common specimen this—is the sarcastic Teacher—the man who rules his class with what he thinks are smart sayings. It is by no means difficult to appear witty before boys; they are always ready to laugh if a master cracks a joke; and these sarcastic Masters endeavour to govern their classes by passing stupid jests on the boys that need correction. Low and unfeeling the jests often are, darkly alluding, perhaps, to the sacred subjects of race, or parentage, or poverty; but the other boys laugh, the offender is checked, and the master thinks himself a witty fellow, and his method a splendid success. Ah me! If the offence was that of talking in class, the offender has been silenced, no doubt, by that brutal jest and that unfeeling laugh; but there is a piteous blush of shame on his cheek, and a cruel wound has been inflicted on his heart that even time itself will, perhaps, never cure. And if the sin is an imperfect lesson—well, satire, as a rule, will have but a poor effect then; for the offender becomes afraid even to try his best, from fear lest each fresh mistake, as it occurs, should expose him to the further assaults of his enemy's spiteful tongue. The whole class, too, are being gradually but surely trained by such a master in this contemptible art of wounding their fellows with the sharpest of edged weapons—a spiteful tongue. There are times, no doubt, when a smart scolding will be the best medicine for a long-standing complaint, but save us from the man who has recourse to this poisonous drug on every occasion.

A third specimen is the bullying Master—the man who directs his class much in the same way that a presuming sergeant would give orders to a set of turbulent soldiers. This kind of master forgets that his boys are students, the sons, perhaps, of gentlemen, born and bred in a much better position than he himself. A blind foreigner, not understanding his language, might imagine himself in the cotton fields of the New World, with the slave-driver before him urging on the poor black laborers to redoubled toil. A continual scolding in a roaring tone is the order of the day. The boys are teased beyond bearing; whatever they do, whatever they say, they are sure to be wrong. These noisy teachers as a rule have but very little learning; like tomtoms they are noisy because they are empty; and in any case the nerves of their pupils are unstrung by their teaching; thought is impossible in such a turbulent atmosphere; confusion reigns within

and without; rudeness and violence are rife; and the advantages of "littoral ease and quiet" are unknown.

The weak-minded Teacher is a dreadful specimen to deal with. This is the man who, instead of ruling his pupils, is ruled by them. He sets impositions to offending boys, but excuses the penances as soon as he is asked. The whole class, courageous before their master's weakness, go on from bad to worse; the poor master is in despair; the rogues laugh at his threats of punishment, and he wonders why his boys are beyond his management. Their lessons, too, are never learned; he scolds them for their neglect; he declares that he will keep them all in on a half-holiday to learn them, but he never does, so their brains are not the heavier for his teaching. Poor fellow! his class are a sad trouble, and he finds it hard work to deal with his boys. He is consoled, however, with the idea that they all like him, and that, never mind his shortcomings, he is, at any rate, as popular as a master could be. But there comes a day of reckoning at last—examination day; and his boys all fail. They don't thank him for his weak-mindedness then; they don't thank him for having excused their unlearned lessons then. "Mr. So-and-So never taught us" is their complaint they turn on their master, and his dream of popularity is over. He is a failure, and he begins over again with a determination of more firmness in the future. But to change his tactics now is harder than he imagines.

A most unpleasant specimen is the "reporting Teacher"—the man who shifts all responsibility from his own shoulders to those of the principal of the school—the man who attempts to govern his class with the eternal threat "I'll report you." The boys dislike him, and call him a sneak; the Principal dislikes him for troubling him with his petty complaints; and the method is a complete failure, inasmuch as the lads, instead of being punished on the spot for their school-boy offences, altogether escape their deserts through natural forgetfulness on the part of the Principal to attend to his subordinate's continual reports.

It would be well, perhaps, for us who are Teachers to examine ourselves as to whether we are numbered in any one or more of the ill-favoured classes mentioned above. The true Teacher belongs to a class for which we can think of no better name than that of gentlemen. Commend us to the Teacher regarding whom his boys say amongst themselves "Mr. So-and-So is a gentleman." If they call him by that honourable name, you may be sure that he is a man who has won their respect. And the man who has won the respect of his

boys is a true teacher indeed. For their respect is a proof that he thoroughly knows what he professes to teach, and that, although he is no lover of the rod, he is not afraid, when any rare occasion makes it necessary, to chastise even the biggest boy in his class. It is a proof, too, that, although he is no professor of sarcasm or of noisy abuse, he can bring sharpness to his tongue and a certain "soft loudness" to his voice, if lying or cheating or any other mean conduct comes under his notice. It is a proof, moreover, that, although his heart is always full of sympathy for the young people with whom he has to deal, and his ear ever ready to listen to reason from their lips, there is no weak-mindedness in his conduct, that he will never listen to a petty and shifting excuse, but will do his duty unflinchingly to those whose future depends so much upon his honest endeavours. And it will prove, finally, that, although he is no tale-bearer to head-quarters, he is not above consulting the Principal of his school for the good of his boys, and that he has won the confidence and the esteem of all who know him.

GLYN BARLOW, B.A., (London.)

(To be continued.)

MADRAS MATRICULATION ENGLISH TEXT FOR 1886.

NOTES ON

THE "HEROINE OF SIBERIA."

BY

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(Assistant Master, Boys' High School, Lahore.)

262. *When in any perplexity*—When (she was) in any perplexity; when she was puzzled how to act.

263. *Practice*—Custom, habit.

Note that the noun is spelt *practice*, but the verb *practise*.

264. *Prognostics*—Lit. that by which we know something beforehand. From Gr. *pro*, before, and *gignosko*, I know. A sign by which we may judge of the future, an omen.

By noticing certain occurrences, Prascovie's mother used to profess a knowledge of the future.

264. *Means*—Like *news*, *gallows*, and *small-pox* (*small-pocks*) are really plurals, but, like these words, is now treated as a singular. *Means* = method; it is contrasted with *end* = result, or aim; as when we speak of adopting certain means (methods) to gain a certain *end* (object, result.)

265. *This purpose*, i.e., to foretell what would take place in the future.

265. *Contemplated without censure*—One of her plans for discovering what would happen was such that we cannot think about it without blaming her; this was her habit of using the Holy Bible for so foolish a purpose.

266. *At hazard*—At random; without searching for any particular passage. *Hazard* was originally a term used in gambling. It is derived from the Spanish *azar*, a die, or throw of the die.

267. *Extract*—Note the reason why this word is used. To *extract* is to get out with difficulty. So a person trying to get help in this way from a text had to force a meaning into the text.

267. *Caught her eye*—Attracted her attention.

268. *Analogous*—Resembling; bearing an *analogy*, i.e., resemblance, likeness.

269. *Sort of*—Not really a prophecy (foretelling), but something like a prophecy. She had to understand or explain the passage in such a way that it might help her to make some decision. (See note on *extract*).

270. *Holy Writ*, i.e., the Holy Writings, or Scripture; the Bible.

271. *Propounding*—L. *pro*, and, *pono*, I place; to place before, or in front of; to offer for consideration. Here used in the sense of *explaining*, or rather, suggesting what he thought to be the correct explanation.

272. *Slavonic*—Belonging to the Slavonic language. The Slavonic (from which *Russian*, *Polish*, &c., are derived) belongs to the Aryan family of languages, like the Indic, Teutonic, and Hellenic.

274. *Partly*—A portion of the "wretched evening" had been spent in this manner.

277. *Please to open* = Let it please you to open.

280. *With eagerness*—Showing how firmly she believed in this superstitious practice of "picking for texts."

283. *Hagar*—A slave in the family of Abraham, the founder of the Jewish race.

285. *Striking*—Remarkable.

287. *Appositeness*—Fitness, appropriateness. The passage seemed like a message from God to Prascovie.

288. *Unreasonable divinations*—Divination (from L. *deus*, a god), means the practice of foretelling future events by certain ceremonies, &c. This is *unreasonable* because it is not likely that God would gratify our curiosity about the future, especially in this peculiar manner. The Latin poet Horace, also tells us it is not permitted by the gods that we should know our future. This superstition, however, was indulged in by some great men,—John Wesley, for instance. Other books besides the Bible have been used. The writings of Virgil, another Latin poet, have been extensively employed for the purpose and the custom of opening the book at random, and reading the first passage that attracts the eye, is called *Sortes Virgilianæ*, or telling one's fortunes from Virgil. The following instance is remarkable. Lord Falkland once proposed in jest to Charles I. that they should consult Virgil. The king opened at the lines which have been thus translated :—

"Scourged by a savage enemy, an exile from his son's embrace,
So let him sue for aid, and see his people slain before his face :
Or when to humbling peace at length he stoops, be his or life or land,
But let him fall in manhood's strength, and welter tombless on the sand."

289. *Interrogate*—Ask questions of; *deign*, condescend.
294. *Unimpaired*—Not impaired, not weakened.
297. *Clandestinely*—Secretly; without warning.
298. *Visibly giving way*—She was seen getting more and more ill through disappointment at not being allowed to go.
300. *Perchance*=per-chance, by chance, perhaps. *Perhaps* is the same word; *hap* means chance or luck. So *to happen* means to come by chance; *hapless*, without hap, unlucky; *happy*, having good luck. *Perhaps* is used in ordinary conversation, *perchance* is generally reserved for poetry or elevated writings.
300. *Altogether*, i.e., by death.
301. *Solicitations*—Requests.
302. *Devotion*, from *de*, *votum* to make a vow, literally means setting apart by a vow; hence, an act of religion; worship; hence, eagerness.
- Here Prascovie is *devoted* or ardently attached to her scheme. She was as eager to go to St. Petersburg as if she were anxious to perform some religious vow.
308. *Providence*—God, who provides for, and controls the affairs of men.
311. *Dispose*—Lit. to set in order; hence to direct, guide, incline.
314. *Sentinels*—Soldiers on guard.
- Avenue*—Approach; way of approaching.
317. *To present you*—You are so poor, so meanly dressed, and so friendless, that no one will have the courage to take you to the Emperor.
318. *Force*—the strength; truth.
319. *Presentiment*—See note on line 239.
325. *Augment*—To increase, make larger.
326. *The feast of the Holy Virgin*—The festival day of the Virgin Mary, the mother of Christ.
334. *Most obscure*, i.e., in rank and title. Lopouloff was too proud to be very intimate with his equals.
339. *Against all hope*, though everybody said it was hopeless.
344. *To take leave*—To say goodbye.
350. *Generous offer*—Because though the amount itself was so small, it was all their money they had for their own living.

PALGRAVE'S STUDENT'S TREASURY OF ENGLISH LYRICS.

NOTES ON

"THE BURIAL OF SIR JOHN MOORE."

(Calcutta University Entrance Examination English Course for 1887.)

By WILLIAM E. MILLER, B.A., F.S. Sc., (LONDON,)

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Lyric Poetry—The term *ode* signifies in Greek, the same as song or hymn, and Lyric poetry implies, that the verses are accompanied with a lyre, or musical instrument.

Ode—All odes may be considered under four denominations, viz.,—Sacred odes, Heroic odes, Moral and Philosophical odes, and Festive and Amorous odes.

The principal English ode writers are Milton, Pope, Dryden, Gray, Collins, Akenside, Cowley, and Gay.

Charles Wolfe, an Irish divine and a poet of great promise, whose name has been immortalized by this short poem, was born at Dublin in 1791. He was educated at High Abbey School, Winchester, and at Trinity College, Dublin. He obtained the curacy of Ballyclog, which he exchanged for that of Castle Canfield. He died of consumption in 1823.

"*The ode on the death of Sir John Moore*" acquired much posthumous celebrity, and was pronounced by Lord Byron, "The most perfect ode in the language."

Burial—From A.-S. *burg*, *byrgan*, Ger. *bergen*, to keep, cover, hide.

Sir John Moore—This eminent soldier was born in Glasgow in 1761. In 1808, he received a command in Spain, which had been invaded by the French. At the close of that year, he was obliged to retreat towards the sea, and fell back on Corunna, where he expected vessels to transport his soldiers to Britain. But the vessels had not arrived, and on the 16th January 1809, he was attacked by the French. Notwithstanding the superiority of the French in numbers, they were signally defeated, but Moore was mortally wounded. His body wrapped in his cloak, was buried on the ramparts of the old citadel. His death excited great sensation throughout the country. The House of Commons ordered a monument to be erected for him in St. Paul's Cathedral; and Glasgow, his native city, also erected one to his memory. Marshal Soult, the French general in command of the forces opposed to those under Sir John Moore, with a noble feeling of respect for his valour, raised another monument to his memory.

Corunna—A sea-port of Galicia, one of the Basque provinces in the north-west of Spain, is situated on a fine harbour and bay. Long 8° 19' W., Lat. 43° 20' N.

The incident narrated in this poem occurred during what is historically known as the Peninsular war. In 1808 Buonaparte having seized the kingdoms of Portugal and Spain, the Spaniards called upon England for help, which was promptly given; and thus began the Peninsular war, an obstinate struggle for six years, in which Sir Arthur Wellesley, though not as yet opposed to Buonaparte himself, triumphed over many of his generals.

A funeral note—The sound of a band at a soldier's funeral. Lat. *funus*, a funeral.

Corpse—Lat. *corpus*, a body, also written *corse*.

Not a soldier discharged his farewell shot—It is customary, when a soldier is buried, for his companions in arms, to fire a farewell volley over his grave.

Hero—Lat. *heros*, a demi-god, a hero.

Darkly—That is with imperfect light.

Ly is now by far the principal ending whereby adverbs are derived from adjectives and participles.

Dead of night—*Dead*, when used in such a construction as this, signifies the period of profoundest inertness, repose, or gloom.

Soils—Dutch *sode* or *soode*. Earth mixed with the roots of grass.

Bayonets—So called because first used at Bayonne, a town in France.

Struggling moonbeam's misty light—Although the moon was shining, yet the cloudiness of the weather from time to time obscured the moonlight.

Lantern—Lat. *lanterna*, or *laterna*, a lantern.

Coffin—Lat. *cophinus*, the case in which the human body was put in the ground.

Not in sheet nor in shroud—Neither winding-sheet nor grave clothes were used.

Wound—The past tense of *wind*, to enfold. It has another form *winded*, which is rarely used.

Martial—Military.

The morrow—The British troops were to embark on the following morning.

Hollowed—A.-S. *hol*, an empty space. Excavated.

The billow—The ocean. An example of the figure of speech called *Metonymy*, where the part is used to represent the whole. A billow, that is a wave, is made to stand for the ocean which contains all the waves.

Lightly they'll talk—They will speak of the departed without dejection.

Upbraid—A.-S. *upgebredan*, to reproach.

Our heavy task—Our mournful task.

Random gun—Guns fired without aiming at any place in particular. From O. E. *random*, A.-S. *randum*, violence.

Sullenly firing—Firing with obstinacy, without thought of yielding.

Gory—A.-S. *gar*, a spear. Covered with blood.

Carved not a line—Did not carve or inscribe his name, &c., on a tombstone.

"THE BATTLE OF THE BALTIC."

Thomas Campbell—The author of this poem, a famous poet and literary man, was born in Glasgow, in the year 1777. He was educated at the High School and the University of his native town, and distinguished himself at the University by his excellent translations into English verse, of passages from the Greek poets. After having been tutor to several young men, he gave up teaching, and went to Edinburgh with the resolution to devote his life to literature. He brought out his poem "The Pleasures of Hope" at the early age of twenty-one; and this work at once made him famous. From this time his career was one of unbroken literary success. His chief fame rests upon his ballads—noble lyrics—which are inspired by a strong and stirring music. Perhaps his best lyric is the poem entitled "Ye Mariners of England," which was written in the year 1800. "Hohenlinden,"

"Lord Ullin's Daughter," and "The Battle of the Baltic," are also well known to every one. This last poem was written in honour of Nelson's victory over the Danish fleet near Copenhagen in 1801. Campbell's finest long poem is his "Gertrude of Wyoming"—a tale written in the nine-lined Spenserian Stanza. He was elected Lord Rector of the University of Glasgow in 1827—an honour which he received from the members of that University three times. He removed to London in the year 1840, but spent the last years of his life at Boulogne, where he died in 1844. He was buried in Westminster Abbey; and his bust now stands in the Poets' Corner.

"*The Battle of the Baltic*"—In the wars with the first Napoleon, at the beginning of the present century, Denmark and Sweden appeared to be on the point of joining Napoleon in a confederacy against England. England resolved to anticipate the formation of any such confederacy. "Accordingly," says Dr. Collier, "a fleet of eighteen sail under Sir Hyde Parker and Admiral Nelson, left Yarmouth Roads for the Sound, on the 12th March, 1801. Sir Hyde was a nervous man, but his colleague was made of sterner stuff. Nelson undertook to reduce the batteries of Copenhagen with ten ships, and having got twelve, proceeded to take soundings, and to lay down buoys in the winding channel which led up to the Danish position. In the hottest of the cannonade, a signal fluttered on the topmast of Parker's ship, commanding Nelson to cease firing. The hero turned his sightless eye towards the bunting, and went on with the attack, desiring his own signal for 'closer action' to be nailed to the mast. At about two in the afternoon, the Danish fire slackened and ceased. Some of the ships that had struck fired on the boats that were pulling to take possession of them, upon which Nelson wrote as follows to the Crown Prince:—"Vice-Admiral Lord Nelson has been commanded to spare Denmark when she no longer resists. The line of defence which covered her shores has struck to the British flag; but, if the firing is continued on the part of Denmark, he must set on fire all the prizes that he has taken, without having the power of saving the men, who have so nobly defended them. The brave Danes are the brothers, and should never be the enemies of the English." This humane and dignified remonstrance had its effect. A flag of truce came from the shore, and next day the victor landed to tell the Crown Prince why the battle had been fought."

A synopsis of the Life of Horatio Nelson—Born in Norfolk, 1758; taken to sea by his uncle in his twelfth year, 1770; sails in the expedition to discover a north-west passage, 1773. The French war having broken out, Nelson sails to the Mediterranean as Commander of the *Agamemnon*, 1793; loses his right eye at Calvi, in Corsica, 1794; and his right arm at Santa Cruz, in the Azores, in 1798. Shatters the naval power of France and her allies by such victories as St. Vincent (1797), the Nile (1798), Copenhagen (1801), and Trafalgar (1805), where he was killed, aged 47. He had been made a Baron in 1798, and a Viscount in 1801. He was England's greatest sailor, and he made England mistress of the seas. Dauntless courage and determination and a strong sense of duty were his most notable characteristics.

The North—The maritime confederacy formed in 1800 by Russia, Prussia, Sweden, and Denmark, called also the northern league.

The lighted brand—The match or fuse used to discharge the guns.

The Prince of all the land—The Prince Regent of Denmark, called the Crown Prince, who commanded the Danish forces. He had been declared Regent in 1784, when his father, Christian VII, became deranged. In 1801 he succeeded to the throne as Frederick VI.

Leviathans—Heb. *liyāthān*, properly an animal bent, twisted in curves, from the Arabic *lawā*, to bend, wind, twist. The leviathan is an aquatic animal described in the book of Job, xli., and mentioned in other passages of Scripture. It sometimes is used to mean a whale. Here it = huge monsters.

Afloat—In a floating state.

Bulwarks—O. H. Ger. *polon* to roll, hurl, and Ger. *werk*, defence. It here means the sides of the ships above the upper deck—the ships themselves—a part taken for the whole.

Brine—A. S. *bryne*, a burning salt liquor. Brine is here a poetical adaptation for the salt sea.

By the chime—Lat. and Ital. *campāna*, bell, whence Italian *scampanare*, to chime. By the bell: Ships carry large and small bells on which the hours are rung.

Flushed—Became animated with joy.

Anticipate the scene—Lat. *ante*, before and *capere*, to take. Get first to; be the first to commence the battle.

Her van—Fr. *avant*. The front line or foremost division of a fleet either in sailing or in battle.

Adamantine—Gr. *a*, not, and *damas*, to subdue. Very hard (literally), that cannot be subdued.

Spread a death-shade round the ships—The shade was caused by the smoke from the gun, when it was fired.

Hurricane eclipse—Hurricane is originally a Carribbean word signifying high wind.

Eclipse from Gr. *ekleipsis*, properly a forsaking, falling. An eclipse is an interception or obscuration of the light of the sun or moon, or other luminous body.

The idea which probably prompted the words was that the scene resembled, from the obscuration of the sun by the powder smoke, an eclipse accompanied with a hurricane.

Havoc—W. *hafog*, devastation, allied with A. S. *hafoc*, a hawk, a cruel and rapacious bird.

Slack—Poetical for *slacken* = abate.

Boom.—An example of Onomatopœia, i.e., the use of a word whose sound corresponds to the sound of the thing signified.

They strike the shattered sail—Sail for colours. When a ship wishes to surrender, she hauls down her flag; this is called "striking her colours."

Conflagration—Lat. *con* and *flagrare*, to blaze.

As he hailed them over the wave—As he called out loudly to them. Nelson did not 'hail' them; but he wrote to the Crown Prince. See note on "The Battle of the Baltic."

Ye are brothers—Referring to their common Teutonic origin. Ye, the duplicate form of *you*, is employed generally by poets for rhetorical purposes, for elevation. When used ordinarily, it is expressive of familiarity.

Submission meet—Suitable submission.

That he gave her wounds repose—Nelson's generous conduct towards the wounded Danes.

Death withdrew his shades from the day—The battle commenced at ten o'clock and finished at two. The withdrawing of the shades was the clearing way of the smoke when the battle was over.

Looked smiling bright—A predicate adjective. Smiling most probably is intended for an adverb, *smilingly*; or the passage may be read, 'the sun looked bright and smiling.'

Old England—Old is used as a term of endearment.

By the festal cities blaze—Great victories are frequently celebrated by illuminations.

Full many—Full is an adverb. Full many = a great many.

Many—(O. E. *maneg*) contains the root *manag*, a nasalized form of *mag* (mah).

Wild and stormy steep—Wild and stormy precipice.

Elsinore—Or *Elsineur*, a seaport of Denmark on the east coast of the island of Zealand. Long. 12° 35' E., Lat. 56° 0' N.

The gallant, good Rion—Captain Rion, who fell in this action, and who was styled by Lord Nelson "the gallant and the good."

The mermaid's song—Mermaid from Fr. *mer*, Lat. *mare*, the sea, and *maid*, is said to resemble a woman in the upper part of the body, and a fish in the lower part. They correspond to the Syrens of the ancients. Shakespeare in many of his characters talks about mermaids. Thus, in the "Comedy of Errors," Antipholus of Syracuse says:—

"Oh, train me not, sweet mermaid, with the note!"

And in another place:—

"I'll stop mine ears against the mermaid's song."

Condoles.—Lat. *con* and *dolere*, to feel pain. Sympathizes.

TEST QUESTIONS.

The following will be found a useful exercise on the above:—

I. Write an account of the Battle of the Baltic so as to make clear all the allusions in the poem.

II. Explain the phrases:—

- "The might of England flashed to anticipate the scene."
- "The havoc did not slack."
- "They strike the shattered sail."
- "Death withdrew his shades from the day."
- "The fires of funeral light died away."

III. Point out any words in the poem that are peculiar to the language of poetry. Give their equivalents in prose.

IV. Parse the words in italics in the following lines:—

- "By each gun the lighted *brand*,
In a bold determined hand."
- "Let us think of them that sleep
Full many a fathom deep."

V. Explain the parts of the following words that are in italics:—

Afloat; *anticipate*; *adamantine*; *conflagration*; *withdrew*; *tidings*; *condoles*.

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course for 1887).

BY

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CHAPTER III.

(Continued from page 183.)

"Pity!" exclaimed Nelson: "Pity! course."—Put into indirect narration this would read: Nelson exclaimed 'Pity!' Did he say "Pity?" He (i.e., Nelson) should live to be envied, and to that point he meant to direct his steps.

Nelson's meaning was that instead of being an object deserving of pity for his misfortunes, he should, before he died, be envied for his triumphs.

Court of Admiralty.—See note at page 88.

He went on shore under a protection for the day from the Judge.—He went ashore on the understanding that he would not be subject to arrest that day.

To indemnify him.—(Lat. *in*, not, and *damnificare*, from *damnum*, damage or loss, and *facere*, to make.) To secure him (the Marshall) against the consequences of wrongfully arresting Nelson.

President of Nevis.—(Lat. *præsidere*, to sit before or in front of). The Governor of Nevis.

Singular generosity.—Unusual magnanimity.

Most of the counsel.—(Lat. *consilium*, advice). Nearly all the barristers.

Counsel as here used is a plural noun and the equivalent of *counsellors*. It also means the advice offered by a counsellor.

A memorial.—(Lat. *memor*, mindful). A memorial is a written representation of facts made to a legislative or other body.

In another sense it means anything intended to preserve the memory of a person or an occurrence. As an adjective, it signifies anything preservative of or retained in memory.

The Register Act was framed.—The Register Act was drawn up and passed into law.

The Register Act was an Act which provided for the encouragement of shipping and navigation. It received its name from the circumstance that under its provisions all ships sailing under the British flag had to be registered. It was passed into law during the reign of George III. in 1788.

The Treasury.—That department of Government which controls the management, collection, and expenditure of the public revenues. Sometimes "The Treasury" is used to mean the officers of the Treasury Department, also called Lords Commissioners, consisting of the First Lord of the Treasury, or Prime Minister, the Chancellor of the Exchequer, and three Junior Lords. From Gr. *thesauros*, a treasure.

"*Had they known all.....accuse myself of.*"—Changed into indirect narration would be: He said that had they known all, he did not think they would have bestowed thanks in that quarter and neglected him. He felt much hurt that, after the loss of health and risk of fortune, another should be thanked for what he did against his orders. He either deserved to be sent out of the service, or at least to have had some little notice taken of what he had done. They have thought it worthy of notice and yet have neglected me. If this was the reward for a faithful discharge of his duty, he should be careful again. But he had done his duty, and had nothing to accuse himself of.

Bestowed thanks in that quarter.—i.e., sent their thanks to the Admiral.

Sent out of the service.—Dismissed from the navy.

Wooing the niece.—Cultivating the acquaintance of, with the ultimate intention of marrying; courting.

Physician.—Gr. *plaxis*, nature.

Good God.—An exclamation of surprise.

Exclamations are omitted in indirect narration; their place being supplied by some verb equivalent in meaning.

Great little man.—A seeming paradox. But the adjective *great* refers to Nelson's greatness of mind, while *little* represents the littleness of his stature.

Winning.—Attractive.

Easily susceptible of attachment.—Capable of being easily impressed with affection.

Prince William Henry.—The Duke of Clarence, and third son of George III, afterwards William IV, King of England from 1830 to 1837, and uncle of Queen Victoria. Prince William Henry served nearly all his time as a midshipman in the West Indies and off the coasts of Nova Scotia and Canada, and first became acquainted with Nelson on board the *Harfleur* under Admiral Lord Hood.

To give away the bride.—In Christian marriages, the bride is formally given away to the bridegroom by her father or some other notable personage.

"*Yesterday,*" said one of his naval friends *service.*—Turned into indirect narration this would be: one of his naval friends said that on the day before, the navy had lost one of its greatest ornaments by Nelson's marriage. It was a national loss that such an officer should marry; had it not been for that, Nelson would have become the greatest man in the service.

Did not understand the effect of domestic love, &c.—The naval friend who had expressed the above opinion was wrong in thinking that home ties would wean a man from his duties to the state.

First demand.—(Lat. *de* and *mandare*, to commit to one's care, to order.) Prior claim.

Salt water and absence always wash away love.—Sailors are proverbially fickle in their attachments, which are said to be quickly effaced by the double action of salt water and absence.

Such a heretic as not to believe that article.—*Heretic* and *article* are an allusion to the "Thirty-nine Articles," which contain the church of England doctrine.

Heretic = disbeliever from Gr. *hairesis*, a chosen sect.

Article = a concise statement from Lat. *articulus*, a little joint.

For.—Is both a preposition and a conjunction.

As a preposition, it is complicated and various in its actions. Originally connected with 'fore,' meaning 'in front of,' it has branched off in different directions, until the original signification is frequently, to all appearance, lost sight of. Its chief meaning is "direction, end, purpose, benefit," and this meaning is brought out strongly, by the contrasting preposition "against." It also means 'notwithstanding,' 'in spite of.' 'To' and 'for' correspond to what is called the dative case of the classical languages, although they have a far wider range of meaning than could be expressed by that inflexion.

As a conjunction 'for' is used in assigning causation, in giving what is called the *logical reason* or proof, and in *explaining* or *accounting* for a thing.

It goes on so contrary to the prescription.—The effect is so opposite to that which the remedy states will follow.

Prescription. Is humorously used.

His correspondence breathed a deeper strain.—His letters were marked by a more serious style.

"To write letters to you".—An Infinitive phrase doing duty for a noun, and the subject of the sentence. The Infinitive form is more simple than the corresponding abstract noun, and it is better adapted for taking on adjuncts that modify the action expressed.

(The student should, by help of the examples previously given, turn the words "To write compulsion," into indirect narration.)

What I experience.—*What* is etymologically the neuter of *who*, but practically it is now equivalent to *that which*. Its function as neuter relative, as well as its possessive *whose*, long ago went over to *which* and *that*. It is therefore called a compound Relative, as in "give me *what* I want;" that is, "give me *that which* I want."

When conjoined with nouns, *what* is an adjective; as, "*What* energy he has shown."

What is sometimes used adverbially; as, "The country having been wasted, *what* by this misfortune, and *what* by that, has nothing left." Here *what* is the equivalent of *partly*. Also in, "*What* was our astonishment!" That is, "*How great* was our astonishment!"

What is sometimes the substitute for a clause, and therefore a noun; as, "I tell thee *what*, I could a tale unfold."

What is sometimes an interjection; as, "*What!* can you not hear?"

My poor pen.—My feeble style of writing.

Any pen or head which could express.—i.e., no pen and no intellect could express.

A moral certainty.—A fact so probable as to be always accepted as evidence or delivered as a judgment.

Scandalous practices.—Gr. *skandalon*, the stick or spring in a trap, a snare laid for an enemy, that which would cause reproach. *Practices* from Fr. *pratiquer* through Gr. *prassein*, to do. Disgraceful performances.

Contractors.—(Lat. *con* and *trahere*, to draw.) Those who undertake to furnish goods, provisions, or other supplies, or to execute material work as building, &c., at a stipulated rate or for a fixed sum.

Prize agents.—(Fr. *pris* pp. of *prendre*, to take, from Lat. *prehendere*. *Agents* from Lat. *agere*, to do, to act.) Persons appointed to sell captures made on sea and land, especially to determine the legal rights of the captors

and to divide the proceeds amongst the officers, soldiers, or seamen. Sometimes termed *prize-courts*.

Left with the command.—Left in command.

Original voucher.—(Norm. Fr. *voucher*, from Lat. *vocare*, to call.) Any book or paper which serves to establish the truth of an account.

The market price.—The current price.

Would not have been convenient.—Would not have suited. Because the contractor's frauds would be shown up.

The abuses.—(Lat. *ab* and *uti*, to use.) Malpractices.

Comptroller of the navy.—See note at page 117.

The old forms.—The system of accounts then in vogue.

With his eyes open.—With the full knowledge that cheating was being carried on.

Originating in fraudulent intentions.—Which had been introduced to carry on cheating.

Antigua.—In Spanish *antigua* means old or ancient, and is connected with Lat. *antiquus*. It is an island in the West Indies, belonging to England.

Rivry to.—(Fr. *privé*, Lat. *privatus*, secret.) Cognizant of.

St. Lucie. Also written St. Lucia, one of the Carribbee Islands, Long. 60° 59' W., Lat. 14° 5' N., belonging to England. One of the Cape Verde islands and a town in Sicily also bear the same name.

Did not affect to be actuated by a sense of justice.—Did not pretend to do what they were doing for the sake of justice.

Required a percentage.—Expected to be paid a certain rate on every hundred pounds.

Through their means.—*Means* is always in the plural form, but often used in the singular meaning.

No check whatever.—(Fr. *echec*, a check.) No restraint at all.

A thing was always, &c.—The value of an article is adjudged by the price it will sell for.

Without even the appearance.—Without even the pretence.

Peculators.—(Lat. *peculium*, private property, from *pecus*, cattle.) Wealth in early days was counted by heads of cattle. Those who take what is not their own.

Board of Admiralty.—See note at page 88.

Nearly driven him from the service.—Nearly made him resign the service.

Imputable.—(Lat. *in* and *putare*, to think) attributable; chargeable.

Hurricane.—Originally a Carribbean word signifying a high wind. A violent storm characterized by the extreme fury of the wind and its sudden changes.

Cudgelling.—(W. *cogel* from *cog*, a short piece of wood.) Fencing with sticks.

Theatricals.—(Gr. *theatron*, a theatre.) A noun always used in the plural. It means dramatic performances by amateurs, as also the scenes, dresses, and other apparatus required for the performances.

Consumptive.—(Lat. *con* and *sumere*, to take.)

That climate.—(Gr. *clima*, a zone of the earth.)

That is used as a Relative, when it can be turned into *who* or *which*,

without altering the sense; as, "They *that* (who) reprove us."

That is used as a Demonstrative adjective when it refers to a noun either expressed or understood; as, "*That* boy is diligent." Sometimes when it refers to a subsequent clause; as, "Caesar replied—*that*—no lands were vacant."

That is used as a Conjunction, when it connects with a former clause another denoting a cause, purpose, consequence, in order that; as "He is studious, *that* (for this purpose) he may become learned."

Ungenial summer.—An unhealthy summer.

A stop and receiving ship.—A ship for receiving men forced to serve against their will in the navy. It is called '*a stop*,' because there the sailor gets his outfit of clothes and other sea requisites sold ready-made, and called by sailors *stop* or *stop-made*. The box in which a further supply of these articles for distribution on the voyage is kept, is called a *stop-chest*.

Unworthy treatment.—Undeserved treatment.

Strict and sullen attention.—An attention strict in detail and performance, but sullenly or angrily carried out.

Senior officer in the Medway.—The officer in command of the River Medway station.

"*It will release me commission*."—Converted into indirect narration: Saying that it would release him for ever from an ungrateful service, for it was his firm and unalterable determination never again to set his foot on board a king's ship. Immediately after his arrival in town he should wait on the First Lord of the Admiralty, and resign his commission.

At stake.—(A.-S. *staca*, from the root of stick.) That which is laid down as a wager or prize, and so in danger of being lost.

Intimating.—(Lat. *intimus*, inmost.) Suggesting obscurely.

Present him to the king on the first levee-day.—(Fr. *levee*, from *lever*, to raise.) A levee is a public reception by a sovereign of the distinguished or privileged classes of citizens. One who has never attended a levee before has to be presented to the sovereign by another who has. It is only the male classes who are invited to levees. A similar reception in which females attend is called a drawing-room.

Gracious manner.—Kindly manner.

"*Nothing is wanting dispersed*."—(This passage should be turned into indirect narration by the student.)

Much to the contrary has been dispersed.—Much that was untrue has been published.

One of His Royal Highness's Officers.—Probably an officer serving in the ship commanded by the Prince.

When the singular ends in *ss*, the Possessive case is generally formed by adding only an apostrophe; as, 'Righteousness' sake.' But Proper names in *ss* take the apostrophe and *s*, as, 'Bass's Ale.'

Applied for a court-martial.—Asked that a court-martial should be convened to settle some dispute that had occurred between himself and the Prince.

A court-martial is a court of military or naval officers, for the trial of offences against naval or military laws.

Unquestionably wrong.—Wrong beyond doubt.

Supported his own character, &c.—Maintained his own dignity and position as commander.

"*Now that you produced*."—To be turned into indirect narration.

That he may stand in your Royal favour.—That he may continue to receive the same favour from your Royal Highness.

As if he had never sailed.—As if this dispute had not occurred. Sailors frequently use the verb *sail* or *sailed* to express degrees of intimacy; such as would spring up from a voyage made together.

You will serve him.—You will help or assist him by giving him promotion or doing him other good offices.

There only wants this.—Nothing but this is required.

I am bold to say.—For, 'I make bold to say,' i.e., I venture to say.

Be taken in the scale.—Be allowed to have any influence.

Mr. Rose.—George Rose, a statesman and political writer, was born at Brechin, in Scotland, in 1744. He was a purser in the navy, but through the influence of the Earl of Marchmont, he was afterwards made a keeper of the records in the Exchequer. Here his talents for business were soon discovered, and he was appointed to superintend the publication of the Domesday Book, and to complete the Journals of the Lords. From this period his advancement was rapid; and when Mr. Pitt (whose friendship and full confidence he possessed) returned to power, Mr. Rose was made President of the Board of Trade and Treasurer of the navy. On the death of that minister, he lost these situations; but when the administration formed by Lord Grenville retired, he resumed his former station, and continued in it till his death, which happened at Cuffnells, his seat in Hampshire, in 1818. He published "a Brief Examination into the Increase of the Revenue, Commerce, and Navigation of Great Britain;" "Considerations on the Debt due by the Civil List;" "Observations respecting the Public Expenditure, and the Influence of the Crown;" &c.

Mr. Pitt.—The illustrious English statesman, second son of the Earl of Chatham, was born at Hayes in Kent, May 28, 1759. After receiving the rudiments of his education at home, under his father's superintendence, he was sent to Pembroke Hall, Cambridge, where his tutor was Dr. Prettyman; on leaving the University he was entered at Lincoln's Inn and in three years was called to the bar. In 1780 he stood candidate for the University of Cambridge, but was unsuccessful. By means, however, of Sir James Lowther, he was returned for the borough of Appleby, and he immediately became one of the most distinguished opponents of the ministry. He next obtained the office of First Lord of the Treasury; and when only 23 years of age was appointed Chancellor of the Exchequer. Although only in his 24th year, he next assumed the station of prime minister, by accepting the united posts of First Lord of the Treasury and Chancellor of the Exchequer. His first measure was the passing of his celebrated India Bill. He died January 23rd, 1806, worn out by gout and aggravated by public cares.

Sir Charles Middleton.—Comptroller of the navy.

Have only their integrity.—Are dependent for advancement only on their own good qualities, and not on any influence.

Artificer.—Lat. *ars*, an art, and *facere*, to make.

The naval yard.—The naval dockyard.

"*It was most true*," he said, *Boreas*."—The intermediate form of narration.

St. John's.—The capital of Newfoundland and centre of the cod fishery. It was almost entirely burnt down in 1846, the houses being mostly of wood.

Upon that duty.—To detect the fraudulent practices of the contractors, &c.
Would have fallen upon his pay.—Nelson was not reimbursed for these extra expenses, but had to provide for them out of his own salary.

The sense of what he thought unworthy usage.—The feeling that he was being badly treated.

"I," said he, "must still.....last."—Change into indirect narration.

Buffet the waves.—(Fr. *buffe*, a blow, through Ital. *buffetto*, a fillip.) Contend against difficulties.

That they call.—That = that which.

So much for serving my country.—This is what I have obtained in return for serving my country.

If any ship should be sent to destroy His Majesty of Morocco's ports.—The Barbary States had for ages braved the resentment of some of the highest powers of Europe, being notorious for their piracies, which were the chief support of their native population. Various attempts had been made to bring them to submit to the laws of civilized nations, but without success. At length Great Britain interposed. The appearance of her fleet off Algiers alarmed the Dey, as the ruler of Algiers is called, and he consented to put an end to all piracy. But he soon violated the treaty, in consequence of which Lord Exmouth sailed with a larger fleet, and after a desperate struggle, on the 27th August, 1816, totally destroyed the Algerine fleet and the batteries protecting the harbour. Morocco is the principal Barbary State.

Posterity will do him justice.—(Lat. *posterus*, coming after.) Future generations will acknowledge that he has done right.

The goal of fame.—Will render him famous. Goal (pronounced Göl) means the point set to bound a race. Gaol (jäl) is a place of confinement for criminals and debtors.

Knowledge.—(O. E. *cnowleach* = *cnowleech* = knowledge.) The termination *ledge* is a Teutonic suffix meaning state.

Paralytic.—(Gr. *para*, beside, and *luein*, to loosen.) Affected with paralysis. Used as a noun it signifies a person affected with paralysis.

Asthmatic.—(Gr. *aein*, to blow.) Affected by asthma, a disease producing difficulty of respiration.

Affections.—Diseases.

He had been given over by his physicians.—His physicians considered him incurable.

"But, Horatio, said he.....long."—Should be put into indirect narration by the student.

Farming the glebe.—(Lat. *gleba*, soil, land.) Cultivating the soil. *Glebe* is the land belonging to a parish church or an ecclesiastical benefice, and so in the charge of the parson.

A birds'-nesting.—See note at page 86.

Coursing.—Hunting hares with harriers, i.e., dogs trained for the purpose.

To board an enemy.—To attack an enemy on his own ground.

He let fly.—Discharged his gun.

To ruffle it.—To disturb it.

The affair of the American ships.—The seizing of the four American vessels at Nevis.

Pestered.—(Fr. *pester*, to harass with small vexations). Plagued.

"I have written them.....give it."—May be changed into indirect narration.

Navigation Act.—An Act passed in 1651 by the Commonwealth for the better regulation of merchant shipping and the importation of merchandise.

They may take my person.—They may imprison me.

He went to a fair.—(Lat. *ferie*, holidays and connected with *forum*, the market-place.) A fair was a market held at stated times in a town or district, for the interchange of agricultural and manufactured produce. The word in this sense is now generally used to represent an annual holiday gathering for sports and games.

Presented her with a writ.—A writ is the Sovereign's precept in writing under seal, issuing out of some Court to the Sheriff, or other person, and commanding something to be done concerning a suit or action, or giving commission to have it done.

On the part of the American Captains.—Taken out for execution at the instance, i.e., at the request of the American Captains.

Laid their damages.—Calculated their losses. The sum mentioned being the amount sued for.

They charged her.—Imposed it upon her as a task or a duty.

He called out his wife.—He called his wife out.

"This affront I did.....country."—In indirect narration: He exclaimed that he had not deserved that affront; but that he would be trifled with no longer. He would write immediately to the Treasury; and, if Government would not support him, he was resolved to leave the country.

Affront.—(Lat. *ad* and *frons*, the forehead.) Any reproachful or contemptuous action or conduct exciting or justifying resentment.

Needed to be under no apprehension.—Captain Nelson should not suffer himself to be vexed on this account.

And was mortified.—Was disappointed.

"Not being a man.....him."—Changed into direct narration: "Not being a man of fortune," he said, "is a crime which I am unable to get over, and therefore none of the great care about me."

None of the great.—None of those in high position. Adjectives are often converted into nouns, as, 'the deep,' 'the future,' 'an imbecile.' Such examples are to be regarded as *cases of ellipsis*; a noun, being readily understood, is omitted, and the adjective thereupon assumes the force of the noun, and may even be inflected as a noun. The noun thus formed is often abstract, as in Greek and Latin: 'the true' for 'truth,' 'the beautiful' for 'beauty.'

To rust in indolence.—As iron deteriorates by being unused, so Nelson said that he would lose by not having work.

The armament.—Armament here is used to signify the preparations for war, not the munitions of war.

The dispute concerning Nootka Sound.—In 1789, the Spaniards destroyed the English settlements on this bay, in support of their claim to the entire western coast of America.

Nootka Sound is a bay of the North Pacific Ocean, on the west coast of Vancouver's island, and now included in British Columbia.

Lord Chatham.—John Earl of, &c., eldest son of the celebrated statesman William Pitt the elder, and brother of William Pitt the younger. He was born in 1756, and succeeded to the peerage on the death of his father, in 1778. In the following year he was appointed Captain of the 86th Regiment of Foot, and served in the American war. He was afterwards appointed by his brother (then prime minister) first Lord of the Admiralty;

was sworn a Privy-Councillor, and elected a Knight of the Garter. His promotions, both civil and military, were rapid and numerous under his brother's administration, and he continued to hold office for many years after, under his successors. As Lieutenant-General, he commanded the unfortunate Walcheren expedition in 1809, and was, three years afterwards, raised to the full rank of General. On the death of the Duke of Kent, he was appointed Governor of Gibraltar, which he held, with other offices, to the time of his death, in 1835. He was the last Peer of the Pitt family, whose title has now become extinct, and with it the annual pension of £4,000, besides another pension of £3,000 per annum, granted to his father for three lives in 1761. This Lord Chatham was married in 1783, to a daughter of Viscount Sydney, but they had no children.

Was to be commissioned.—See note at page 87.

The revolutionary war.—The war with France during the Revolution.

Cockle-boat.—(Fr. *coche*, a boat.) A small boat belonging to a ship.

This dry acknowledgment.—This formal avowal of the receipt of his letter.

Joint interest.—Combined influence.

(To be continued.)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"
Educational Record, Madras.

QUESTIONS ON

SOUTHEY'S "LIFE OF NELSON."

I. Explain the following passages :—

(a) "The pain which is felt when we are first transplanted from our native soil, when the living branch is cut from the parent tree,—is one of the most poignant which we have to endure through life."

(b) "Aft, the most honour; forward, the better man."

(c) "As no animal has so human-like an expression in its countenance, so also is there none that seems to possess more of the passions of humanity."

(d) "So completely water-logged that the Lowestoft's tenders went in on deck, and out again with the sea."

(e) "The more sanguine part of the English began to dream of acquiring an empire in one part of America more extensive than that which they were on the point of losing in another."

(f) "There were not orderly men enough to assist the sick."

Turn the metaphor in passage (a) into its corresponding simile.

II. Parse the words in italics in the following :—

(a) Three *years* afterwards he read in the county newspaper.

(b) *Very* top of the tree.

(c) He strayed a *birds'-nesting*.

(d) Could the garrison have held out a *little longer*.

(e) The ships however moved *something*.

(f) Boats reach the sea *from thence* in a day and a half.

III. State briefly what you know of :—

(a) The Royal Society. (b) The Mystics and their season of darkness and desertion. (c) Lord George Germaine. (d) The Armed Neutrality. (e) The Mosquito shore. (f) The author of "Leonidas."

IV. Turn into *direct* narration :—

"And from that time, he often said, a radiant orb was suspended in his mind's eye, which urged him onward to renown."

"He replied, that he did not wish the younger to be favoured; he knew that his nephew would pass a good examination, and he had not been deceived."

Turn into *indirect* narration :—

"I felt impressed," said he, "with a feeling that I should never rise in my profession. My mind was staggered with a view of the difficulties I had to surmount, and the little interest I possessed. I could discover no means of reaching the object of my ambition. After a long and gloomy reverie, in which I almost wished myself overboard, a sudden glow of patriotism was kindled within me, and presented my king and country as my patron. Well then," I exclaimed, "I will be a hero! and confiding in Providence, I will brave every danger!"

V. Give the meanings of the following expressions :—

(a) To rough it out at sea. (b) A reasonable excuse. (c) Lawful booty. (d) Effective men. (e) Two masters of Greenlandmen. (f) The ships were paid off. (g) My mind was staggered. (h) To board the prize.

VI. Derive and explain the meanings of:—

Rector; Event; County; Character; Gipsies; Booty; Apprise; Physical; Commission; Voyage; Dock; Admiralty; Kettle; Extricate; Midshipman; Fatigue; Squadron; Athletic.

Distinguish between 'further' and 'farther' and remark on the forms 'past' and 'passed.'

VII. Enumerate the best known of Sonthey's works both prose and poetry. Offer some remarks on his style and more particularly on his "*Life of Nelson*."

DREW'S CONIC SECTIONS.

COROLLARIES TO PROP. XVIII.

1. Let the two ordinates QQ' and RR' of a parabola (focus S) which are not parallel to each other, make equal angles with the axis; then the points Q, Q', R, R' shall be on the circumference of a circle.

Produce them to meet in O, bisect QQ' in V. Draw through V, PV cutting the parabola at P and at P draw the tangent PT parallel to QQ' meeting the axis in T.

Bisect RR' in V' and draw P'V' parallel to the axis and draw the tangent P'T' meeting the axis in T'.

Since QQ' and RR' make equal angles with the axis, the tangents PT and P'T' must make equal angles with the axis, i.e., T and T' must coincide.

$$\therefore SP = S'P'$$

$$\therefore OQ.OQ' = OR.OR'$$

$\therefore$ The points Q, Q', R, R' lie on the circumference of a circle.

2. Conversely, if a circle cut a parabola in four points, then the chords common to the circle and the parabola will make equal angles with the axis.

If three of these points be given, the fourth can be found. Prop. XX is a particular case of this.

3. A circle cannot cut a parabola in more than four points.

4. If Q and Q' lie on one side of the axis while R and R' lie on the other, then the sum of the ordinates of Q and Q' is equal to the sum of the ordinates of R and R'.

5. If two ordinates QR and QR' of a parabola make equal angles with the axis, then the circle passing through Q, R, R' will touch the parabola at Q.

6. Conversely if a circle touch a parabola at Q and cut it in R, and R', then QR and QR' will make equal angles with the axis.

7. If a circle touch a parabola at Q and cut it at R, then QR will make the same angle with the axis as the tangent at Q.

This is the circle of curvature at Q.

8. If a circle be described passing through Q, Q', R and R' (Cor. 1) [QQ' lying on one side of the axis and RR' on the other side and meeting each other outside the parabola] and if through R a line XRW be drawn parallel to the axis, meeting QQ' produced in X and the circle in W then $XW = 4SP$.

For, draw through R, RM parallel to QQ' cutting PV in M

$$\text{then } XQ.XQ' = XV^2 - QV^2$$

$$= RM^2 - QV^2$$

$$= 4SP.PM - 4SP.PV$$

$$= 4SP.XR.$$

$$\text{But } XQ.XQ' = XR.XW;$$

$$\therefore XW = 4SP.$$

9. If the circle QQ' RR' become the circle of curvature (which it will be if QQ' coincides with the tangent at P, i.e., if the centre of the circle is taken in the normal at P and if R is indefinitely near to Q), then XW will become the chord of the circle of curvature at P, drawn parallel to the axis.

Hence Proposition XIX in Drew's Conic Sections.

10. If this circle cuts the parabola in R' then PR' which will make with the axis, the same angle as the tangent at P, will be divided by the axis in the ratio of 1 to 3.

ENGLISH.

I. Paraphrase and analyse the following passage, and parse the words in italics:—

*'Honour, that praise which real merit gains,
Or e'en imaginary worth obtains,
Here passes current.'*—GOLDSMITH.

That form of reward which is given in most places to those who possess qualities worthy of praise, and which is also bestowed upon those whose title to it is not so valid, is here given freely by the people one to the other.

Sentence.	Kind of Sentence.	Connective.	Subject.	Predicate.	Object.	Extension.
(a) Honour that praise passes current here.	Princ. Sent.		Honour	passes		here (place)
(b) Which real merit gains.	Adj. Sent. to praise in a.	in rel. pro.	real merit	gains	which	
(c) Or even imaginary worth obtains.	Adj. Sent. to praise in a.	or	imaginary worth	obtains	[which]	

Honour—abs. noun, neut., sing., nom. to *passes*.

that—adj. of distinction, pointing out *praise*.

praise—abs. noun, neut., sing., nom. in app. with *honour*.

which—rel. pro., agr. with its antecedent 'praise,' neut., sing., 3rd, obj., gov. by *gains*.

or—conj., joining the sent., 'Real merit gains' and 'Imaginary worth obtains.'

even—adv. of deg., qualg. *obtains* (=equally).

passes—reg. intrans. verb, act., ind., pres., 3rd, sing., agreeing with *honour*.

current—adj. of quality, qual. *honour*.

2. Make a list of the prefixes in the following words, giving their meanings and the meaning of the words:—Antecedent, adjective, conjunction, preposition, interjection, objective, adverb, pronoun.

Word.	Prefix.	Meaning of Prefix.	Meaning of Word.
antecedent	ante-	before	Going before; the word to which relative pronouns refer is so-called.
adjective	ad-	to	A word joined to a noun to qualify it.
conjunction	con-	together	A word which joins together other words or sentences.
preposition	pre-	before	A word placed before a noun to show its relation to other words.
interjection	inter-	between	A word thrown into express emotion.
objective	ob-	in the way of	The case of the object; that which is thrown in the way of, or follows a transitive verb.
adverb	ad-	to	A word added to a verb.
pronoun	pro-	for	A word used for or instead of a noun.

3. Give Latin derivatives in which the following affixes are used: -ant, -ose, -ate, -escent, -esce, -esque, -ical, -ique, -ian, -ary.

-ant, elegant, dormant.
 -ose, grandiose, verbose.
 -ate, sedate, associate.
 -escent, opalescent, convalescent.
 -esce, coalesce.
 -esque, picturesque, statuesque.
 -ical, problematical, nautical.
 -ique, unique, oblique.
 -ian, Christian, politician.
 -ary, antiquary, solitary.

GEOGRAPHY.

1. Draw a map of one of the following:—

- The Baltic Sea.
- France.
- Italy.

2. Enumerate the changes made in the East of Europe by the Berlin Congress, and briefly describe the chief physical features of Turkey.

Montenegro, Servia, and Roumania, hitherto subject to Turkey, were made into independent principalities. Bulgaria was left tributary to Turkey, but allowed a Christian government and a militia of its own. To Russia, part of Bessarabia was given by Roumania; which received in return a part of the Dobrudscha along the Black Sea. Servia was enlarged by the addition of the upper part of the Valley of the Morava.

The Alps, after leaving Transylvania, are continued through Turkey under the name of the Balkan range, which extends right across the country

to the Black Sea. Towards the centre of the country is the great mass called Tchar Dag (10,000 ft.). South-west of the Balkans is the Despot Dag, and to the south the Pindus range which runs into Greece. These mountains are crossed by narrow defiles, one of the most noted being the Schipka Pass. The lower course of the Danube, the Maritza, flowing into the Black Sea; the Struma, Solombria, and Vardar, into the Archipelago; and Doin and Boyana, into the Adriatic, are the principal rivers. Turkey may be said to be a mountainous country, but there are extensive flat districts which are very fertile: as the plain of the Lower Danube, the valley of the Maritza, and the Plain of Thessaly. Turkey is washed by the Adriatic, the Archipelago, the Sea of Marmora, and the Black Sea, and has numerous islands in the Archipelago.

3. Name the chief towns of Italy, and state briefly for what each is noted.

Rome—capital, on Tiber, celebrated for its fine modern buildings (St. Peter's and Vatican) and its ancient ruins (Colosseum and Arch of Titus).

Naples—largest and most beautifully situated city in Italy, trade, growth of vine, Pompeii and Herculaneum and Vesuvius near.

Turin—on Po, silk manufacture.

Genoa—port, exports olive oil, silk, fruits.

Milan—fine cathedral, silk trade extensive.

Venice—built on islands; manufactures glass and jewellery, shipbuilding; Cathedral of St. Mark, Rialto Bridge and Bridge of Sighs.

Bologna—manufactures glass, silk, and musical instruments.

Florence—beautiful city, many paintings and sculptures. Birthplace of Dante, Michael Angelo, Galileo, Boccaccio, Petrarch, etc.

Mantua—a fortified town, considerable trade, and birth place of Virgil.

Leghorn—port, exports straw hats, silk, olive oil, fruits, and wine.

Pisa—university, leaning tower.

Gaeta—strongly fortified.

Brindisi—packet station.

Parma, Ferrara, Padua, Bari, Parai and Racenna are considerable towns.

ARITHMETIC.

1. What is the discount on a bill for £793 14s. 10½d., due nine months hence, at 4 per cent.?

Int. on £100 for 9 mons. at 4 per cent. = £3.

£ £ £ s. d. £ s. d.
 ∴ 103 : 3 :: 793 14 10½ : 23 2 4½. Ans.

2. My income amounts to £69 6s. 6¼d. annually, derived from an investment in 5 per cent. Railway Debentures. This money was the amount of an investment 2½ years previously at 3½ per cent. simple interest. Find the original sum.

£ £ s. d. £ £ s. d.
 5 : 69 6 6¼ :: 100 : 1386 11 3
 £100 in 2½ yrs. at 3 per cent. = 100 + (2½ × 3½) = 108½
 £ £ s. d. £
 108½ : 100 :: 1386 11 3 : 1275. Ans.

3. A herd of 240 cows were sold at £14 6s. each, and the buyer paid $\frac{1}{2}$ of their cost for carriage to the market, where he exchanged them for 299 ponies at £15 each. What was his gain per cent.?

$$\begin{aligned} £14 \text{ 6s.} \times 240 &= £3432 \text{ original cost} \\ \frac{1}{2} \text{ of } £3432 &= 156 \text{ carriage} \end{aligned}$$

£3588 Total expenditure.

$$£15 \times 299 = £4485 \text{ value of ponies}$$

$$£4485 - £3432 = £897 \text{ gain}$$

$$£3588 : £100 :: £897 : £4 \text{ gain per cent.}$$

4. By investing a certain sum in the 3 per cent. Consols at 93, my income is less by £21 12s. than it would be if I had invested in £100 railway shares selling at 132 and paying £6 per share. How much have I invested?

In 3 per cent. consols, £1 will yield $\frac{3}{100}$

„ 6 „ railway shares „ $\frac{6}{132}$

$$\text{Diff.} = \frac{3}{100} - \frac{6}{132} = \frac{186 - 132}{4092} = \frac{54}{4092}$$

$$\therefore \text{Amount invested to yield } \frac{54}{4092} = £1$$

$$„ „ „ 1 = \frac{100}{93}$$

$$„ „ „ £21 \text{ 12s.} = \frac{21 \times 100}{93}$$

$$\frac{21 \times 100}{93} \times 21\frac{1}{2} = £1636 \text{ 16s. Ans.}$$

HISTORY.

1. What were the chief events of the reign of Henry I.? Give the dates of the reigns of all the kings of the same name, and state to what dynasty each belonged.

Henry usurped the throne	...	A.D.
He proclaimed a charter of liberties abolishing Curfew and Danegelt	...	1100
He broke the power of the barons and conquered Normandy, Robert being taken prisoner at Tenchebrai	...	1100
Quarrel with Anselm healed	...	1106
Drowning of Prince William	...	1108
Settlement of Flemish	...	1120
Marriage of Matilda to Geoffrey Plantagenet	...	1127
Oath of fealty to Matilda	...	1133
Death of Henry	...	1135
Henry I.	...	1100—1135 Norman.
Henry II.	...	1154—1189 Plantagenet.
Henry III.	...	1216—1272 „
Henry IV.	...	1399—1413 Lancaster.
Henry V.	...	1413—1422 „
Henry VI.	...	1422—1461 „
Henry VII.	...	1485—1509 Tudor.
Henry VIII.	...	1509—1547 „

2. Who was sovereign of England at the close of the sixteenth century? State briefly the condition of the country at that time, as to power, government, laws, religion, and commerce.

Elizabeth was Queen of England from 1558 to 1603. The country had recovered from the effects of the Wars of the Roses, and was increasing in wealth and influence. The defeat of the Spanish Armada led the people to feel themselves able to cope with even the strongest of their enemies. It aroused a patriotic spirit and desire for naval supremacy. The Government was still somewhat absolute, but the people desired greater control over the affairs of the nation, and objected strongly to the monopolies granted by Elizabeth. These she abolished near the close of the reign. The laws were administered by the Courts of Justice, the Star Chamber, and Court of High Commission. Those of Supremacy and Conformity pressed hardly upon Catholics and Nonconformists. Elizabeth was a member of the Protestant Church, and the people generally followed her lead. Many persons suffered imprisonment and death through their non-compliance with the Acts named. Trade and commerce began to flourish. The East India Company was formed. Hundreds of work-people from the Netherlands and from France settled in the country, and silk and woollen-cloth began to be manufactured.

3. Write a short account of the battle of Bannockburn.

Robert Bruce, grandson of the Bruce who had disputed with Baliol the crown of Scotland, assumed the leadership of the Scots after the death of Wallace. He was crowned at Scone, and the indignant Edward marched northward to punish him. Death, however, carried away the English king, and the enterprise was for a time abandoned by his successor, Edward II. Bruce made great headway, but when he threatened Stirling Castle, Edward marched northward with a great army. The armies met at Bannockburn, near Stirling, in June, 1314. The English army was much larger than that of Bruce, and spent the night previous to the battle in revelry and merry-making. The Scotch army of 30,000 was formed in squares and circles of spearmen, against which the English cavalry dashed in vain. Being ill-led, they were thrown into disorder and utterly routed, many falling into pits dug by the Scotch on the plain. 30,000 were left dead on the battle-field. Edward fled, closely pursued by a party of Scotch. He, however, succeeded in escaping, but all his treasures and supplies fell into the hands of his enemies. Scotland, by this battle, won her independence, and Bruce was afterwards acknowledged as King.

EDUCATION AND RECREATION;

A LECTURE DELIVERED BY

FOSTER WATSON, Esq., M.A.,

At the College of Preceptors, 1886.

These terms are familiar enough, and at first sight seem to require no elucidation. Yet, directly one boldly asks the question, What is Education? a score of eager faces present themselves to one's imagination as anxiously desiring to gain a new disciple to their pet theory or definition. So, I doubt not, it would be with the word Recreation, if the subject came so nearly home to every one. But "Education" is admitted to be essential to a man's success in life; without it, he would be handicapped in his business; could not hope to rise to any important position, could not amass a fortune, or even obtain a fairly lucrative post. Hence, with the practical tact which we moderns exhibit in every direction, Education is a household word, and on the whole (either with discussion as to what it is, or without discussion)

we admit it to be of vital importance. Recreation, on the other hand—a term open to discussion equally with Education—is less regarded; not, surely, because it is of less importance, but, one fears, because it does not give the same earnest or pecuniary advantage. It is not generally recognised that Recreation creates Wealth; and as we are after all, more or less, a nation of shopkeepers, the fact that wealth and money are not terms of equal connotation escapes notice, and recreation is overlooked.

I can, however, easily make clear what I mean by the terms I am using. Without refining a definition, I take Education to be the mental discipline and equipment by which children are prepared for the battle of life. By Recreation, I understand the means by which the strain and stress of the preparation in the first place, and the actual struggle afterwards, are to be relieved. All application to work, both at school and in after life, involves effort, and in time produces fatigue. In other words, it takes something out of a man that requires to be reconped. The means by which this is done is Recreation.

It is always instructive, in dealing with educational matters, to look into the past, and to inquire as to the opinions of some of the great writers. And not only is it wise to give regard to those who have shown practical methods, but also to those who have sketched ideal systems. For this reason—in our own work we are so limited by conditions. We have to try to do the best we can under our limitations—to make the most of what we have at our command. As Matthew Arnold says—

"Limits we did not set condition all we do;
Born into life we are, and life must be our mould."

But those who have taken a larger sweep—placed, as it were, upon a hill—they look on the valley below, and the rising hills beyond, while we down below scarcely have energy to see more than what lies at our feet. So that, although we know we cannot accomplish the ideal systems of education which have been thought out, yet we would hear from others the tales of fairy land, though we do not hope to discover it in our own experience. In the matter of Recreation, the great writers on education are not so far removed from the ideas and aims of many practical teachers to-day, except indeed in points of detail. They shall, therefore, stand as our spokesmen.

Plato, you will remember, divides Education into two parts, *viz.*, the cultivation of Music and of Gymnastics. Music includes all studies the tendency of which is to produce and strengthen in the minds of the pupils a sense of beauty, harmony, and proportion. Gymnastics include the regulation of diet, which he insists shall be simple and moderate; it also includes those exercises which will have the effect of making strong, brave soldiers. But Plato, with the acute perception of a practical man, as well as with the fine feeling of a philosophical poet, maintains that the exercises and toils of the pupil have for their object the stimulation of the spirited element of his nature, rather than the mere gain of strength; and that he will not, "like athletes in general, take the prescribed food and exercise merely for the sake of muscular power." Gymnastics, he points out, exclusively attended to, lead to roughness and hardness; Music, to softness and gentleness. Neither of these, in the extreme, can be good; so Plato concludes that the guardians of his commonwealth should train up the children so as to combine both sets of characteristics, in order that men, by music, should be temperate; by gymnastics, brave. He concludes by saying,—"Whosoever can best blend gymnastics with music, and bring both to bear on the mind most judiciously, such a man we shall justly call perfect in music and a master of true harmony, much rather than the artist who tunes the strings of the lyre."

So lucidly and pointedly does the philosophical teacher of the Academy express himself on the subject of the training of the mind and body. Pardon me one general word on Plato. Many are inclined, in these latter days, to count him no more than an idle dreamer. One the more readily seizes the opportunity to remark that, so long as our ideal is before our actual (and woe worth the day when it is not), so long is it in a sense true that our ideals are on the whole truer than the real, and so long are Plato and the rest of ideal philosophers our highest guides.

Aristotle says there are as nearly as possible four things which it is usual to teach children,—reading, gymnastic exercises, and music, to which (in the fourth place) some add painting. The object of gymnastic exercises is to produce courage. Aristotle points out that gymnastic exercises for youth should be most gentle, omitting all violent diet and painful exercises which may stunt the growth of the body. As an illustration of this, he mentions that he could scarcely find even two or three of the Olympic victors who had gained a victory both as boys and as men—because the necessary exercises they went through to win in time of youth deprived them of strength in after life.

Plato and Aristotle, then, were agreed on the importance of attention to the body as well as the mind. Nor has the modern world been less emphatic on the point. Of moderns, one might instance weighty words from Milton, Locke, Rousseau, and many others; but it will be sufficient if I quote the words of an Englishman, the gentle Roger Ascham, and a foreigner, the sagacious Montaigne.

Ascham expresses the general tendency of feeling among English educational writers, in the well-known words,—“And I do not meene, by all this my taulke, that yong Ientlemen should alwaies be poting on a booke, and by vsing good studies should lease honest pleasure and haunt no good pastime. I meane nothing less. For it is well known that I both like and love, and have alwaies and do yet still vse, all exercises and pastimes that be fit for my nature and habilitie.” Montaigne says;—“We have not to train up a soul, nor a body, but a Man; and we cannot divide him.”

To turn to the consideration of Physical Exercise. The training of the body has, I think, received more attention in the past than in the present. Mr. Herbert Spencer relates how he once thought that modern men were stronger than their ancestors. But he says, “Detailed observation, however, has shaken our opinion. Omitting from the comparison the labouring classes, we have noticed a majority of cases in which the children do not reach the stature of their parents; and in massiveness, making due allowance for difference of age, there seems a like inferiority. Medical men say that now-a-days people cannot bear nearly so much depletion as in times gone by.” Whatever our theories of physical education may be, it seems that practically we do not sufficiently carry them out. Yet we cannot ignore the vast importance of the subject. It is true that in former times, when war was a commonplace of existence, strength of body must have assumed a very evident importance; but it is just as essential to-day that a man should have a strong body, to withstand the wear and tear of the 19th-century competition. Mr. Spencer, in the “Essay on Education,” maintains that the physical education of children errs (i.) in deficient feeding, (ii.) in deficient clothing, (iii.) in deficient exercise (among girls at least), and (iv.) in excessive mental application. With the first two of these, deficient feeding and deficient clothing, the teacher of higher grade and middle class schools has little or nothing to do, though in boarding schools these are surely very important questions. In elementary schools, again, in poor districts, it is unfortunately too true that the children have far too little food—some are in a semi-starving condition. It is clear that

in these cases education is carried on under very unfavourable circumstances, for then the children are necessarily weak, inert, sleepy.

I do not think Mr. Spencer's remark as to exercise can apply to public schools. Now, as to exercise in public schools, undoubtedly there is sufficient attention given to physical training. Dr. Wiese, in his account of his Educational Tour through England, in 1876, speaks of one school in which the morning hours are put aside for games. Mr. Fitch says,—“Considering that it is, at any rate, the first business of a school to encourage learning, and develop mental power, it is rather a discredit to some of our great schools, that so large a proportion of time and thought should be devoted to athletics; and that success in cricket and football and rowing should often be valued as much as intellectual distinction.”

Public school games and exercises at least include cricket, football, tennis, fives, running, swimming, and in many cases fencing and broadsword exercises, gymnastics, military drill, and volunteer rifle corps. All these no doubt have a marked effect on the character of the public school boy, and in moderate limits help on the intellectual education by offering a fresh, sound, healthy, physical basis of mind.

But, is there sufficient bodily exercise in middle class and elementary schools in large cities? It is often impossible to get a field for play, and so the boys have to play games which only require a limited space, and which are, on the whole, “less noble.” It may be that “rounders” is the only practical game. Not that I wish to say anything against this game. In default of a better, it is a very valuable one, and infinitely better than nothing. At the same time, it would not be difficult to show how much a school loses in *esprit de corps* by not having cricket matches against other schools. The game, when there are such matches, loses the feature of being simply a hunt for pleasure. It is the upholding of the honour of the school, and the feeling which this arouses within the minds of boys is itself an education of no slight value. It has been said of woman, it is a liberal education in itself to love a good woman. It might be said that the feeling of loyalty and delight in one's own school is similarly an education. But, to bring this out, school must be put in competition with school, especially in games. To do this, a field must be at hand, or accessible, for practice; for, if the matches are played without practice, only disappointment can result. I come, therefore, to the conclusion that a field for sports is necessary to a school whose *esprit de corps* is to be a marked feature. How many schools in towns, however, are without this great desideratum.

But I shall be reminded that schools can flourish without the selfish enthusiasm of boys in their victories in cricket matches. Further, that they can also have fitting exercise in gymnastics. The benefits of gymnastic exercises are evident. They develop a free use of the bodily powers, increase energy, and attain these results in due order. To put the matter in the words of an enthusiast,—“The gymnasium is a place where bodily strength may be exercised; a school where skill in manly strife may be acquired; a field for chivalry to contend in; a help to education; a nursery for health.”

But, admitting all this, it has still to be remarked that gymnastics require due, definite, authoritative order, and that the child's actions are controlled by the instructor. In games, on the other hand, in which the child follows his own inclination—or, rather, is bound by rules and laws of *his own choosing*, to which he willingly submits—there is the further element of spontaneity, an element of great importance in recreation.

With regard to games in general, their relation to physical education is evident. It is unnecessary to dwell upon this. It may not, however, be

fruitless to point out that games are not only of use as the means of physical education, and as relief to intellectual education; but they have also another aspect, which is probably much overlooked. Richter finely writes,—“Play is the first poetry of the human being.” Following out the same idea, Mr. Sully suggestively says,—“In their games children are actors, architects, and poets, and sometimes musical composers as well. As their taste and their powers of execution progress, they derive a greater enjoyment from the production of pretty and tasteful effects. And, on the other hand, the exercise of these active impulses leads on naturally to a genuine interest in the contemplation of art-products generally.” Such thoughts as these disclose to us how essential is attention to the matter, especially in the very young.

And yet, how little are people alive to the importance as seen by the popular contempt for “child's play.” Parents often enough see no poetry in a child's play—not even the germs of it. They scold sufficiently, as they think, to keep him from mischief; and then, the more serious they see the child, the more man-like—*i.e.*, the more unnatural—the better are they pleased. I have often thought that there are few things more pathetic in modern biography than the passage in the life of Charlotte Brontë, where it is related how some children came to see Charlotte and her sisters, and showed them how to play—they had never learnt that. In that lonely vicarage they either were taught, or taught themselves, how to read, and how to think; but, of the joyous bound, the make-pretence, the light-heartedness of play, they had no experience. It is a serious view of things to take, but I am inclined to think it is true, that there are many children—an increasing rather than a decreasing number—who, like Charlotte Brontë, are not learning to play. It may be said that children need no teaching in this subject; they naturally find it out for themselves. That is true—to a certain extent, when child meets child, and there is a fair opportunity, undoubtedly it is so. But let us take the case of an elementary or middle-class school in a large town, and consider what the opportunities are.

The child goes to school, say, at nine o'clock. Till 12 or 12-30 he is at work, under school discipline. Dinner-time is usually short, and games are certainly not of the highest advantage directly after meals. Then comes afternoon school. The boy or girl gets away from school between three and four o'clock, but in very many cases has to go four, eight, or ten miles home, partly walking, partly by 'bus or train. One case I know, where a boy comes to a London school daily from Southend. After these journeys to and from school, and constant mental application in the day-time, the child has still before him his home-lessons. If his parents have a little old-fashioned wisdom about them, he must go to bed in good time, which should mean, for children up to fourteen, by eight or nine o'clock. Supposing the boy conscientious, and that he prepares his lessons, and supposing he be not too wearied (as he may well enough be), there is not a very great margin of time for play.

But suppose that boy be not very strong in body—suppose it just takes up his strength to do his day's work—then, his energy being gone, he makes no interest in games, and grows up nerveless, unenergetic, weak. It is just these boys who need physical exercise, and nothing will induce them to exert themselves. I have noticed how boys, to whom it would be of the utmost good to take up gymnastics, decline to do so—even when a favourable opportunity has presented itself, and they have no other form of physical exercise at hand—from simple inertness, and a growing disinclination to exertion, unless, indeed, it be mental exertion. Once more, then, let me say that I believe that boys and girls do not get either as much exercise

or as much play as they should, and that it is a growing evil. Parents and teachers are alike proud of the mental successes of their scholars, and it is on intellectual achievements that everyone's attention is rivetted. I have no panacea to propose, but one or two suggestions that occur to me may be the means of drawing suggestions forth from others.

First, I think in every school there should be, if possible, a teacher whose chief work it is to promote the physical education of the boys. He should act as guide, philosopher, and friend to the boys in cricket, football, gymnastics, and all games. Games should have a recognised place in the school time-table, at any rate to the extent of half-an-hour in the morning and half-an-hour in the afternoon; and after school-hours, in day schools, strong boys would naturally stay for an hour or two's further games. As to the Games-master, I would have him a man of very easy manners, good-natured, and, if possible, a cultured man. Above all, he must be a man of the highest character, for there is nothing which so attracts the delighted admiration of boys as the man who "can do" things. Such men as I have in my mind could be found, I believe, in large numbers from the Universities of Cambridge and Oxford. The only observation, further, worth adding is, that such men should be offered good remuneration, not the pay of the school cricket professional. The worth of such a man to a school, in adding freshness and vigour to the physical development of the boys, would be not less remarkable in the increased freshness and vigour of the boys' minds.

The second suggestion I have to make is a very evident one, but one which cannot be too often brought to our minds. Teachers should know their boys. They should know exactly the boys who are being injured by too close attention to work. They should also keep an eye on that pitiable class which have energy neither for work nor play. They should make themselves acquainted with circumstances of their boys' lives, so as to be able to judge whether each boy gets sufficient bodily recreation; when to encourage; when to discourage; and in what way best to find opportunities for pushing suggestions to a successful issue. Shall I seem too paradoxical if I say that parents ought to take a sympathetic, and not too critical, interest in what takes place at school; and on the other hand, the teacher should have a knowledge of, and an interest in, the boy's life out of school?

As far as he is able, then, the teacher must see that the boys whom he is teaching get due opportunity, and encouragement if necessary, for bodily exercise. But the term "Recreation" has a wide significance than that of physical education. I have defined it as the "means by which the strain and stress of the preparation of children for work in life may be relieved. Recreation includes, also, all that freshness—the pleasure, the charm—which is added by change from one intellectual pursuit to another. There is no doubt that, after a certain length of mental application, it becomes necessary to have either a remission of work or an alternation from sedentary work to bodily exercise. But the exhaustion of the brain may be warded off by judicious alternation of mental work. Dr. Bain says, on this point,—“The mathematical sciences are naturally deemed the driest and hardest of occupations to the average mind, yet ... I have known clergymen whose relaxation from clerical duty consisted in algebraical and geometrical problems.”

(To be continued.)

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FRÖEBEL'S SYSTEM OF EDUCATION.

THE one great principle of Fröebel's theory is the necessity of basing the whole of education upon "natural laws," as revealed by the study of the child's mental and physical constitution. "Nature was to him," writes one of his admirers, "as the manifestation from highest to lowest of the law and order under which we live, as the Divine thought made known through earthly things; hence his great value for science, which helps man to read these laws and to realise these relations to the outer world and to God." This was the key-note to his whole theory and this also accounts for the condemnation he passes on ordinary methods of education. By neglecting nature we leave the child ignorant of her wonders, her ever varied forms of life, of her external changes,—all of which have endless attractions for him,—and of her laws, which science reveals to us. We thus teach the child words about things which he is incapable of understanding or caring for. The child's whole being must expand under natural law. Education, as it is now, is only a patch-work, one principle prevailing at one period, another at another. And then by neglecting nature we undervalue the work of the mother—"the divinely appointed educator"—letting ignorance govern that early education which must give its bias to all that comes after. The first germs of observation, of curiosity, of spontaneous acting, of emotions of pleasure or aversion, of trust and sympathy are very early to be seen, and on them Fröebel founds the intellectual, moral, and physical training, of the child. Fröebel's plans are based upon a careful study of the nature of children, and are designed in order to develop the growth of every good and useful tendency in the child; and to check every evil propensity.

The natural bent of every child is to exercise its powers in play, and Fröebel therefore seizes upon play as the instrument of develop-

ment. Much stress is laid on the delicate training of the physical organs, which gives sureness and accuracy of hand and eye. Such a training is no less valuable to the scientific man than to the artisan, and Fröbel also attaches equal importance to the cultivation of the imagination of children, which is, however, carelessly set aside in ordinary systems of education.

But above all Fröbel thinks that the first foundation of all true education must be laid by the mother. Nothing that other teachers might do would be firmly based or complete without the aid of the divinely appointed educators of the race; and not the aid of their love only, which indeed, seldom fails but of their cultivated intelligence. God places the infant's in loving arms, but the knowledge that must guide the love and make its work effectual can only be won, as knowledge for every task is won, by study and effort. Not until women have realized the duty thus laid upon them, until they have fitted themselves to conduct the earliest education, and to co-operate with the teachers through all its subsequent stages, can we hope to see moral and intellectual training combine for the full and harmonious development of human faculty.

This should be carefully borne in mind by those who are engaged in the educational work of India. So long as women are left ignorant in India, so long as the mothers are unenlightened, anything but the divinely appointed educators of the race,—education will bear no fruit worth being proud of.

REVIEW.

ENGLAND AND INDIA.

LECTURES BY

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We strongly commend these lectures to one and all, who care to know the views of an enlightened Native Gentleman, on such interesting subjects as "English Character," "English University Life," "English Education in India and its Effects," and other kindred topics. The Lectures are characterised by simplicity and clearness of style, and as was to be expected they are free from that partiality for sesquipedalian language which Hindu students so much indulge in. The author appears to us to be sometimes too plain in his speech, but he makes up by a deep earnestness, especially when he deals with questions affecting Hindu Social Reform.

The lecturer having been to England, resided in Cambridge University for about 5 years, mixed pretty freely in society in England, and travelled somewhat on the continent of Europe, naturally felt that he had something to tell us and his Hindu brethren on his return from England, and he has chosen a most pleasant means of doing so in his Lectures. We are told his "First Impressions of London" and of Cambridge; we are given a very vivid picture of the Freshman, an idea of the peculiar advantages from a social point of view of residence in Cambridge or Oxford, and a faithful representation of the feelings with which he and other old Cantabs look back on their College days. His estimate of the English character is not overdrawn. We are told that "*thoroughness and accuracy* are the essential elements in the education of a Cambridge Student and that in consequence he exhibits great power in mastering any new subject to which his attention is necessarily turned," while "the education of an Indian Graduate is wanting in accuracy and comprehensiveness. Our Hindu Social Reformers will do well to peruse Mr. Sattianadhan's unpretending little pamphlet. They will see clearly what "India's Needs" are, that there is "much too much selfishness in the Hindu character," and that something more remains to be done than "commending with the lip this or that reform."

MADRAS MATRICULATION ENGLISH TEXT, 1886.

NOTES ON

THE "HEROINE OF SIBERIA."

BY

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(Assistant Master, Boys' High School, Lahore.)

360. *On her knees*—Prascovie knelt before her parents while the benediction was being said.

Benediction—(L. *ben* well, *dictum* to say) lit: a good saying. Hence, a blessing.

The opposite word is *malediction*, a speaking ill (L. *male* ill) hence, a curse. Cf. *benevolence* and *malevolence*, a wish, good or bad, (L. *volo*, I wish); *benefactor* and *malefactor*, one who does well or ill, (L. *facere*, to do).

363. *Two poor friends*—Those referred to in line 333.

364. *Immoveable*—They were so full of sorrow at Prascovie's departure.

365. *Motioned*—Made a sign of farewell.

366. *Adieu*—(French *a* to, *Dieu* God) the commending of a person to God's care; an expression of kind wishes; a farewell.

Cf. *good-bye*, a contraction of "God be with you;" and *fare-well* = *fare*, i.e., go on, well.

367. *Disappeared*—Was lost to sight.
369. *Durst*—i.e., *dared*.
372. *Cabin*—A small room.
374. *Tremor*—Trembling; feeling.
375. *Hagar*—See note on line 283, and read the story of Hagar in the book of *Genesis*.
378. *Degree of simplicity*—An amount of ignorance. Prascovie, it must be remembered, was still a child, and from the nature of her life in Siberia could not know the difficulties that lay in her path. To ask a person the road to St. Petersburg, when she was so far away from it, betrayed an innocent ignorance that naturally caused amusement. It was, as if a villager in Calcutta had asked some one to show him the road to Peshawar—supposing, of course, that railways were unknown.
381. *At her expense*—They laughed at her foolishness; she supplied them with cause for laughing.
383. *Explosion*—Outburst. Our imaginary villager now asks the road to Madras thinking Madras to be on the road to Peshawar.
387. *Chance*—Prascovie, by some good fortune, happened to get on the right road.
389. *Stages*—Places for stopping.
391. *Redoubled*—Went on faster.
396. *Then, &c., seek*—She remained there, resolving at daylight to seek, &c.
398. *Drove her*—i.e., took her in his cart.
400. *Haggard*—Wild and rough in appearance.
401. *Afford*—Give.
405. *Denying repose*—Refusing to give her any rest; by their mocking and insults not allowing her to rest.
407. *Accosted*—Met; addressed.
416. *Vied*—Another word taken from the language of gamblers. (See note on *hazard*, line 266.) *Envier* in French meant to invite to throw for certain stakes. There is an old English expression to “strive a-vie,” i.e., to strive as if for a wager. *To vie* properly means to stake or wager against; hence, to be a rival.
- Pres. part. = *Vying*.
416. *Vehicle*—(Lat. *veho*, I carry) the general name for any carriage or conveyance.
424. *That*—Demons. pronoun; that remarkable adventure.
427. *Repulsed*—The old man at first refused her admittance, but as she was going away he relented, went after her, and brought her back.
429. *Bad expression of countenance*—The appearance of their faces made Prascovie suspect they were not good people.
- Addison has an interesting essay on this subject.
- “I think we may be better known,” he writes “by our looks than by our words, and that a man’s speech is more easily disguised than his countenance.”
433. *Lurid*—Gloomy, dismal.
441. *Wallet*—A bag for carrying necessities on a journey.
443. *Sure enough*—Surely enough. An adverbial phrase qualifying

the verb commenced. *Enough* has here the meaning of *very*. “Sure enough, they commenced”=“As she quite correctly suspected, they commenced.”

446. *Her blood ran cold*—Prascovie was terribly alarmed.

451. *While*—Here *while* is a noun, and means *time*. So in the expression *worth while*=“worth the while,” “worth the time spent.” Cf. also *a long while*.

Its use as a conjunction came later. “Men must work *while* women weep.” Here *while* is an abbreviation for “*the while that*,” i.e., “during the time that.” The conjunction often occurs in the form *whilst* (line 460) which is really the genitive of *while*.

452. *More dead than alive*—Very frightened and weakened by the fright.

453. *High day*—Late in the day. Almost noon.

456. *Affable*—Lit. easy to speak to. Hence, agreeable, courteous.

465. *What had happened*—The attempt at robbing her.

468. *We are not, &c.*—We are not quite so bad as you think us to be.

472. *Artless*—Without art; without pretence or affectation. Simple.

473. *Professed robbers*—Robbers by profession.

478. *The depth of the snow*—The snow had fallen so heavily that it collected on the ground to some height.

478. *Ekatherinemburg*—A town on the right of the Ural Mountains.

480. *Enumerated*—Gave a list of; repeated one after another.

482. *In all probability*—Most probably.

483. *Amongst*—Really the preposition *among*, with the old genitive suffix *s*, and the letter *t* added to make the sound more distinct.

Cf. *whilst* (line 451) *against*, *amidst*.

485. *Charities*—Abstract nouns, and as such, do not take a plural.

When they do they refer to particular instances of the abstract notion. *Charities* = acts of charity.

486. *Invariably*—Always; without exception.

494. *Overrated*—Rated, or spoken of too highly; exaggerated.

496. *Conceived a bad idea, &c.*—Prascovie formed a bad impression of this lady, because the latter had hinted that Madame Milin (whom Prascovie had heard so well spoken of) might not be so good as she was said to be. Prascovie thought that a lady who spoke ill of others could not herself be very good.

498. *Assent in words*—Prascovie went with this lady, but she was silent at the lady’s remark. She would not agree with the lady’s statement that Madame Milin could be of such use as the lady herself.

501. *Received*—Treated; welcomed.

505. *Domestic, i.e., domestic servant*. Latin *domus*, a house.

513. *Materially*—Greatly; to such an extent that she could perceive the change.

519. *Menial labours*—The labours of a menial or servant.

525. *Transported*—Here used in its literal sense of *carried across*. L. *trans* over, and *portare* to carry.

528. *Disembarked*—Got out of the boat.

529. *These*—i.e., these mountains *left behind*, passed.

531. *Waters*—Sailed on a tributary of the Volga.

532. *Means*—Money.
 533. *Profited by*—Took advantage of.
 534. *The mouth, i.e.*, where the Khama joins, or flows into the Volga.
 538. *Bark*—Also spelt *barque*, a ship or boat. So to *embark*, to get on board.
 539. *Served as*—Was used as.
 540. *Immersed*—Drowned; put under water.
 540. *Barge*—Boat.
 542. *Out of the way*—To another portion of the vessel.

(To be continued.)

CALCUTTA UNIVERSITY ENTRANCE EXAMINATION, 1887.

NOTES ON

Selected portions of the English Course prescribed for the Calcutta University Entrance Examination of 1887.

By M. DUNN, B.A.,

Professor of English and Classics, St. Peter's College, Agra.

(Continued from page 183.)

PAGE 56.

Sir J. Moore.—(1761—1809.) He was placed in chief command of the English Armies in the Peninsula after the signing of the Convention of Cinten which roused great indignation in England, the terms being too favourable to the French who had suffered several defeats at the hands of Sir Arthur Wellesley. Sir John advanced into Spain but finding the Spanish insurgents completely defeated and himself in danger of being surrounded by the French he retreated in the depth of a severe winter through the mountains of Galicia pursued by Napoleon and Soult. The former afterwards withdrew leaving his lieutenant to press the pursuit. The sufferings of the English army were intense. To cover the embarkation of his troops Sir John gave battle to the enemy at Corunna, inflicting a heavy defeat on the French. Towards the end of the action he was struck by a cannon ball and was buried upon the ramparts of Corunna.

Not a drum—note.—It is usual when burying a military man to have martial music played to the place of burial.

Not a soldier—buried.—Three volleys of musketry are fired over the graves of military men.

Darkly.—With imperfect light.

The sods—turning.—Digging up the ground with our bayonets.

By the—light.—By the dim light of the moon whose beams strove to pierce the darkness of the night.

Sheet.—Winding-sheet, in which a corpse is wrapped.

Shroud.—The same as sheet.

Martial.—Lat. *Mars* (the God of war.)

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His narrow bed.—His grave.

And smooth'd—pillow.—And smoothed down the earth that formed a pillow for his head.

Lonely.—This word though qualifying *pillow* refers of course to the deceased who would be left all alone when his comrades had embarked.

And we—billow.—An ablative or nominative absolute.

Lightly.—With levity.

And o'er—him.—And standing on his grave over his remains they will censure him.

Reck.—Care. Sax. *wrecan* (to think.)

But.—Only.

And—sullenly firing.—And the distant sound of cannon fired at random in the dark told us that the enemy angry at their defeat were firing upon us.

Fresh.—Just won, referring to *field*.

Gory.—Bloody.

We carved—glory.—We inscribed no epitaph nor did we raise a tombstone over his grave, but left him with his glory as his only companion.

Wolfe, the Rev. Charles.—An Irish divine and poet (1791—1823.) His ode on *The Burial of Sir John Moore* is considered one of the finest in the language.

PAGE 77.

Soft airs—tide.—Mild breezes ruffled the quiet waters of the river Ouse.

Ouse.—There are three rivers of this name in England: (1) The Ouse in Yorkshire, joining the Trent, forms the Humber, (2) Great Ouse which rises in Northamptonshire, and (3) Little Ouse which rises in Suffolk and falls into the Great Ouse. The second one is here meant as Olney, the poet's residence for a number of years, lies on this river in Buckinghamshire, about ten miles from Bedford.

'Scap'd from literary cares.—When having got away from my occupations of studying and writing poetry.

His side.—The bank of the Ouse. The personification of a river is common, compare:—

"Oh, Tiber! father Tiber!

To whom the Romans pray."—Lays of Ancient Rome.

High in pedigree.—Of excellent breed. Lat. *pes* (foot), and *gradus* (step).

Nymphs.—Properly a race of beautiful beings supposed by the ancients to attend upon certain goddesses and to frequent mountains, woods and rivers. Hence any beautiful woman.

Grace.—Beauty, accomplishment. Lat. *gratia* (favour).

Spaniel.—A kind of water dog, or one used for sports in the field. Supposed to be from *Hispaniola*, now Hayti in the West Indies.

Now wantoned—reeds.—At one time he played and lost himself among the water plants and reeds on the river's margin.

Flag.—W. *Llag* (a blade). An aquatic plant with a bladed leaf, so called because it bends or yields to the breeze.

Starting into sight.—Becoming suddenly visible again.

Pursued ——— *flight.*—Followed the swallow over the field almost as swiftly as the swallow flew.

Blown.—Opened.

Intent.—Another instance of an adjective used as an adverb, equal to *attentively*.

Surveyed.—Examined. Fr. *sur* (over) and *voir* (to see). Lat. *super* and *videre*.

Extended.—Stretched out. Lat. *ex* (out) and *tendere* (to stretch).

Steer.—Direct.

My eager hand.—My hand which was anxious to catch the lily. Lat. *acer* (keen).

PAGE 78.

Beau.—The name of the Spaniel.

The word is French for *beautiful*.

Beau marked ——— *face.*—Beau steadfastly and seriously watched me as I laboured unsuccessfully to obtain the flower.

And puzzling ——— *case.*—And though the question was a puzzle to the dog he tried to understand the state of affairs.

Chirp.—A corruption of *chirp*. A loud call.

Dispersing all his dream.—Putting an end to his thoughtfulness.

Ramble.—Ablative absolute.

Shall hear of this thy deed.—The world shall read thy deed described in verse.

Mortify.—Put to shame.

But chief ——— *enjoin.*—But I shall first of all teach myself.

"The world ——— gives me all."—Reported in the indirect speech this would be "The world should hear of that deed of his dog; his dog should mortify the pride of man's superior breed; but chief himself he would enjoin, awake at duty's call, to show a love, as prompt as his dog's, to God who gave him all."

W. Cowper—(1731—1800.—His chief works are the *Task*, *Conversation*, *Truth*, *Expostulation*, a translation of Homer's *Iliad* and others. The following extract from Stopford Brooke's *Primer of English Literature* may be quoted here.

"A new element was introduced by him and Blake—the love of animals and the poetry of their relation to man, a vein plentifully worked by after poets. * * * Cowper is the first of poets who loves Nature for her own sake. He paints only what he sees, but he paints it with the affection of a child for a flower and with the minute observation of a great man. The change in relation to the subject of man is equally great. The idea of *mankind as a whole* * * is fully formed in Cowper's mind. All the social questions of education, prisons, hospitals, city and country life, the state of the poor and their sorrows, the question of universal freedom and of slavery, of human wrong and oppression, of just and free government, of international intercourse and union, and above all the entirely new question of the future destiny of the race as a whole, are introduced by Cowper into English poetry. It is a wonderful change; a change so wonderful that it is like a new world. And though splendour and passion were added by the poets who succeeded him to the new poetry, yet they worked

on the thoughts he had begun to express, and he is their forerunner." The above extract will be useful to show in what respects Cowper departed from the line of poetical composition followed by Pope and his school, and became the forerunner of that school in which poetry was no longer a "mere, mechanic art."

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Wayward.—Cross, peevish.

From whom—flow'd.—From whom you derived your existence.

PAGE 81.

Rev. T. Gisborne.—(1758—1846).

Their little day.—Their short life.

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Where ——— *on high.*—Where the lark flies high in the heavens his wings quivering in the sun's light on a dewy morning. *Soar* is from the French *essor* (flight).

Gales.—Breezes.

When faint ——— *noontide way.*—When wearily at noon he pursues his journey slowly and with great difficulty.

Drags.—Here the verb is intransitive. *To drag* means to proceed slowly and heavily.

Soothing.—Tranquillising, pleasing.

The sweetest ——— *return.*—The sweetest of all sounds is the welcome he receives on his return home from those he loves.

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Spanish main.—The mainland of South America near the West Indies.

Full.—Very.

Bleak domain.—Dreary land. *Bleak* is connected with *black* and *bleach*.

Domain is from the Latin *domus*.

Mulla's shore.—The Island of Mull, one of the Hebrides.

Resplendent hue.—Brilliant colour.

His native fruits.—The fruits of his native country.

Turf.—Fuel used extensively in the Hebrides.

Heathery land.—Land covered with heather, a species of shrub.

And turned his golden eye.—And looked upon.

Raging surf.—Stormy sea.

From green—gray.—The colour of his plumage changed from green and gold into gray.

(To be continued.)

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course for 1887).

BY

WILLIAM E. MILLER, B.A., F.R.S.C., (LONDON),

CHAPTER III.

(Continued from page 232.)

"There are three things, young gentlemen, said Nelson.....devil."—Put into indirect narration this would be:—Nelson said to one of his Midshipmen that there were three things, which he was constantly to bear in mind. First, he must always implicitly obey orders, without attempting to form any opinion of his own respecting their propriety. Secondly, he must consider every man his enemy, who spoke ill of his King; and thirdly, he must hate Frenchmen as he hated the devil.

Implicitly.—(Lat. prefix *im* for *in* and *plicare*, to fold.) Unreservedly.

Respecting their propriety.—(Lat. *proprietas*, propriety.) Respecting their suitability to any acknowledged standard or rule.

As a Midshipman.—See note at page 115.

The Mediterranean.—So named by the ancients from Lat. *medius* and *terra*, from being, as it were, in the middle of the land, or the midland sea.

Under Lord Hood.—Forming part of the squadron under the command of Lord Hood. See note at page 148.

In those seas.—The Mediterranean and its arms or branches.

But good principles.—Republican principles are here meant.

See page 84 of *Record*, where it is stated that Southey was at one time "an enthusiastic admirer of the contemporary revolution in France."

Democracy.—(Gr. *demos*, the people and *kratein*, to rule.) A form of Government in which the power resides in the collective body of the people, who conduct it by representation and delegation of powers.

The French under the name of democracy had committed such barbarities that the very name of republic was hated by the English.

Ended in dividing France.—France would have been divided into two republics if the English had helped the South of France in its efforts to form a separate republic.

Toulon.—A fortified city and seaport of France, capital of the department of Var. It is situated on a bay of the Mediterranean, and contains an arsenal, a rope-walk, a park of artillery, dockyards, basins, and everything to be expected in a naval seaport. Toulon is the only mart in the Mediterranean for the re-exportation of the products of the East Indies. In 1793 it capitulated, in the name of Louis XVII, to the British, who not finding the place tenable evacuated it the same year. Long. 5° 55' E., Lat. 43° 7' N.

The name Toulon is corrupted from *Telonium* or named after *Telo Martius*, a Roman tribune who colonized it.

To take possession provisionally.—To occupy temporarily.

Sir William Hamilton.—Was born in Scotland in 1730. His mother having been the nurse of George III, young Hamilton very naturally obtained that prince's patronage. Sir William was generally distinguished for his tastes in the polite arts; he employed a large portion of his life in the study of natural history, and supplied the *Philosophical Transactions* and the *Archæologia* with many learned articles. During his residence as Ambassador from England to the Court of Naples, a period extending over 36 years, he published his "*Campi Phlegrei*," from his observations of Mount Vesuvius, Mount Etna, and other volcanoes. He presented many books, manuscripts, and geological curiosities to the British Museum; and after his death his superb collection of antique vases was purchased by parliament for that institution. He died in 1803.

Our envoy at Naples.—(Fr. *envoyer*, to send, from *en*, in, and *voie*, Lat. *via*, a road.) An envoy originally was a person deputed to negotiate a treaty or transact special business with a foreign prince or Government, and distinguished from an Ambassador or permanent resident at a foreign Court. Now the term has become synonymous with that of Ambassador.

Naples situated on a beautiful bay was at this time the capital of the kingdom of the Two Sicilies and was ruled over by a Prince of the Bourbon family. It has a most delightful neighbourhood and climate and is the most populous town of Italy. It possesses considerable trade and has six castles, the highest of which is called St. Elmo. It also possesses the blood of St. Janarius, its patron saint, which, it is pretended, liquefies every 19th September. In its neighbourhood is Mount Vesuvius and the remains of Herculaneum and Pompeii.

In Italian, Naples is Napoli, taking its name from its ancient Greek name Neapolis = new city.

"I have never before, he continued, ... Augustus."—Put into indirect narration this would be:—Sir William Hamilton continued that he had never before entertained an officer at his house; but he was determined to bring him there. He directed that he (Nelson) should be put in the room prepared for Prince Augustus.

The student should note the following rules for changing direct into indirect speech.

(a) Leave out the quotation marks and insert the conjunction *that*, if necessary.

(b) Make, if necessary, the tenses of the verbs in the reported speech correspond with the tense of the reporting verb.

(c) Change the persons of the pronouns in the reported speech in such a way that they may in the indirect form refer to the same individuals as they do in the direct.

(d) Omit all interjections, vocatives, and other words that are used only in addressing a person directly.

(e) Change *shall* into *would* and *will* into *should*.

(f) Change *here* into *there*; *hither* into *thither*; *now* into *then*; *this* into *that*; *these* into *those*; *this* into *so*; *to-day* into *that day*; *to-morrow* into *the next day*; *yesterday* into *the previous day*; *to-night* into *that night*; *last night* into *the previous night*.

For changing sentences in the Imperative Mood into the direct form:—

(a) If the imperative contains an *order*, change the reporting verb into *command*, *direct*, *order*, or *tell*, and the imperative into the infinitive.

(b) If the imperative contains a *request* change the reporting verb into *ask, beg, entreat, or request*, and the imperative into the infinitive.

(c) If the imperative contains a *wish* or *prayer* change the reporting verb into *pray* or *wish*, and the imperative sentence into an *assertion*.

Prince Augustus.—Augustus Frederick, son of George III and Sophia Charlotte of Mecklenburg Strelitz, and Duke of Sussex, was born 1773, died 1843.

The meaning of the passage changed into indirect narration is that although Sir William Hamilton, on account of his high position at the Neapolitan court, did not invite naval or military officers to his house, still he invited Nelson, as he recognized in Nelson a future great man.

That acquaintance began.—Nelson's acquaintance with Lady Hamilton, which resulted in the separation of Nelson from his wife.

Who did honor to the station to which she had been raised.—Lady Hamilton was the daughter of a female servant named Emma Harte, and was herself a servant in the house of Mr. Thomas of Howarden, in Flintshire. Not liking her position she left it and after a series of adventures, none of which redounded to her credit, she became the wife of the Sir William Hamilton mentioned above. It was at Naples that she imbibed a violent passion for Nelson who ever after became her slave. She died in 1816 in the neighbourhood of Calais.

"Sir William, you are a man after my own heart."—Nelson here tells Sir William that he (Sir William) was just the kind of man that suited his ideas of what a man ought to be.

You do business in my own way.—You do business in the way in which I like to do it.

I will, if I live, be at the top of the tree.—I will rise to the top of my profession, i.e., the navy.

Neapolitan.—(Lat. *neapolitanus*, pertaining to Neapolis or Naples.) The proper adjective from Naples.

The only blot upon Nelson's public character.—This was the execution of Prince Caraccioli, who was an Italian admiral, and who became one of the victims who perished by the sanguinary reaction at Naples in 1799, when the French abandoned the town, and the royal family were restored. Notwithstanding that the capitulation with Cardinal Ruffo guaranteed his life, he was hanged at the masthead of his vessel, and his body thrown into the sea. It is supposed that Nelson sanctioned this outrage owing to the evil influence which Lady Hamilton exercised over him; but this has been vehemently denied by her ladyship. Prince Caraccioli or Caracciolo was the oldest and the best officer in the Neapolitan navy. Nelson is not, however, without supporters in the course he adopted. See chapter VI.

The king.—Ferdinand I. king of the Two Sicilies, was born in 1751, and succeeded his father Charles III. on the throne of Naples, in 1759, on the accession of the latter to that of Spain. During his minority, on account of the familiarity of his demeanour, he was a great favourite with the people. He married, in 1768, Maria Caroline, daughter of the empress Maria Theresa, who soon acquired such a decided influence over him, that he consulted her upon all occasions. The French revolutionary government demanded that Naples should renounce all connection with Britain, and enforced its demand by sending a fleet into the Bay of Naples. On the death of Louis XVI, however, Ferdinand joined the coalition against France, and took part in the general war from 1793 to 1796. After two years of

peace, the victory of Nelson at Aboukir again engaged Ferdinand against the French, who, on the defeat of the Neapolitans under General Mack, took possession of the whole kingdom, and proclaimed the Parthenopean republic in 1799. But, during the same year, the capital again fell into the royalist army under Cardinal Ruffo, and many adherents of the republic were executed. In this way, under the imbecile rule of Ferdinand, Naples continued to change sides, according to the power and influence of the two great belligerent nations, until the congress of Vienna, in 1814, finally re-established him in all his rights as king of the Two Sicilies. Unfit as this monarch was to wield the sceptre, all agree that he felt a strong sympathy for the sufferings of his subjects, that he was a patron of charitable institutions, and decidedly good-natured. He died January 24th, 1825.

This mission.—(Lat. *mittere*, to send.) This duty.

Tunis.—So called from its ancient name *Tunetum* or *Tunes*, is a country and capital town of Barbary. In name at least it forms part of the Turkish empire and pays a certain tribute to the Bey who resides at Tunis. It is a great centre of Mahomedanism, having nine colleges and a great number of smaller schools. Long. 10° 6' N., Lat. 36° 45' N.

Five sail of the enemy.—Five of the enemy's ships.

Sardinia.—An island in the Mediterranean separated from Corsica by the Straits of Bonifacio, and having 41 small islands belonging to it. The kingdom of Sardinia consisted of the island of that name and the N. W. part of Italy, which last included Savoy, Piedmont, Nice, and Genoa. But Savoy and Nice have been ceded to France and now form the three departments of Savoie, Haute Savoie, and Alpes Maritimes.

Corvette.—Through the Fr. *corvette*, Spanish *corveta*, from Lat. *corvis*, a basket, = a ship of war, of less tonnage and armament than a frigate, and used to carry advices or despatches.

Brig.—An abbreviation of *brigantine*, from Fr. *brigantin*, originally a piratical vessel. A vessel with two masts, square-rigged.

Had only three hundred and forty-five men at quarters.—Literally, had only 345 fighting men. *Quarters* here means the assigned positions or stations at which officers and men are posted in battle. Cf. "Beat to quarters" = summoned to their stations.

Others being absent in prizes.—When an enemy's vessel is captured, a certain number of the crew of the victorious vessel is put on board of the captured vessel as a prize-crew to conduct the vessel to its destination and to prevent the captured vessel's crew from regaining possession of her.

Near enough.—*Near* was once a comparative. We compare pos. *nigh*, comp. *nigher*, superl. *nighest* or *next*, and pos. *near*, comp. *nearer*, superl. *nearest*. Here *nigh* and *near* look as if their comparison was regular. But the really regular form would be an apparent mixture: pos. *nigh*, comp. *near*, superl. *next*. *Nigh* is from O. E. *neah*, *neh*, later on *neih*, *negh*. *Near* is from O. E. *nyra*, *nearra*, and was the regular comparative of *neah*. It began to be used as a positive about the 12th century, though it was not quite disused as a comparative till the 17th century. Thus *nearer* is etymologically a double comparative and *nearest* has really the modern superlative added to the old comparative form.

To engage her.—To enter into combat with her. From Fr. *engager*, from *en* and *gager*, pledge.

Disadvantage.—From Lat. *dis* not, and Fr. *avantage*, advantage.

The Frenchman manœuvring well.—The French vessel being well handled i.e., made to change its position with skill. See note at page 148.

Sailing greatly better.—i.e., sailing very much better.

A running fight.—As opposed to a stationary fight. A fight in which the combating vessels were sailing along while fighting.

So much damage.—(Lat. *damnum*, loss.) So much injury.

In the rigging.—(A. S. *wrgan*, to cover, to clothe.) The ropes which support the masts, extend or contract the sails of a ship, &c.

Called his officers together.—Held a consultation or council of war.

Refit.—Here a common noun = repair.

That she certainly was not.—That the vessel was certainly not fit to go into action without undergoing some repairs.

Veer the ship.—(Fr. *vire*, to turn.) Turn the ship round.

The student may change this passage from 'veer the ship' to 'action' into indirect narration, being guided by the rules given above.

Lay her head.—Nautical for point her head.

Crows.—An iron lever with a claw at one end shaped like the beak of a crow, commonly called a crow-bar.

Capstan-bars.—(Lat. *capistrum*, a halter.) Bars to make a capstan revolve. A capstan is a truncated cone pierced in the upper part for bars or handspikes, by which it is turned, coiling a rope or cable for weighing anchors or drawing up any great weight.

Our wounded spars.—Our damaged spars. Sailors use the word *spars* to mean those pieces of timber used as yards, booms, or masts, whether in actual use or kept in reserve.

For the people.—For the crew.

It may be half-an-hour good.—It may be a complete half-hour.

Signals of distress.—By flags hoisted in the manner prescribed in the signal code.

Hoisted out their boats.—Got their boats out and put them into the water. Some boats in every ship are kept on deck, others for more immediate use are hung from the davits, already for lowering.

The Dey.—*Dey* (from Turkish *dai*, a maternal uncle, a friendly title given to the commander of the Janizaries or military) or *Bey*, or *Beg* (pronounced *bay*), is the title given to the governor of a town, city, or district in Turkey, Algiers, Tunis, and other parts of the east.

Upon the impolicy.—(Fr. *police*, Lat. *politia*, policy.) General inexpediency.

The revolutionary government of France.—France under the Revolution.

Such arguments were of little avail in Barbary.—This kind of reasoning could accomplish nothing with the Dey, because such acts of cruelty were common in his country.

Barbary is a region of Africa, between the Atlantic Ocean, the Mediterranean Sea, and Egypt; it is 2,200 miles in length, and 500 in breadth, containing the countries of Barea, Tripoli, Tunis, Algiers, Fez, Morocco, Taflet, and Biledulgeria. It was known to the ancients by the names of Mauritania, Numidia, Africa Proper, and Lybia. The name Barbary is of Arabic origin, and is obtained from the Berbers, an appellation by which the Arabs designated the people of this region before the Saracen conquest.

The French had put their sovereign to death.—Louis XVI beheaded by the French in 1793.

He drily replied.—He answered sarcastically or shrewdly.

Nothing could be more heinous; yet, if historians told.....the same.—Nothing could be more wicked; but the English had also done the same in the instance of Charles I.

Heinous from Fr. *haineux*, through *haine*, hatred, from *hair*, to hate.

Completely gained the ascendancy.—Completely gained the superior or controlling influence. Ascendancy (Lat. *ad* and *scandere*, to climb,) is one of a numerous class of words used in old astrology; "the ascendant" meant the horoscope or that part of the apparent path of the sun which is above the horizon at one's birth; hence, "to be in the ascendant," or "to have the ascendancy" means to have great influence.

Was detached.—Was separated for an especial purpose.

General Paoli.—Pascal Paoli, a Corsican patriot and general, was born in 1726, at Stretta, in Corsica. He followed his father Hyacinth Paoli, one of the Chief Magistrates of Corsica, into exile, and was educated at the Jesuits' College at Naples. In 1775 his countrymen having elected him their generalissimo, he returned to Corsica, where he acted with such vigour against the Genoese, that he confined their dominion within the narrow limits of the fortified seaports, while he exerted himself in securing the independence of the republic. The Genoese, however, having made a transfer of the island to France, that power sent such an overwhelming force into it as compelled Paoli again to be an exile; and embarking on board an English vessel, went to England, where he obtained from the government a pension of £1200 a year. In 1789 the island was recognised by a decree of the National Assembly, as a department of France; and Paoli being invited to resume his station at the head of affairs, resigned his pension, took his departure from England, and, in 1790, attended by deputies from Corsica, presented himself at the bar of the National Assembly at Paris, where he was received with enthusiasm, and took the oath of fidelity to the French Government. The progress of the revolution disappointed the hopes which he had conceived; but he continued the connection with France till after the execution of Louis XVI, when he abandoned his allegiance, and was invested with his original dignities of the president of the National Council, and commander-in-chief of the island. He was encouraged to adopt these measures by the promise of assistance from Great Britain; and in February 1794, an English army landed in Corsica. On the 14th June following a meeting took place of deputies from the different parts of the island, when, through the influence of Paoli, a decree was made declaring the separation of Corsica from France, and its union to the British empire. Shortly after, Paoli revisited London; and, being in embarrassed circumstances, owing to a commercial failure at Leghorn, the English Government restored his pension; and he continued to reside in the metropolis till his death in 1807.

Anti-Gallican.—Opposed to the French.

Gallia was the ancient name of France and its inhabitants were called Galli or Gauls. Gall is a Celtic word=west, or western; as in Gaul, Cornwall, Galway=western way or direction.

Corsica.—From a Phœnician word signifying 'the wooded island,' is an island in the Mediterranean, separated from that of Sardinia on the south, by the Strait of Bonifacio. It is mountainous but fruitful valleys

are interspersed; and it has some fine lakes and rivers. It has always been famous for swarms of bees, and produces vast quantities of honey and wax. The mountains are rich in lead, iron, copper and silver; and there are also mines of alum and saltpetre. Porphyries, jasper, talc, amianthus, emeralds, and other precious stones, are found scattered in the mountains; and the south coast abounds with beautiful coral. It belongs to France, but is really an Italian island. The people are in a rude state and all its natural advantages are turned to little account.

(To be continued.)

QUERY PAGES.

These pages are specially intended for students who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

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THE "QUERY EDITOR,"
Educational Record, Madras.

EXAMINATION QUESTIONS.

LOGIC.

(Kumbakonam College.)

- I. (a) What are the logical characteristics of the terms:—Beauty, immortal, nation, Kumbakonam life, the Madras Mail.
- (b) Give one example of each of the following:—(1) a collective general name, (2) a singular abstract name, (3) a connotative abstract name, (4) a connotative singular name; or, if you deny the possibility of any of these combinations, state clearly your reasons.

II. Arrange in regular subordination to one another the following terms:—'Christian,' 'animal,' 'Episcopalian,' 'organized,' 'man,' and explain the statement that, in such an arrangement, the denotation and connotation vary inversely.

III. (a) 'What is the logical signification of each of the following designatory terms:—*Some, all, few, a few, any, most, not all, certain.* Illustrate the answer by examples.

(b) How are the following propositions to be logically treated?

- (1) The virtuous alone are happy.
- (2) None but the brave deserve the fair.
- (3) Great is Diana of the Ephesiads.

IV. (a) Give all the logical opposites of
'Unsafe are all things unbecoming.'

(b) If P asserts that Oxygen, Hydrogen, and Nitrogen cannot be liquified, and Q denies the assertion what precisely must Q be understood to mean?

(c) Examine in the case of each of the following propositions, the precise meaning of the assertion the proposition is false:—

- (1) Some English soldiers did not behave discreditably in South Africa.
- (2) Some electricity is generated by friction.
- (3) Oxygen and Nitrogen are constituents of the air we breathe.
- (4) Bare assertion is not necessarily the naked truth.

V. (a) Convert (1), obvert (2), and contraposit (3).

- (1) A struck B.
- (2) Only animals feed.
- (3) A stitch in time saves nine.

(b) Explain the different steps by which you infer each of the propositions under A from the corresponding proposition under B.

A.

B.

- | | |
|-------------------------|-----------------------------|
| 1. Some S is not—P. | 1. Some not—P is not not—S. |
| 2. Some not—S is not—P. | 2. All S is P. |
| 3. No S is P. | 3. All P is not—S. |
| 4. All S is P. | 4. All not—P is not—S. |

VI. (a) Prove that O cannot be a premise in the first or fourth figure, and that it cannot be the major in the second figure, or the minor in the third.

(b) How much can you tell about a valid syllogism if you know.

- (1) That only the middle term is distributed.
- (2) That only the middle and minor terms are distributed.
- (3) That all three terms are distributed.

VII. (a) Reduce *Baroko* and *Bokardo* to figure 1.

1stly—*indirectly*.

2ndly—*directly*.

(b) Reduce *Ferio* to Fig. 2, *Festino* to Fig. 3 and *Felapton* to Fig. 4

ENGLISH LANGUAGE AND LITERATURE.

I. Explain and illustrate the different significations of the words in the following groups :—

(a) Proud, conceited, presumptuous, insolent, haughty, vain.

(b) Strong, vehement, powerful, vigorous, able, potent, forcible.

II. Where do the following passages occur? Explain them with reference to the context in each case :—

(1) In maiden meditation fancy free.

(2) Where more is meant than meets the ear.

(3) The light that never was on sea or land.

(4) I own the soft impeachment.

(5) O for a lodge in some vast wilderness,
Some boundless contiguity of shade.

(6) Ill fares the land, to hastening ills a prey,
Where wealth accumulates and men decay.

(7) The soul's calm sunshine and the heartfelt joy.

(8) Fears of the brave and follies of the wise.

(9) Ah! every inch a king.

(10) License they mean where they cry liberty.

(11) Dear as remembered kisses after death.

(12) What's in a name? That which we call a rose,
By any other name would smell as sweet.

(13) Better fifty years of Europe than a cycle of Cathay.

(14) The starry Galileo and his woes.

(15) The people's prayer, the glad diviner's theme,
The young men's vision, and the old men's dream.

(16) Not to know me argues yourself unknown.

III. There are two tendencies at work in English; the one to widen and the other to contract the application of words. Show how some of the following words illustrate the former tendency, and others of them the latter :—

Breakfast, stereotype, red-tape, starve, disease, philippic, witch, muses, checkmate.

IV. Show that in the following words the apparent derivations are not the true ones :—

Business, chance-medley, rosemary, Oxford, nightmare, runagate, sovereign, train, help meet, beafecater.

V. Name and give the authors of :—

(a) The earliest English Comedy, (b) the earliest English Tragedy, (c) An English Tragedy that closely follows the Greek models, (d) The work that originated the name "John Bull" as a designation of the English people, (e) The poem in which the modern form of Blank verse was first used, (f) a literary forgery of the 18th century.

The following phrases are used by the best English writers. Place each of them appropriately in a sentence, giving its equivalent in English.

(a) *Status quo*, (b) *ne plus ultra*, (c) *sine qua non*, (d) *prima facie*, (e) *esprit de corps*, (f) *volens volens*.

ENGLISH.

I. Analyse the following passage, and parse the words in italics :—

Hail, beauteous stranger of the grove!

Thou messenger of spring!

Now Heaven repairs thy rural seat,

And *woods* thy *welcome sing*.

What time the daisy decks the green,

Thy certain voice we hear;

Hast thou a star to guide thy path,

Or mark the rolling year?

ANALYSIS.

Sentence.	Kind of Sentence.	Connective.	Subject.	Predicate.	Object.	Extension of Pred.
Hail beauteous stranger of the grove, thou messenger of spring			<i>Nom. of address.</i>			
(a) Now Heaven repairs thy rural seat	Princ. Sent.		Heaven	repairs	thy rural seat	now (time)
(b) And woods thy welcome sing	Princ. Sent. co-ord with (a)	And	woods	sing	thy welcome	
(c) The daisy decks the green	Adj. Sent. to time in (d)		the daisy	decks	the green	
(d) Thy certain voice we hear what time	Princ. Sent.		we	hear	thy certain voice	[on] what time (time)
(e) Hast thou a star to guide thy path	Princ. Sent.		thou	hast	a star [dir] to guide thy path [ind.]	
(f) or mark the rolling year.	Princ. Sent.	or	[thou]	[hast]	[a star] to mark the rolling year [ind.]	

PARSING.

Thou—Per. pro., com., sing., 2nd, nom. of address, in app. with 'stranger.'

messenger—com. noun., com., sing., 2nd, nom. of address, in app. with 'stranger.'

woods—com. noun, neut., plur., 3rd, nom. to 'sing.'

welcome—abs. noun, neut., sing., 3rd, obj., gov. by 'sing.'

sing—irreg. trans. verb, act., ind., pres., plur., 3rd, agreeing with its nom. 'woods.'

what—rel. pro., used as adj., qualg. 'time.'

time—abs. noun, neut., sing., obj., gov. by 'at,' und.

hast—irreg. trans. verb, act., ind., pres., 2nd, sing., agreeing with its nom. 'thou.'

to guide—reg. trans. verb, act., inf., pres., gov. by 'hast.'

mark—reg. trans. verb., act., inf., pres., gov. by 'hast,' understood.

2. Paraphrase the above passage:—

I bid the hail! thou lovely tenant of the woods and welcome harbinger of spring! Returning warmth has clothed in green thy country home, and trees and groves rejoice at thy approach. When the flowers first deck the fields we are sure to hear thy voice. How findest thou thy way across the sea? Is there some star to tell thee of the changing year, or guide thee safely back?

3. Name some of the affixes in geographical names which are not of English origin, with examples of their use.

Ark—an alter, as Grimsargh.

beck—a brook, as Wansbeck, Troutbeck.

by—a town, as Whitby, Grimsby.

dale—a dale or valley, as Teesdale.

ey—an island, as Orkney, Sheppey.

fell—a hill, as Scafell, Snaefell.

ford—an arm of the sea, as Milford.

garth—a field, an enclosure, as Applegarth.

gate—a way or passage, as Westgate.

holm—an island, as Bornholm.

kirk—church, as Ormskirk.

force—a waterfall, as High Force.

4. Give examples of Keltic words introduced into English in modern times.

Shamrock, reel, strathspey, brogue, clan, claymore, plaid, pibroch, whiskey.

GEOGRAPHY.

1. Draw a map of India inserting the physical features and the chief towns.

2. Name the chief European seaports of the Mediterranean and the Baltic seas, with their principal exports.

The chief ports of the Mediterranean are Barcelona, Marseilles, Genoa, Civita Vecchia, Leghorn, Naples, Palermo, Brindisi, Venice, Trieste, Syra, Nauplia, Hydra, Constantinople, Gallipoli, Saloniki; and the exports are silk, wool, dried and other fruits, raw cotton, olive oil, quicksilver, lead, glass, marble, straw hats, brimstone.

The chief ports of the Baltic are St. Petersburg, Riga, Dantzic, Konisberg, Stettin, Memel, Lubeck, Copenhagen, Christiana, Stockholm, Christiansand, and Gottenburg; and the exports are tallow, wheat, timber, hemp, potash, wool, corn, linen, flax, cattle, hides, provisions, tar, and iron.

3. What are the climatic advantages which New Zealand claims over Queensland and Canada as a settlement for people from England.

A great part of Queensland is situated within the tropics. The heat, therefore, is intense, and to persons born and reared in England the climate is, especially in the north, somewhat trying. Droughts also are frequent.

Canada, on the other hand, is very much colder than the British Isles; the winters are longer and much more severe, although the atmosphere is drier than that of England.

The climate of New Zealand resembles that of England, and a colonist settling there experiences little change, except that the winters are not so cold. Wind and rain are more prevalent, but the variations of temperature are less numerous. The amount of rainfall is greater, but the number of rainy days is less.

The chief climatic advantages of New Zealand are therefore those which are derived from the small amount of change from the climate of England.

HISTORY.

1. Relate briefly the historical events connected with the following places with dates:—Blackheath, Leicester Abbey, Norwich Castle, Smithfield, Fotheringay Castle.

In 1497, a rising in favour of Perkin Warbeck took place in Cornwall. A force of 16,000 marched to *Blackheath*, where they were attacked by Henry VII.'s forces, and 2,000 of them slain.

Wolsey, after having incurred the displeasure of Henry VIII., retired to York, but was arrested in 1530 for high treason. On his way to trial he was taken ill, and died at *Leicester Abbey*.

During the reign of Edward VI., a rebellion in Norfolk, under Ket, a tanner, took place in 1550. It was put down by the Earl of Warwick, and Ket was hanged on the walls of *Norwich Castle*.

Smithfield is associated with the burning of Protestants chiefly in 1555, in the reign of Queen Mary. In *Smithfield* Wat Tyler was killed, 1381.

Fotheringay Castle is noted as the place of imprisonment and execution of Mary Queen of Scots, 1587.

2. What additions were made to the geographical knowledge of the people during the reign of Henry VII.?

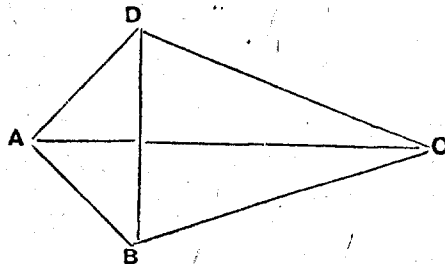
During the reign of Henry VII., Columbus discovered the Bahamas, a group of islands in the West Indies, in 1492; Sebastian Cabot discovered Newfoundland, and the mainland of America, in 1497; while in 1486, Bartholomew Diaz doubled the Cape of Good Hope, thus discovering an ocean route to the East Indies.

3. What was the origin of the Crusades? How came the Kings of England to engage in them? Give the dates of the First and Second Crusades.

Peter, the Hermit of Amiens, witnessed the cruelties practised upon the Christians by the Turks in Palestine. On his return he complained to Pope Urban II., and under his sanction, a general Crusade was preached throughout Europe, the First Crusade starting in 1095. Robert of Normandy, brother of William II., joined this Crusade, to vie with the other nobles of Christendom in the zeal for the recovery of the Holy Sepulchre. The Second Crusade took place in 1146. Richard I. joined the Third Crusade in his ardent zeal for the honours of chivalry. Edward I. joined the Fourth Crusade in imitation of Phillip of France.

EUCLID.

The four sides of any quadrilateral are together greater than the two diagonals together.



Let ABCD be a quadrilateral, and AC and BD the two diagonals. The four sides AB, BC, CD, DA together are greater than BD and AC together.

The sides BA, AD are $>$ BD in the $\triangle BAD$ (I. 20), and the sides BC, CD are $>$ BD in the $\triangle BCD$ (I. 20).

Again: the sides AD, DC are $>$ AC in the $\triangle ADC$ (I. 20), and the sides AB, AC are $>$ AC in the $\triangle ABC$ (I. 20).

$\therefore$ twice AB, BC, CD, DA are together $>$ than twice AC, BD; and AB, BC, CD, DA are together $>$ than AC, BD.

Q. E. D.

A NEW DEPARTURE IN TEACHING GEOGRAPHY.

By L. R. KLEMM, Ph.D., *Supt. of Schools, Hamilton, Ohio. U. S. A.*

Permit me to depart from the customary method of procedure by starting from the general and going down to the particular subject, by first directing attention to the fact that in teaching young pupils we should invariably start from sense-perception; from that the next step to conception and idea is easily taken, never *vice versa*. Show the child the particular, the concrete thing; show him several similar facts, and offer an opportunity to abstract from them—to rise from the object to the idea. Every subject of instruction in the lower schools has a certain elementary basis of sense-perception. The primary ideas resulting therefrom will be easily understood by the child, because by means of his five senses he can take them in, retain and assimilate them. If anything were taught lacking this sound basis, that is, anything the elements of which cannot be perceived by the sense, it has no business to be included in the course of study of the elementary schools; it would, in fact, be like the proverbial bladeless knife that had no handle. In a measure this rule holds good in every branch of study, even in the most abstract philosophy.

A few simple examples may explain what is meant. (1) You may never see South America, yet you can obtain a tolerably accurate knowledge of the topography of that continent. And it is sense-perception by means of which you gain this knowledge. You know what is signified by such terms as elevations and depressions, peaks and ridges, valleys and heights, plateaus and plains, coasts and banks, capes and inlets, rivers and lakes, bays and harbours, islands and peninsulas, llanos and pampas; they are the names of things the like of which have come under your own personal observation. And, with the aid of illustrations, your imaginative power may be fed sufficiently to obtain a pretty accurate idea of South America. (2) The artist who modelled the Venus of Milo may not have seen the original in reality; but his power of imagination was so great that, starting from what forms of beauty he had seen, he combined them, and these created the graceful figure which, to this day, has remained the ideal of beauty. (3) No one ever saw the ideal, that is, the absolutely perfect human being, of whom we all have a more or less definite idea. His eye must have the keenness of an eagle's eye; his form must vie in beauty with that of Apollo Belvedere; his strength must be superhuman; he must be accomplished in all the arts—be a Mozart in music, a Raphael in painting, a Demosthenes in elocution, etc.; he must be a thinker far beyond any philosopher of ancient or modern times; in point of morals he must be as

unblemished as the very stars above. Where is he to be found? Yet he exists in our imagination; and he is a creation, every part of which has its origin in reality. (4) Take history. You were not present at the downfall of the Roman Republic; yet from what is told you, and what you have experienced yourself, you can form a vivid picture of the state of things at the time of Cæsar. And your knowledge of the events that happened 2,000 years ago in Rome will be the more vivid, the clearer your ideas are of the political institutions of your own country.

Analogy and comparison are impossible, when there is nothing in your mind with which to compare. Not having a standard measure, how will you measure a distance? Every iota of instruction, every idea, every rule must be based upon or lead back to perceptions previously gained; and when these are wanting, they must first be supplied. This is a condition of rational instruction *sine qua non*.

Now the question arises: Have our pupils the necessary basis of sense-perception when they take up the study of geography, say in the third school year? I think not; and in the way in which geography is taught commonly, we do not even offer facilities for gaining sense-perception. Do not say: "Aye, but we do; for we start from the school-room, and gradually widen the horizon of observation." Despite this assertion, I repeat: The method in vogue is faulty, inasmuch as it fails to establish, first of all, a sound basis of sense-perception. The average teacher begins to build, before he knows upon what foundation he builds. To prove my assertion I could bring in evidence enough to convince even a jury composed of proverbial court-house rats. A few facts may suffice, however.

Out of 90 pupils in a grammar school in Hamburg, only 38 had seen the sun rise; only 8 had ever noticed the Milky Way. Out of 1,000 children, when entering the public schools of Berlin, only 638 had seen the evening red; only 462 the setting sun. I am prepared to give many more instances of ignorance of common daily occurrences and facts, but my time is limited. Of 502 children that last year entered the schools of a town in Saxony, only 92 had seen the sun rise, and 114 had seen the sun set. You may be tempted to say: "These frightful examples of ignorance were found in Germany; God be thanked, they cannot be found in enlightened America." This is but poor consolation. I claim these cases have been systematically enumerated in Germany, because there teaching is a profession, and people there are accustomed to treat educational questions with scientific thoroughness; while in this country, as Hon. Henry Barnard, of Conn., says: "The business of education is pursued with an utter lack of system, with complete, unsympathizing, independent, self-dependent isolation of effort." I am confident, that our American children, if examined, would be found to exhibit the same deplorable want of information. Dr. Stanley Hall has proved this satisfactorily to all who are not prejudiced. My own experience during 20 years in the school-rooms of this country, is in substance the same.

The greatest error, then, which prevails in the teaching of geography, is the lack of preliminary steps. In every other branch of study, even the most inferior teacher proceeds somewhat rationally, but geography usually begins, I am sorry to say, with the introduction of the text-book.

Ritter, the father of modern geographical science, says: "The most natural method is the one which makes the child familiar with reality first,—which lays a sound foundation of geographical knowledge, gained through actual observation of that part of nature which surrounds the child. Here

he is to learn to see. Whether he lives in the city, or in the hamlet on the mountain, or in the valley, it is certainly not within the four walls, not from maps, and not from the text-book, but in nature alone that knowledge of nature will be gained by him. Nature ever remains the same; she knows no typographical errors, no blunders in drawing, no want of discretion. Nature's teaching is always perfect. This elementary method combines all the requirements of science; it furnishes the stratum of concrete knowledge, from which abstract ideas are drawn. Amid nature the child learns to know the country in all its various conditions, and learns to recognize it even on the flat surfaced representation—the map. If this genuine elementary instruction be given, all difficulties of subsequent instruction in geography are removed."—(*School Journal of America*.)

EDUCATION AND RECREATION:

A LECTURE DELIVERED BY

FOSTER WATSON, ESQ., M.A.,

At the College of Preceptors, 1886.

(Continued from page 239.)

Dr. Bain further shows that there is a real transition and change of strain, and so relief, in passing from the study of languages to that of science, and *vice versa*—from words and spoken teaching, to concrete objects in the sciences of observation and experiment—from the world of matter to the world of mind. Let it be added, in changes from one subject to another in schools, an immense assistance is often found in a sharp, simple, arm-drill exercise.

Thus, then, the mental strain in education can be relieved by remission of work and by alternation of work, by actual muscular exercise and play, and by changes of subject: the principle involved in all cases being that both the mind and the body cannot, without injury, be kept strained in one groove of work continuously for a lengthened space of time.

I have already pointed out that the element of spontaneity counts for much in Recreation. The alternation of work set by the teacher to other work set by the teacher, will not be so recreative as the change from work set by the teacher to work to which boys give themselves up voluntarily. Then, somehow, whatever be the labour involved, it is recreation rather than straining work.

"There be some sports are and painful, and their labour
Delight in them sets off."

Let us consider cases of voluntary labour of boys, which may count as Recreation. Provided, then, a boy spontaneously undertakes to collect the wild-flowers of a district, stones or shells, insects or geological specimens, he will undergo far more toil in the pursuit than could be got out of him in setting him to dig a garden; simply because to do the one "it is his humour," and to do the other—it is not. A few days since, I saw a boy out of school hugging a book—a yellow-back book. Knowing the boy, I was interested to learn what book it was to which he was so affectionately attached. Proudly he opened the book, telling me at the same time it was on "Butterflies," and inviting my admiration for a particular specimen of which there was an engraving. Like the rest of us, he is looking forward

to the coming of spring and summer; but differs from us here, probably, in the delighted visions, which almost dance through him, at the thought of collecting specimen after specimen of butterfly.

It is his humour. It is that into which he will put months of concentrated expectation, should not another humour steal his affections in the meantime. Such humours require some acknowledgment on the part of the teacher. It is wise to make them useful without destroying—and, if possible, increasing—the interest. This may be done by the establishment of Museums in schools. The main point, however, to be insisted upon in this connection is, that the collection of specimens, and their arrangement and care, shall be left as much as possible in the hands of the boys or girls themselves—that it is really their museum.

As favourite occupations amongst the pupils differ so widely in schools, it is a very good plan, and is becoming very general, to make provision for their fullest encouragement and development, by an exhibition of work which has been done in the way of recreation. Parents and friends interested in the school, or in the work of special boys, are invited to attend. All sorts of work done by the pupils—especially work done as recreation, *i.e.*, the results of their occupation in their spare time, that to which they have voluntarily set themselves—is shown. Drawing of all kinds, fretwork and carpentry, model engines and machines, fancy printing and writing, collection of stamps, of insects, geological specimens, butterflies, &c.—everything, in fact, which the mind and heart of boyhood delight to set itself to do and think into material form. It is well to have a distinct space assigned to each class for its exhibition, so that emulation is excited. It may also be necessary to make a choice from the various work offered; and in this case—at any rate, in the higher forms—a committee of boys may be elected by each class, to discuss with the teacher which pieces of work shall be chosen.

I have still to mention the Library as a means of recreation. It is sometimes urged that boys have so much book work to do, that it is somewhat of a punishment to induce them to read still more. But, there are books and books. We have seen that a change from language to science, or science to language, is a relief, a recreation to the mind. But language and science both belong to the intellectual side of mind. To pass from either of these, or both of them, to books, say of an imaginative order, is refreshing to grown-up people. Why should it not be to children? Besides, if it is their desire to have a school library, the fact that they wish it will make a pleasure of the effort involved in reading. There is, however, a more serious difficulty than that suggested. It is, that children have so little time for reading other books than those of the class-room. This, it is true, makes them enjoy what reading they do get of books which are their own choice, all the more. One the other hand, little spare time and much work brings boys into the bad habit which so besets their elders, of skimming their reading, and simply slurring through books. Mr. Fitch has some excellent words on the subject of the school library, and the selection of books for it. He says,—“Believe that for the child, as for yourself, it is true that any book which is really enjoyed, which enlarges the range of the thought, which fills the mind with fancies or glowing pictures, which makes the reader feel happier and richer, is worth reading, even though it serves no visible purpose as part of school education.”

These remarks include pretty well all I have to say about Recreation in relation to the education of children, viewed both in the physical and mental aspect. They can be summed up in very few words,—*There must be full scope for all kinds of activity of mind and body.*

There are two other points to which the subject of “Education and Recreation” demands our attention.

1. The necessity of Recreation for the Teacher.
2. What I will call the school-basis of Recreation for after years.

When one considers the demands made on teachers, it seems hopeless to further ask that every teacher shall see that he or she, as a duty, preserves freshness and vigour by sufficient and fit recreation. First let me recall to mind the passage in Mr. Spencer's book on Education, where he speaks of his visit to a Training College for Teachers. He says,—“Not only are the ten-and-a-half hours of recognised study frequently increased to eleven-and-a-half, by devoting to books the time set apart for exercise; but some of the students get up at four o'clock in the morning to prepare their lessons, and are actually encouraged by their teachers to do this!” This, of course, may be put aside as exceptional; but, unfortunately, it is not exceptional for mere boys and girls, known as pupil teachers, to teach during the day, and fill up, almost literally, all their spare time with lessons of their own, growing up without recreation, either physical or mental, and possibly acquiring an aversion to exercise, until, indeed, their bodies are so out of order that no amount of exercise will ever be of service to them. For those teachers (a large section numerically) whose income from their school appointment is barely sufficient to meet the wants of themselves and their families, recreation is out of the question. Their spare time must be given up to getting “outside” work—which means the appropriation of all, or nearly all, their time to work which brings their daily bread. It seems absurd, perhaps, to speak to them of the necessity of recreation. Yet recreation is as necessary to the teacher, if he is to do his work well, as it is to the school-boy. I do not mean that the teacher must romp in games, and give himself up an unwilling victim to gymnastics. But, if his teaching is not to become stereotyped, mere mechanical routine, he must have frequent recourse to the various occupations and pursuits which he finds from experience best add energy and vivacity to his mind and body.

Aristotle said that man's object is not merely to live, but to live well. It might be said with truth that a teacher's aim is not merely to teach, but to teach well. To do this, consider what is necessary, outside of all merely technical knowledge and ability. There is, first, a general knowledge of things; he must be able to give his opinion and his advice as to all kinds of subjects which he and his pupils come across. To teach any particular subjects, he must know in what points they are like or unlike to others. He must find illustrations to bring out vividly some point with which he is dealing. Knowledge makes vast strides, and to in any way keep abreast in any subject, it requires that much time should be spent in reading. But not only so. Besides having his own school-subjects to keep in mind, he ought to understand the spirit of the age, and be alive to its tendencies and developments. And, again, he too, with the rest of the intellectual world, ought to be taking his delight in the feasts of imagination which poetry, fiction, and literature generally have to offer. To turn to the freshest, the most invigorating and earnest books which are moving and have moved the rest of men, is a fit restorative to the man weary of the strain of work, and fearing to sink into the monotony of humdrum mechanical routine.

So much from the Mental side. From the Physical side, it is sufficient to say that a teacher requires spirit, activity, and cheerfulness. How these can be best obtained, each teacher must determine for himself—but it is only by some form of Recreation. Over-work will assuredly reduce these invaluable elements in a teacher; it may even take away their possibility.

Then the teacher does not lead his children; they are simply constrained by fear. An unsympathetic teacher cannot help being a tyrant. And a teacher cannot well be sympathetic with children unless he keeps alive in himself something of the freshness and spontaneity of childhood. Throughout the consideration of Recreation, we see that feature of change is prominent. Here, again, it seems to me to apply. When a teacher is weary with his work—if he has had a hard, troublesome, and tiring day, or week, let him not, when he seeks companionship, meet fellow teachers and exchange a record of troubles. With whomsoever he meets, teacher or otherwise, let it be on common human ground. Outside of the school, let teachers, mix as much as possible in the movements which are agitating the minds of men—political, social, religious. By putting ourselves into useful action, by contributing something of ourselves to these, we shall, in return receive a share of their life and strength. From them we shall get activity, spirit, and energy. In the teacher who is an athlete, animal spirits will probably be fully developed. He will do well to accustom himself to some favourite intellectual pursuit. In short, as the worthy Fuller says:—

"Refresh that part of thyself which is most wearied. If thy life be sedentary, exercise thy body; if stirring and active, recreate thy mind. But take heed (adds he) of cozening thy mind, in setting it to a double task under pretence of giving it a play-day, as in the labyrinth of chess, and other tedious and studious games."

The second point I wish to bring forward is what I call the Basis of Recreation for the child's life after he leaves school. When the boy or girl leaves school, he or she has indeed finished scholastic education, and leaves the academy of the pedagogue for the university of life. But, so long as he continues to be an industrious and devoted worker, so long will he require to avail himself of some recreation. Now, it is a notorious fact, that a very large number of men and women are without resources in the way of recreation. If they become ill or unable to attend to their ordinary business, they can find no occupation which has the slightest interest to them. Notice how restless and unhappy the so-called successful man who has "retired" from business often is! He has means, he has leisure, but he is without resources of enjoyment. Mr. R. H. Quick says,—"Most Englishmen are at a loss how to make any use of leisure. If a man has no turn for thinking, no fondness for reading, and is without a hobby, what good shall his leisure do him? He will only pass it in insipid gossip, from which any easy work would be a relief." I ask, what is the position of the school teacher in relation to this lack of resource of the men and women he has had in training?

The task that is put into the schoolmaster's hands by the parent is, generally speaking, to prepare the boy for business or for a profession. If the latter, probably the boy goes through a higher course of training when he leaves school, in which he, consciously or unconsciously, grows into more liberal ideas as to all those influences which tone down and ameliorate the pressing worry and strain of life. But, if he goes from school to business, he frequently leaves school at the very earliest age he can induce an employer to take him into his service. Not so only. But the parent constantly is urging the schoolmaster to only give the boy "useful" knowledge—that which will be of direct and evident service in the situation to which he is going. Hence, the schoolmaster is requested to keep strictly to marketable subjects, and deliver up the boy at the earliest possible age to the desk or the bench. And that is what he usually does. But, surely, if teaching is a profession at all, those who belong to it have a right to claim a certain amount of discretionary power in the education of the children placed under their care. They have a right, on behalf of the future happi-

ness of the child, to neglect the desire of the parent to simply supply the scholar with the necessary qualifications for mounting the office stool. The teacher has to look to the making or marring of a man or woman. And though, fortunately, there does not lie upon us the grave responsibility of completely determining the future of those entrusted to us; yet the teacher who works with any ideal before him, cannot feel that he has done his duty when he has taught his class "the usual subjects," and turned his boy out, as it were, to order. What, then, is the teacher able to do besides putting his scholars through the educational machine? What is he able to do besides giving the boy a certain quantity of useful knowledge, and training his faculties to utilise that knowledge, and possibly, to put him in the way for finding further knowledge for himself? Can the teacher do anything to supply that void in the man's life, that inability to interest himself in anything but his immediate daily work, even when he is not at it? Can he give to the boy a basis for Recreation in after life? Again I offer my suggestions, in the hope of inciting other and more valuable suggestions.

I. In the "Wilhelm Meister" of Goethe some excellent ideas may be found, or suggested, with regard to education. They may, indeed, be visionary ideas, but it is necessary for us teachers to drink in the feeling which ideas excite, to sympathise with their meaning, however much we may be convinced of their impracticability. However impracticable may be the system of education propounded in the third volume of "Wilhelm Meister" (Carlyle's translation), yet it does us good to read it, and to feel that teachers and taught meet together on a higher level than that of correct spelling and properly formed writing characters. Here is a passage from "Wilhelm Meister" which is not, I trust, too visionary to be useful. Goethe says, in "Wilhelm Meister":—

"Men are so inclined to content themselves with what is commonest; the spirit and the senses so easily grow dead to the impressions of the beautiful and perfect, that everyone should study by all methods to nourish in his mind the faculty of feeling these things. For no man can bear to be entirely deprived of such enjoyments; it is only because they are not used to taste of what is excellent, that the generality of people take delight in silly and insipid things, provided they be new. 'For this reason,' he would add, 'one ought every day, at least, to hear a little song, read a good poem, see a fine picture, and, if it were possible, to speak a few reasonable words.'"

This is an ideal we teachers ought to have before us each day—to hear a little song, if it only be the chirping of a sparrow; to read a good poem, if it only be a short one; to see a fine picture, if it be but a historical character pictured in the imagination; to speak a few reasonable words, if they find no better listeners than our boys. And, having our daily song, poem, picture, and words of reason—wherever we happen to find them—we should watch our opportunity, and when the moment of speaking out fully and freely comes, as it assuredly does come at times—perhaps not daily, but from time to time—we should share these priceless treasures, and let our scholars hear the songs and poems and reasonable words, and see the pictures which have gladdened us. There are times when a class rises to our level, perhaps beyond it; then is the time when impressions are registered for life; then is the time to seal an image of pleasure and beauty, which will not only be a joy for ever, but which may also be the parent of many other similar joys.

II. One of the bonds of friendship between older people is that of Hospitality. There is nothing which scholars appreciate more than being treated in the same way by the teacher as he would treat his grown-up friends. For boys to be met on the common ground of good and kindly feeling is in itself a delight. Nothing, however, gives so much real pleasure

as a common pursuit in pleasureable and useful work, which is taken up as recreation. Let a teacher, then, gather some of his elder boys together to his house, to read and to enjoy such books as Tennyson's "Idylls of the King," Wm. Morris's "Earthly Paradise," Lewis Morris's "Epic of Hode's" or Edwin Arnold's "Light of Asia." Or, if the teacher prefers, and as such delightful wealth, let him receive his boys as guests, and entertain them by showing them his paintings and collections. You will readily understand, I do not mean to make such gatherings mere extra lessons out of school-time. I mean that the teacher should let the boys see and feel in what it is that he himself finds his pleasures and recreation, and that, outside of the school-room, there are new fields of thought and feeling open to all. And although, necessarily, much of the teacher's atmosphere of thought and feelings seems vague to the boy, it is sufficient if the fact of its reality seizes upon him, and he becomes conscious of the existence of new worlds of the imagination, higher and nobler than the "every-dayness of our work-day life."

III. It is usual in German schools for boys to make journeys together into the country during the holidays, under the care of a master. I expect the circumstances of English schools do not lend themselves easily to a following of the German custom; at any rate, it is not frequently followed. But it probably is within the power of every teacher to urge his pupils to go into the country and get face to face with Nature. Occasionally, too, he may be able to go with them. It may seem strange to say that children, whose main characteristics are objective, require urging to go into the fields and lanes. But experience teaches us that many London children have no idea of the glory and beauty there is in the country. One boy told me, a short time ago, that he had been in the country once for a week or two, but it was very dull, and he was very glad to get back to town. The reason of the dullness is very clear. The boy had never observed the things which Nature, with so bounteous a hand, had put before his eyes. He had walked about in the country, as some of us walk about in the town, through street after street, without noticing the names of the shopkeepers and the nature of their wares, gathering merely a general impression of the dullness and monotony of the "long, unlovely streets." But the child should see Nature from an early age, and he should see it often. For those childish memories will be a recreative force in older years, and the very thought of Nature will suggest a refuge and retreat from the weariness of the man's life.

How much the child misses, not only in the present but for his future, if he neglect to early make a friend and companion of Nature, we shall recognise by recalling those words of Wordsworth on revisiting the banks of the Wye:—

"These beauteous forms,
Through a long absence, have not been to me
As is a landscape to a blind man's eye;
But oft in lonely rooms, and 'mid the din
Of towns and cities, I have owed to them,
In hours of weariness, sensations sweet,
Felt in the blood, and felt along the heart;
And passing even into my purer mind,
With tranquil restoration."

IV. We have seen that, in the child's early play, there are germs of the actor, the architect, the poet, the musician. We should all admit that any inclination and power in the direction of art deserves cultivation. The parents of many children in the middle and poorer classes cannot encourage

and train the child in art, for they are so often themselves without artistic sentiment. Rich parents, too, may be found by the score whose ideas and feelings on artistic questions are strictly conventional and shallow. Now, it is the special function of art to afford pleasure, and that of the most refined order. It would, therefore, be a most inadequate preparation for recreative enjoyments, to omit from any boy or girl the possibility of developing within himself or herself the capacity for at least enjoying, if not actually creating, products of art. Who is to do it, and when is it to be done, if it is not started at school?

Accordingly, we find that music and drawing are taught in most schools; but scarcely, I venture to say, with that enthusiasm which they deserve. Often enough, too, pupils get so tired with the drudgery of the preliminary work which is hammered into them, that they have no heart for further weariness, and give up in despair. This is not the training children want. The teacher of drawing should, as part of the school course, take his classes to see some of the best pictures in the different galleries, selecting, of course, those whose subjects are likely to be interesting to children. After they have been, he should talk about the pictures, and notice what things most strike the minds of his class. He should then give, very simply, the more salient of the impressions the pictures produce on his mind, and compare those pictures which his class have seen with others they have not seen. This sufficiently indicates the method I would suggest, *viz.*, the arousing a genuine interest for pictures, and the exercise of careful observation in judgments on them. So with music; let the children under the care of the teacher hear good music, and talk with him about it, and compare one piece with another. The preparation by a school, from year to year, of a musical entertainment, even of a comic opera, is sufficient to excite a very vivid interest in musical matters. The snatches of music which have pleased the fancy of the boy unconsciously find a wholesome vent in school-boy whistle and song. This, with all the importance due to appearance in public, possibly does more to arouse musical feeling amongst children, both amongst the performers and their listening fellow-scholars, than much strumming and drudging in scales.

One further suggestion on this point. Let children get well accustomed to hearing good music, and they will always long for it. As a means of recreation, it is not so much technical knowledge that is called for, as simple, pure delight, and joy in it, all that which tends to verify Aristotle's description,—*"Music, man's chiefest joy."* How much more full and rich must a man's feelings be in the recollection of his old school, when he brings back to mind how the dear old organ joyously poured forth its strains to call him to his day's work, and to release him from it! May be that has made him all his life through love music more, and has drawn him to lose himself in its charms.

I am aware that, in drawing attention to the question, What basis can the teacher supply to his pupils for Recreation in after life? I shall seem to be going beyond the province of the teacher. The duties of the teacher are formidable enough, in any account we might give of them; and I should not dare to thus appear to enlarge the field of vision where he must be anxiously on the alert, were it not that I am convinced of the importance of this subject of Recreation. For men's lives are now so cabined, cribbed, confined by incessant and uncompromising competition in the fierce struggle for existence—in the unmitigated monotony of work induced by the separation of employments into such minute and uninteresting grooves of work—that if they have nothing to relieve the strain and stress men will, for very weariness, lose all hold on life.

Already, we are obliged to notice the cry of bitterness which is being wrung from the workers and toilers. Long since we have heard the voice of Wordsworth telling us:—

“The world is too much with us; late and soon,
Getting and spending, we lay waste our powers;
Little we see in nature that is ours;
We have given our hearts away, a sordid boon!”

It is only lately, however, that the remarkable *Journal intime* of Henri Frédéric Amiel has disclosed the terrible conflict of mind this modern hurry and confusion may produce in a gentle-hearted man. Every where is apparent a growing Pessimism; such, e.g., as that of Schopenhauer and Hartmann, as philosophers. Pessimism, and dark views of life, have always found a home in the hearts of cynical old men. But, to-day, a growing darkness is penetrating the minds and souls of the young men.

It is creeping down even into the school-room. We hear echoes, and more than echoes sometimes, of scepticism and of pessimism, in the talk of our boys.

All these harmful tendencies, we must all wish to counteract. It is no use pointing them out, and warning the men and women that are to be against them. We must do something positive. If the burden of life is becoming greater; “if the individual withers and the world is more and more”—well, the child will find that out soon enough. But, meantime, let him not lose the joy which is so easily accessible, and which so well becomes him. And, if it be possible, build up within him such resources of joy, such means of recreation, as will enable him to overcome the dulling ache of the business-world into which he goes. “Life,” says Mr. Walter Besant, “must have joy, as the earth must have sunshine.” Those who have the work of Education in hand have willing subjects to deal with when they introduce them to the paths of joy and recreation. Attention, then, is demanded by the circumstances of our time from the teacher, (1) to the physical recreation of children; (2) to their mental recreation; (3) to his own mental and physical recreation; (4) to all those modes in which preparation for manly recreation of mind and body may be given at school. These are all sufficiently important to be pursued as ends in themselves; but they have the further recommendation, that they make the intellectual work of education brighter, fresher, and more fruitful.—*The Educational Times*.

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[VOL. II.]

COMPETITIVE EXAMINATIONS.

—♦♦—
[Extracted.]

THERE is hardly any question now that as a test of fitness competition is better than nomination. Selection by competition is regulated entirely by the merits of the candidates and is free from the influence of every sort of bias or prejudice. It is a thoroughly impartial test and gives room for the assertion of individual qualities. The system of nomination frequently results in jobberies, and depends chiefly on power and influence. The competitive test therefore readily commends itself to every right thinking person, and the application of the opposite principle is resented as being unequal and unjust. The chief objection to the Statutory Civil Service is the fact that it admits candidates by the backdoor of nomination. Not only in the Statutory Civil Service but in the subordinate service of Government and in fact every service, selection is desired to be made by competition and few persons would be found to hanker for the restoration of the nomination or patronage system wherever it has been dislodged. But, excellent as is the principle of competition relatively to that of nomination, few admirers of it are so blind as not to see that it has defects and that it wants improvement. A writer in the *Fortnightly Review* for August last discusses this subject and proposes certain changes in the system of competitive examinations, which are worthy of consideration.

Mr. Gordon Grey, the writer in the *Review*, complains that the examinations do not take sufficient account of the physical and moral qualities of candidates. The examinations are almost wholly intellectual and all but neglect the other no less essential qualities of mind and body. The complaint in reference to the examination for the

Indian Civil Service and that for the Army Service has a peculiar significance to us, and we have more than an academic interest in the proper correction of defects in those examinations, if any should be found to exist. The question of age has always been a *resata quæstio* with the Indian Competitive Civil Service and instances of physical infirmities in our Civil Servants are laid to the account of the comparatively early age, and the high pressure of work which are required for the examination. But it seems the all but exclusive intellectual character of the examination may also have to account for these cases in no small measure. In both these services strong body and strong nerve are quite as much necessary as a strong intellect and strong memory. The present scheme of examinations confines its test principally to memory and in a subordinate degree to intellect, and in no degree to body or nerve. In the examination for the army, especially, the preference for book knowledge to strong physique appears quite unreasonable. The soldier has more to fight in the field than to write despatches and his work in the field will require the strength more of his physical and moral powers than of his intellect. If the defects pointed out by Mr. Grey are real, as they seem to be, it is evident that steps must be taken to remove them.

Mr. Grey contends that all the three component parts of man, the mental, the moral, and the physical, are each entitled to consideration. What their relative proportion of importance should be he does not define. But, assuming that they are equal, he suggests a scheme of examination by which he claims that all the three qualities will be properly sifted and taken account of. Instead of marks which it may be difficult to assign he proposes that candidates should be divided into classes taking as the starting point the highest excellence attained under each head and working downwards. We shall let Mr. Grey speak for himself :—

“The candidates would be divided according to their merit into three classes under each head, omitting from these classes all who failed to reach a certain standard, just as in most of the present literary examinations, candidates must reach a certain minimum before being allowed to score any marks. As has been said on an earlier page, marks need not be abolished for the literary examination, but they would be converted into “classes” for the purpose of comparison with the other heads of competition. All marks above a certain point would count as a first class, marks between that point and some other as a second, and those below that down to the qualifying minimum as a third class. But although for the purpose of comparison with the

other heads the candidates would be thus grouped into classes composed of equals, the total of marks, as will be shown further on, might be used in determining success when the classification left it undecided. The three classes obtained under each of the three heads would be combined to form aggregate or final classes. For this combination these classes should be represented by their numerals taken in reverse order. Thus a first class would be represented by 3, a second by 2 and a third by 1. The combination of totals would thus range from nine, the aggregate of the possessor of three firsts down to three, that of the possessor of the three thirds, giving altogether seven aggregate or final classes of qualified candidates as shown in the following table :—

	Educational Examina- tions.	Physical Qualifica- tions.	Moral Qualifica- tions.	General Aggregate.	Final Classifica- tion.
Highest possible	3	3	3	9	I
Various possible combi- nations of intermediate degrees of merit.	}	...	...	8	II
				7	III
				6	IV
				5	V
Lowest admissible. ...	1	1	1	4	VI
				3	VII

Whenever the number of candidates in one or more of their final classes exactly equalled the number of appointments competed for, we should have no farther to look for the winners; whenever this was not the case, a further scrutiny would be required in the classes through which ran the boundary between the winners and losers.”

Mr. Grey further illustrates his scheme by examples and describes the character of examination under each head. Our space forbids us from further quoting from his scheme. We think we have done enough to give a general idea of it and we shall leave our readers to learn it from the original for fuller details. There is, however, one suggestion of Mr. Grey which cannot be passed over in silence. He proposes that candidates who have already passed any of the classes under heads I and II under tests applied by other great examining bodies should be excepted from examination under those heads in the competitive examination. Thus “academic distinction would be accepted in lieu of Examination under head I, and athletic distinctions of a high order or unimpeachable evidence of first class bodily proficiency should be accepted as giving a candidate a claim to a first class under head II.” This exemption from a fresh examination will attract University men to the competitive examination and will in a great measure check the

special cramming which is the bane of the present system. We think the examination of the Indian Civil Service may even be limited to University men with great advantage. The restriction will secure men of liberal education, and will keep out the hot-house productions of the cramming schools. As regards the system of classification in preference to the allotments of marks proposed by Mr. Grey, it does not seem it will at all simplify matters. There will be nearly as much difficulty in assigning individual qualifications as in assigning marks. But this is a question of details. The main contention of the necessity of testing moral and physical qualifications quite as much as intellectual qualifications is, we think, sound and deserves every consideration. —*Indu Prakash.*

CALCUTTA UNIVERSITY ENTRANCE EXAMINATION, 1887.

NOTES

On Selected portions of the English Course prescribed for the Calcutta University Entrance Examination of 1887.

By M. DUNN, B.A.,

Professor of English and Classics, St. Peter's College, Agra.

(Continued from page 253.)

Campbell, Thomas—(1777—1844.) A Scottish poet born at Glasgow but Celtic in temperament. In his poems like "O'Connor's Child," "Lochiel," "Exile of Erin," and "Lord Ullin's Daughter" he breathes all the tenderness and grace and passion that are uppermost in the Celtic race. His "Gertrude of Wyoming" is an American tale told in the Spenserian Stanza and though replete with felicity of idea and language does not relieve itself of the heaviness which the cumbrous Spenserian measure imparts to it. But it is in his war songs that Campbell will live. His "Hohenlinden" "Battle of the Baltic" and "Ye Mariners of England" are splendid specimens of the war-poems of England, but, as Arnold observes, "full of faults of expression." His "Pleasures of Hope," written at a very early age, is pronounced by Byron to be one of the best didactic poems ever written.

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Arose from out the azure main.—Among the ancients one of their goddesses named Venus Aphrodite was popularly supposed to have been begotten of the sea. Azure means blue from Fr. *azur*.

Charter.—Law. Lat. *charta*.

The nations—*fall.*—Alluding to revolutions to which countries like France were afterwards subject. Perhaps an allusion was intended to Louis XIV who then occupied the throne of France.

Still more—*native oak.*—Every attack made upon thee by a foreign nation will only make thee the more formidable just as the roaring tempest that rends thy skins only succeeds in planting thy native oak deeper.

To bend thee down.—To make thee submit.

Generous flame.—High-born spirit.

And work their—*renown.*—And be the cause of bringing destruction upon themselves and adding to thy glory.

To thee—*rural reign.*—Thy farmers are superior to all others.

The muses—*repair.*—Learning and the arts, which are always to be found among a free people, shall come to thy happy shores.

Muses.—These were nine goddesses, sisters, each of whom presided over a special art or department of learning. There were thus the muses of epic poetry, of tragedy, of comedy, of music, of painting, &c.

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With matchless beauty crown'd.—Whose womankind surpasses that of all other countries in beauty.

Thomson, James.—(1700—1748). A Scotch poet, author of the *Seasons*, *Liberty*, and the *Castle of Indolence*.

Battle of the Baltic.—In December 1800 the Northern Powers, Russia, Denmark and Sweden, formed a confederacy to resist the maritime law of England, whose ships searched vessels belonging to neutral countries for contraband of war. An English fleet under Sir Hyde Parker, with Nelson as second in command, bombarded Copenhagen and took or destroyed the Danish fleet.

Might.—Forces.

Arms.—Cannon.

Lighted brand.—Lighted put-fires to apply to the touchhole of the cannon. The word *brand* is in the case absolute.

Prince of all the land.—The Prince Royal of Denmark.

Led them on.—*Them* refers probably to *might*; but the language is loose.

Leviathans.—Sea monsters. A term commonly applied to the great whale. The name occurs in several passages of Scripture, but it is not certain to what aquatic animal it belongs.

Bulwarks.—Properly a means of defence, a fortification; here, by the figure, of synecdoche, the Danish fleet or ships, and defences.

Sign of battle.—The signal for action.

On the lofty British line.—On the tall masts of the British line-of-battle ships.

April morn.—April 2nd.

Chime.—Clock.

Flushed.—Glowed with eagerness.

To anticipate the scene.—To begin the battle before the proper time. Lat. *ante* (before) and *capere* (to seize). The expression sounds well but is meaningless.

Van.—Vanguard, foremost ships.

Rush'd—*space between.*—Rushed to get over the dangerous distance that lay between them and the position assigned them in the battle. The space is termed *deadly* because, as the ships were moving into their respective positions, the Danish fleet and the batteries on shore kept up a tremendous cannonade on them.

Hearts of oak.—Hearts as strong and unyielding as oak. This is a national song.

From its adamant lips.—Adamantine means made of or as hard as adamant, a stone imagined to be of impenetrable hardness. Hence *adamantine lips* means hard, cruel mouths. Diamond is another form of the same word.

Spread a death-shade round the ships.—Spread round the ships a canopy of smoke emblematical of death.

Like——of the sun.—Like the darkness that envelopes the earth when the sun is hidden during a violent storm.

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Havoc.—Slaughter.*

Slack.—Lessen.

Their shots——then ceased.—The fire of the guns of the Danes grew feeble and then ceased altogether.

And all——shattered sail.—A universal wail rises from the Danes as they furl the sails of their vessels, or as their ships in flames light up the darkness with a dim light. The expression "strike the shattered sail" is out of place here as the Danish fleet was at anchor and had no need of their sails.

Hailed.—Called out to them. One ship is said to "hail" another when they speak to each other. This is managed by means of certain signals.

Ye are brothers.—The English and the Danes belong to the same stock. It will be remembered that several Danish Kings reigned in England.

But yield proud foe, &c.—The bombardment of Copenhagen was undertaken with the view of detaching Denmark from the Armed Neutrality. It was useless to demand the surrender of the Danish fleet, for such did not exist after the battle. Nor did Nelson stipulate for its surrender. It was not till 1807 that Copenhagen was bombarded a second time and the Danish fleet seized, as it had been discovered that the Danes had promised by the Treaty of Tilsit to let Napoleon I. have the use of it.

Submission meet.—Due submission.

Our king.—George III. (1760—1820.)

That he gave her wounds repose.—Because he gave her time to recruit her shattered condition.

As death——day.—As the smoke of battle cleared off.

Woeful.—Sorrowful.

When the fires——died.—When the flames that enveloped the Danish fleet forming for the dead so many funeral pyres, gradually died out.

By the festal cities blaze.—In the cities that rejoice and are illuminated on account of the victory.

Whilst the wine-cup shines in light.—Whilst the wine-cup flashes at the brilliantly lighted banquet.

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Steep.—Declivity.

Elsinore.—A sea-port of Denmark, on the east coast of the Island of Zealand, twenty-four miles from Copenhagen. It stands on the narrowest part of the Sound, on a declivity inclining towards the shore. The town is the scene of Shakespeare's tragedy of Hamlet.

Rion.—Rion was one of Nelson's senior captains. A squadron was given him to make use of as he thought fit. On board the Amazon he kept up an unequal contest with the Dane, and anxious to see what effect the guns of his frigate had produced, he ordered his men to stand by for a time. The smoke cleared away and the Danes marking the position of the vessel turned their batteries on her and she was forced to retreat, to save herself from utter destruction. But a shot cut Rion in two, and his loss was deeply deplored; no other loss could have been greater, except it had been Nelson himself.

On the deck of fame that died.—Who died gloriously on the deck of their respective ships. Compare Campbell's "Ye Mariners of England."

"For the deck it was their field, of fame,

And ocean was their grave."

Soft sigh——grave.—May the winds not disturb the sea in the depths of which they lie buried.

While the mermaid's song condoles.—While the mermaid joins in the song of lamentation. Mermaid, a fabulous being, half woman and half fish.

NOTES ON

SOUTHEY'S "LIFE OF NELSON."

(Calcutta University Entrance Examination English Course for 1887).

BY

WILLIAM E. MILLER, B.A., F.S.SC., (LONDON),

CHAPTER IV.

(Continued from page 260.)

Some thirty years.—About thirty years.

Is but a melancholy tale.—See Note at page 114.

The mal-aria.—This word is an adaptation of two Italian words, *mala*, *aria*, from Latin *malus*, bad, and *aer*, air. The Anglicised form *malaria* is now used to mean tainted air, or air productive of fever.

Pestilential atmosphere.—Lat. *pestis*, pest. Atmosphere from Gr. *atmos*, vapour and *sphaira*, sphere.

If the welfare and happiness.....policy.—Southey implies that the good of mankind has never been considered by kings and governing bodies as a first consideration.

The Moors.—Lat. *Maurus*, a Moor, are natives of the northern coast of Africa, or of the countries formerly called Mauritania, and now known as Morocco, Tanis, Algiers, and Tripoli, or collectively as the Barbary States.

The Pisans.—The natives of Pisa, a city of Tuscany and capital of Pisano, with a famous university and three ports. It was the birthplace of the celebrated Galileo in 1564; and has a cathedral, and a number of handsome churches. It is most celebrated, however, for its leaning tower. It has large manufactures in steel, jewellery, embroidery, damasks, velvet, taffeta, and calico. Long. 10° 23' E.; Lat. 43° 43' N.

Aragon.—Formerly one of the 14 divisions of Spain, forming one of the seven kingdoms of that country. The province produces corn, wine, flax, and fruit in abundance, some saffron, and has many salt mines.

The Genoese.—Inhabitants of Genoa, a duchy of Italy, extending 150 miles along that part of the Mediterranean called the Gulf of Genoa. The capital of the duchy is also called Genoa. Besides being a seaport it is full of marble palaces and churches, whence it has the name of Genoa the Proud. It is remarkable for its commerce and its banking business.

Venice, Genoa, and Pisa were the most important commercial cities in the world during the middle ages.

The yoke of the Genoese.—A. S. *geoc*, from Latin *jugum*, a yoke. The tyrannical government of the Genoese.

Ruled with an iron rod.—Governed the country with great severity.

They resorted to assassination.—Professional assassins are common in Italy; and obnoxious persons are readily removed by their aid.

Assassination is derived from Arabic *hashish*, an intoxicating drink.

The *Assassins* or *Haschischin* were a tribe, formerly in Syria (about A.D. 1080) who were much given to assassination and who used to drink *hashish* before they attacked their victims, notably amongst whom were the crusaders.

German auxiliaries.—Lat. *auxilium*, help. Auxiliaries are troops hired to help a nation at war.

The Emperor Charles VI.—Was the son of Leopold, emperor of Germany and king of Spain. He was declared king of Spain by his father in 1703, and crowned emperor in 1711. It was his alliance with Holland, France, and England that enabled him to obtain considerable advantages over Spain. Subsequently, however, he was at war with the allies, and thus lost Naples and Sicily. Died 1740.

Theodore, a Westphalian Baron.—Theodore Stephen Neuhoﬀ, Baron, the son of a Westphalian noble, was born at Metz, about 1690. While a student at Cologne, he unfortunately killed a young man of rank in a duel, and fled to the Hague. But through the mediation of the Spanish minister he received a lieutenancy in a Spanish regiment of cavalry destined to march against the Moors in Africa, and, on account of his good behaviour, was promoted to a captaincy. When the Corsicans, after several unsuccessful attempts to free themselves from the oppressions of Genoa, resolved, in 1735, to form a government of their own, Neuhoﬀ was crowned king, had silver and copper coins struck, and established an order of knighthood, under the name of the order of deliverance. Theodore, however, could not maintain himself against the Genoese and a Corsican opposition. He fled to England. Here his Dutch creditors pursued him, and being arrested, he became a prisoner in the king's bench for some years. His liberation was at length, however, effected, through the instrumentality of Robert Walpole; but he died soon after, in 1755.

Westphalia together with the Rhine Province formed before 1866 the western half of Prussia, which then consisted of two irregular portions, entirely separated from each other. *Westphalia* means the western field or plain.

Baron, probably of German origin from Gothic *vair*, A. S. *ver*, and Lat. *vir*, a man, is the lowest title of nobility in England. It is sometimes used as a title of official distinction as in 'Barons of the Exchequer.'

Then appeared upon the stage.—Then commenced to take a prominent part in political affairs.

In that age men were not accustomed to see adventurers play for kingdoms.—Neuhoﬀ from being only a soldier had become a king. This had not occurred ever before in the world's history. Now-a-days it would not be thought much of, as this has been accomplished by Bernadotte, who, from being a private in the French army, was made king of Norway and Sweden (1764—1814) and by Napoleon Buonaparte himself.

The common talk of Europe.—All Europe was talking about him.

Ripperda.—Jan Willem Ripperda was a Dutch adventurer, but of good family. From being a Roman Catholic Colonel, he became, after his marriage, a Protestant Deputy and Envoy Extraordinary to Spain, where he introduced the manufacture of cloth. Here he turned Roman Catholic again, and settling in Spain, was made a Duke, displacing Alberoni as Prime Minister, in all but name. At length he fell into disgrace, and was imprisoned in the castle of Segoria, whence he escaped in 1728, and came to England. In 1731 he went to Morocco, where he was favourably received by Mulvi Abdalla, and declaring himself a convert to the Mahometan religion, and taking the name of Osman, he obtained the chief command of the Moorish army at the siege of Centa. But the Moors being defeated, he fell from his second elevation; and, retiring from public affairs, died at Tetuan in 1737. Born at Groningen in 1680.

Alberoni.—Ginlio Alberoni, a cardinal, and minister of the king of Spain, Phillip V, was the son of a gardener; but being possessed of uncommon talents, and with a disposition suited to the intriguing policy of the court, he obtained patronage, and rapidly reached the highest offices in the state. By his ability and activity he created a naval force, reorganized the army, and rendered Spain more powerful than it had been since the time of Phillip II, but he was eventually foiled by the combined efforts of England and France, who made his dismissal from the councils of the Spanish monarch the chief condition of peace. Born 1664; died 1752.

His means.—His property, income, or revenue.

'Means' according to most grammarians, is to be used in the singular when the signification is singular, and in the plural when the signification is plural. We may say, accordingly, 'this means,' or 'these means,' as the case requires.

If they would erect Corsica.—If they would elevate Corsica.

His stately person.—His outward appearance and manner of bearing himself.

Talents.—Lat. *talentum* from Gr. *talanton*, a balance, anything weighed, a definite weight, a talent from *talao* to bear. By talents, as here used natural gifts or endowments are meant.

At once fixing the Government.—By making Neuhoﬀ king.

The leading families.—The principal families.

The public weal.—The common good; the happiness of all.

He struck money.—A phrase expressive of coining money, i.e., issuing money with his own effigy stamped thereon.

Conferred titles.—See above in account of Neuhoﬀ's life, where it is stated that he established an order of knighthood, called the order of deliverance.

Blocked up.—Blockaded. To blockade a town or city, is to guard with troops or ships all approaches to it, so as to prevent the entrance or landing of provisions or reinforcements. From Ital. *bloccata*, Fr. *bloquer*.

Amused the people.—Deluded the people by keeping their minds filled with other thoughts.

They cooled in their affections to him.—They became less attached to him.

Of expediting himself the succours.—i.e. Of himself expediting the succours.

Such was his address.—So great was his skill in speaking.

Warlike stores.—Stores necessary for war.

A supercargo.—A supercargo was an officer in the East India Company's vessels, or in merchant ships, having power to sell the cargo at the port to which the ship was bound, or to carry it to other ports, and to purchase or procure fresh cargo for the homeward voyage. The office of supercargo no longer exists.

The plural of supercargo is supercargoes. But this is a mere caprice of spelling, and the pronunciation is not affected.

Deserved afflictions.—Punishments suitable to his crimes.

He threw in the stores.—To land stores into a town under a state of blockade is frequently spoken of by the verb throw, which implies the sense of an operation hastily performed and executed with difficulty.

A price had been set upon his head.—A reward had been offered for him dead or alive.

His dreams of royalty.—His notions of becoming King.

Was thrown into the King's tench.—Was put into the debtors' prison.

The supreme court of common law in the kingdom of Great Britain was called the *King's Bench*, because the king formerly presided there in person, and is still presumed to do so.

An Act of insolvency.—This is an Act of Parliament, under which a bankrupt is exempted from prison and gets cleared of his debts by giving up all his property to his creditors.

After his deliverance.—His deliverance from his debts.

A most affecting memorial.—A petition written in the most touching style.

The Court of Versailles.—The French Court held at Versailles.

Versailles is a town of France, capital of the department Seine et Oise. In the reign of Louis XIII it was only a small village; and here this prince built a hunting seat in 1630. Louis XIV enlarged it into a magnificent palace, (now used as a museum) which was the usual residence of the kings of France, till 1789, when Louis XVI and his family were removed from it to Paris. The gardens are adorned with a vast number of statues, and the water works are magnificent. It was the scene of the Treaty of 1871, which concluded the Franco-Prussian war, when Prussia obtained Alsace and part of Lorraine and payment of £320,000,000 as war indemnity.

In its flagitious project.—The project of subduing Corsica for their allies, the Genoese. *Flagitious* from Lat. *flagitium*, a disgraceful act.

The standing corn.—The corn growing in the fields.

Hung all the most able and active men.—The verb hang has two forms of the past tense, *hung* and *hanged*. We generally use *hung* to signify suspended; and *hanged*, to signify suspended on the gallows.

Bastia.—A city of Corsica, formerly the capital, with a good harbour. Long. 9° 26' E; Lat. 42° 41' N.

San Fiorenzo.—A seaport of Corsica, defended by walls and a tower, situated about 20 miles south of Bastia. Also known as St. Florent.

Heart-burnings.—Secret enmity.

This feeling.—The belief that the Corsicans were naturally a barbarous people.

Influenced the British Court.—Induced the British Government.

Would preserve the same sentiments.—i.e., continue to regard Britain as a friend of Corsica's.

But signifying also.—Informing them at the same time.

Such a measure.—Fr. *mesure*, Lat. *mentiri*, to measure. Such a step.

Partisan.—Fr. *partisan*, a partisan from *pertuisane*, a weapon, through *pertuiser*, to pierce. Partisan originally meant one of the body of troops armed with the *pertuisane*; now it more generally signifies an adherent of a party.

A hero worthy of old times.—Fit to have lived with the heroes of ancient history.

He then spake to them.—*Spake* is an older form of the past tense than *spoke*.

Corte.—A small town in the centre of Corsica.

Straying.—Walking out.

Salied out.—Lat. *salire*, to leap. Suddenly issued out.

Like *rally*, *rollied*, the addition of *-d* to form the past tense is accompanied by a modification in spelling, similar to the formation of the plural of nouns or the comparison of adjectives.

Execrable.—Lat. *ex*, out of, and *sacer*, holy, i.e., unholy, and therefore wicked.

To latter.—Lat. *batuere*, to strike. The frequentative form of *bat*, allied to *beat*, from A. S. *beatian*.

With becoming feeling.—With suitable sentiments.

A fact so honourable.—An incident so creditable to his father, who did not allow his love for his son to interfere with his duty to his country.

Set on, it is believed... that deed.—It is not positively known that the assassins were instigated by the Genoese government but their after conduct in awarding these men a pension would suggest that such was the case.

Paoli's father.—Hyacinth Paoli, was a native of Corsica, who was elected one of the chief magistrates of the island in 1735. On account of the revolutions which distracted his country and the oppressions of the Genoese, he retired to Naples, where he died.

The Corsicans heard.—*Heard*, the past tense of *hear* shortens the vowel of *hear* in its formation. The *-d* of the past tense is a modification of the verb *dip*. *Heard* being a short form for *hear-did*.

Fell on his neck.—The causative form of *fall*.

Causative verbs denote the action or situation as being caused or effected in the object.

"*My son,*" said he, "your success."—In indirect narration this would be:—He told his son that perhaps he might never see him more; but in his mind he would ever be present with him. His design was great and noble, and he doubted not but God would bless him in it. He would devote to his cause the little remainder of his life in offering up his prayers for his son's success.

Democratical Government.—Gr. *demos*, the people and *krateia*, to rule. A republic.

Moulding the rising generation.—Sp. *molde*, Fr. *moule*, both from Lat. *modulus*, a shape. Forming the characters of the young people.

France had not interfered.....usurpation.—Alluding to Napoleon's unconquerable ambition.

Grecian states.—The states of ancient Greece are meant.

Livres.—Is a French word from Lat. *libra*, a pound of 12 oz. It was a French money of account, afterwards a silver coin equal to 20 sous or $9\frac{1}{2}d$. It is not now in use.

Six battalions.—Fr. *bataillon* from Lat. *batuere*, to beat. A battalion in the British Army is composed of about 800 men.

With all his errors.—In spite of his (Rousseau's) mistaken ideas.

Rousseau.—Jean Jacques Rousseau, was the son of a watchmaker at Geneva, where he was born, in 1712. He was one of the most eloquent writers and singular characters of his age. His father fostered in him the growth of those free principles which are the natural characteristics of a zealous republican. After various adventures he became Secretary to the French ambassador in Venice, in 1742. His chief works are the romance, "Julie, ou la Nouvelle Heloise," published 1760, "Du Contrat Social," "Emile, ou de l'Education," and "Lettres de la Montagne." That he exercised a great influence over the theoretical opinions of the age, at the period of the French revolution, if he did not greatly accelerate it, there can be little doubt; and that his writings have been highly injurious to society as at present constituted, there can be still less. The quotation in the text is taken from his "Lettres de la Montagne," which was a remonstrance against the proceedings of the Genoese republic, the citizenship of which he renounced. His latter days were passed in frequent changes of place, to escape real or fancied persecution. He stopped for a while with Hume the historian, in England, but returned suddenly to France and died in 1778.

"You Frenchmen," said he, writing....."extirpating him."—In indirect narration: writing to one of that people he said that Frenchmen were a thoroughly servile nation, thoroughly sold to tyranny, thoroughly cruel and relentless in persecuting the unhappy. If they knew of a free man at the other end of the world, he believed they would go there for the mere pleasure of extirpating him.

Thoroughly sold to tyranny.—Entirely absorbed with the idea of making others their slaves.

Extirpating.—Lat. *ex*, out of, from, and *stirps*, a root, stock, or stem; lit. pulling out by the roots, i.e., totally destroying.

Mere pleasure.—*Mere* is an adjective that cannot be compared, as its meaning does not admit of any change of degree.

The immediate object.—Immediate is the antonym of *intermediate*. The first object to which they (the French) gave their attention.

Antonyms are words having a contrary or opposite signification.

Purely mercenary.—Only having a pecuniary interest.

Would that the conduct.—A contracted form of 'I wished' or 'I should wish.'

The Peace of Paris.—Concluded February 10th, 1763. The Peace of Paris put an end to these seven years' war. By this treaty Minorca was exchanged for Belleisle; the provinces of Nova Scotia, Cape Breton, and Canada, were ceded to England; the islands of Guadaloupe, Martinico, and St. Lucia were restored, but Tobago, Dominica, St. Vincent, and Grenada were retained.

Also all conquests made in any part of the world during the negotiations were to be given up.

Deservedly proud.—Proud on just grounds.

"I defy Rome, Sparta, or Thebes," he would say.....boast.—Paoli's meaning is that the heroes of these ancient powers did not display greater patriotism than the Corsicans did during the past thirty years.

Rome.—The celebrated capital of Italy.

Sparta.—Now called Misitra, was the ancient capital of Laconia, a country in ancient Southern Greece.

Thebes.—A celebrated city, the magnificent ruins of which are in the neighbourhood of Suez, supposed to have been founded by Cadmus, son of a king of Phœnicia. Cadmus is supposed to have been the first to introduce the use of letters into Europe.

Respite.—Fr. *repit*, from Lat. *respectus*, looking back. Cessation from war.

He used to say.....forgotten.—Put into direct narration this would be: He used to say, "though I have an unspeakable pride in the prospect of the fame to which I aspire; yet, if I could but render my countrymen happy, I could be content to be forgotten."

An unspeakable pride.—A pride too great to be expressed in words.

He could be content to be forgotten.—He would give up his fame.

His own importance he never affected to undervalue.—He never pretended that his own worth was less than what it really was to his country; i.e., he never practised a false modesty.

"We are now to our country," said he....."vigour."—In indirect narration: He said that they were now to their country like the prophet Elisha, stretched over the dead child of the Shunamite—eye to eye, nose to nose, mouth to mouth. It began to recover warmth, and to revive: he hoped it would yet regain full health and vigour.

We are now.—*We* means the speaker (Paoli) and others associated with him. In oral address only one can speak at a time, but that one, speaking for others as well as himself, says 'we.' The foreman of a jury addresses the judge in the words, "We find the prisoner guilty." In written composition 'we' is more strictly correct, because the parties signing their names at the end are all equally supposed to be uttering their sentiments. Persons, in very high authority, in issuing their commands, often use 'we' instead of 'I'; as, "We, Alexander, Autocrat of the Russians." In anonymous writing, as in newspapers, and magazines, the writer speaks as 'we.' This is called the editorial 'we.' 'We' is also used in speaking for humanity generally: as "We fancy that we shall always feel as we do now."

Elisha.—For an account of this incident, see the Bible, second book of Kings, IV Chapter, verses 18 to 37.

(To be continued.)

QUERY PAGES.

These pages are specially intended for students, who are requested to send in papers.

We should be much obliged if correspondents who send questions for solution, would give (if possible) the required answers, and the source from which the questions are obtained.

No query will be inserted or answered unless accompanied by the real name and address of the sender, not necessarily for publication, but as a guarantee of good faith and for facility of reference. When a pseudonym is adopted, it should be written at the end of the query, and the real name and address on a separate piece of paper.

Correspondents are requested to write their queries *legibly*; and on *one side* of the paper only.

Replies will not be sent by post. All communications intended for these pages should be addressed to

THE "QUERY EDITOR,"
Educational Record, Madras.

QUESTIONS.

HUGH MILLER'S "MY SCHOOL AND SCHOOL-MASTERS."

I. What fundamental facts in natural history or geology are referred to in the following :—(The answers to be very brief and to the point).

- (1) A range of rough precipices as bold and abrupt, though they front the interior of the country.
- (2) A little green hillock, over an island of the river.
- (3) The old Scandinavian flora of the country—that flora which alone flourished in the times of its boulder clay.
What historical parallel is mentioned in connection with this?
- (4) The *unio* of our river-fords secretes pearls so much more frequently than the *unionidae* of our still pools and lakes.

II. What is it that Wordsworth calls "the accomplishment of verse"? What does Hugh Miller contrast it with? How is the distinction between the two illustrated?

III. That time of a man's life when he is most busy building castles in the air—what does Hugh Miller call it? What is that which, in pure natures, underlies this disposition?

IV. "The hour is come, but not the man." How is this an appropriate motto for that chapter in Scott's "Heart of Midlothian" which describes the preparations for the execution of Porteous? What is the modified form of the word that occurs in the cave-scene in "Guy

Mannerings"? What is the application in the latter case? In what connection does Hugh Miller quote it?

V. What is meant by :—

- (1) Day of grace.
- (2) "Local habitation."
- (3) Standing marvels.
- (4) Complementary colors.
- (5) A mere coincidence.
- (6) An undecayed subject?

QUESTIONS WITH ANSWERS.

ENGLISH.

1. Parse the following sentence :—

'Why did you not do what I bade you?'

Why—an interrog. adv., qual. *did do*.

did—anx. verb to 'do,' irreg. trans., indicating past tense and completing neg. form of verb.

you—pers. pro., com. gen., plur. num., 2nd pers., nom. to *did do*.

not—adv. of mood (negation), qualifying *did do*.

do—irreg. trans. verb, act., inf., pres., gov. by *did*.

did do—irreg. trans. verb, act., ind., past, plur., 2nd, agreeing with its nom. *you*.

what—comp. rel. pro., = that which; *that*—neut., 3rd, sing., obj., gov. by *did do*; *which*—neut., 3rd, sing., obj., gov. by *to do*, und.

I—pers. pro., com. gen., 1st sing., nom. to *bade*.

bade—irreg. trans. verb, act., ind., past, 1st, sing., agreeing with its nom. *I*.

you—pers. pro., com. gen., 2nd, plur., obj., gov. by *bade*.

2. What is an affix? Give as many affixes as you can which are used in forming English nouns, with examples.

An affix is a syllable added after a root, as bond—bond-age.

The principal affixes used in forming English nouns are :—

-*Ar*, as beg-g-ar; -*er*, read-er; *or*, sail-or; *yer* or *ier*, sawyer, cloth-ier; -*en*, vix-en; *ard* or *art*, as lag-g-ard, brag-g-art; -*ster*, song-ster; -*dom*, king-dom; -*ship*, friend-ship; -*hood*, girl-hood; -*ness*, dark-ness; -*th*, steal-th; -*y*, beggar-y; -*ery*, mock-ery; -*ric*, bishop-ric; -*lock*, wed-lock; -*ledge*, know-ledge; -*ing*, read-ing.

3. Analyse the following lines :—

Come to the sunset tree!
 The day is past and gone;
 The woodman's axe lies free,
 And the reaper's work is done.

SUBJECT.	PREDICATE.	OBJECT.	EXTENSION.
[Thou]	come	...	to the sunset tree (place)
The day	is past	...	
(and) [it]	[is] gone	...	
The woodman's axe	lies	...	free (manner)
(and) the reaper's work	is done	...	

4. What is a relative pronoun?

Give examples and sentences in which they are used.

A relative pronoun is one which not only stands for a noun, but relates to some noun or pronoun already used, and which is called its antecedent.

The relative pronouns are *who*, *which*, *what* and *that*, and their compounds.

Examples :—That is the man who called you.
 I saw the house which you built.
 The horse that I bought has broken its leg.
 Ask him what he wants.

5. Analyse the following passage, and parse fully the words in italics :—

To work when others are idle will enable you to be idle when others are at work.

(a)

ANALYSIS.

Sentence.	Kind of Sentence.	Connec- tive.	Subject.	Predic- ate.	Object.	Extension.
(a) To work will enable you to be idle	Principal Sentence.		To work	will en- able	you (dir) to be idle (indir)	
(b) when others are idle	Adv. Sent. (time) to 'to work' in a.	when	others	are idle		
(c) when others are at work	Adv. Sent. (time) to 'to be idle' in a.	when	others	are at work		

(b) *To*—particle, sign of inf. mood.

to work—reg. trans. verb, act., inf., used as abstract noun, neut., sing., 3rd, nom. to 'will enable.'

when—adverbial cop. conj. joining the sentences, 'If you work' and 'others are idle.'

idle—adj. of quality, qualifying 'others.'

will—aux. verb to 'enable,' indicating future tense.

enable—reg. trans. verb, act., inf., pres., gov. by 'will.'

will enable—reg. trans. verb, act., ind., pres, 3rd, sing., agreeing with its nom. 'to work.'

to be—irreg. intrans. verb, act., inf., pres., gov. by 'will enable.'

others—indef. pers. pro., com., plur., nom. to 'are.'

6. Give the full force of the prefixes and the meaning of the following words :—

Controvert, efface, irresistible, invaluable, pollute, purpose, succumb.

Word.	Prefix.	Meaning.
Controvert	contro-	against; to turn against
Efface	ef-	out; to destroy the face, to rub out
Irresistible	ir-	not; not to be resisted
Invaluable	in-	not; not admitting of being valued
Pollute	pol-	towards; to wash towards, to defile
Purpose	pur-	forward; to place forth, to intend
Succumb	suc-	under; to lie down under

7. Paraphrase :—

Prepare you, generals :

The enemy comes on in gallant show;
 Their bloody sign of battle is hung out
 And something to be done immediately.

Generals! it is necessary that you should get ready for battle immediately. Our enemies are approaching us in all the glory of battle array; their ensigns, declaring their intention to fight, float in the breeze, and an attack will at once take place.

HISTORY.

1. Name the different nations or tribes which conquered England at different times from its earliest-known history to the Norman conquest, with dates.

England was first conquered by the *Romans*, being invaded by Julius Caesar in 55 and 54 B.C., and by Claudius in 43 A.D. The Roman occupation lasted till 410 A.D., and during the next forty years the *Picts and Scots* from Caledonia invaded the northern parts. These were driven back by the *Teutons* who were invited over by the British for that purpose. Various tribes of these, including *Saxons, Jutes, Angles, and Frisians*, came over at different times from 450 to 582 A.D. The country was again invaded by *Danes* from Norway, Sweden, and Denmark, at various times from 787 to 1014.

2. What led to the peace of Wedmore? Who were the parties engaged in the battle of Ethandune, and what were its results?

The battle of Ethandune was fought between the Danes under Guthrum and the English under Alfred. Alfred had visited the Danish camp, and gathering his forces had attacked them at the above place, and gave them such a beating that they were glad to yield to him. The Witan was then meeting at Wedmore, and a treaty was signed by which the Danes received East Anglia and part of Mercia, and Guthrum consented to receive Christian baptism.

3. Who was Dunstan? Give a short account of his life.

Dunstan was a monk who was made Abbot of Glastonbury by Edmund. In Edwy's reign differences arose respecting the secular clergy, who were often married, despite the prevalent opinion that the clergy ought not to marry. Dunstan took the part of the monks, and in consequence of his opposition to the king's marriage was driven out of the country. A revolt against Edwy, and the succession of Edgar led to Dunstan's return. He became Archbishop of Canterbury, and the chief counsellor to the king. Under his guidance the country was well governed. He died A.D. 989.

ALGEBRA.

Solve:—

$$\left. \begin{aligned} x^2 + y^2 - xy(x + y + 2) + x^2y^2 &= 31 \\ x + y + xy &= 11 \end{aligned} \right\}$$

$$\left. \begin{aligned} (1) \quad x^2 + y^2 - xy(x + y + 2) + x^2y^2 &= 31 \\ (2) \quad x + y + xy &= 11 \end{aligned} \right\}$$

$$(1) \quad x^2 + y^2 - xy(x + y + xy) - 2xy + 2x^2y^2 = 31$$

$$\left. \begin{aligned} \text{Substituting } & \\ \text{from (2) } & \end{aligned} \right\} \quad x^2 + y^2 - 11xy - 2x^2y^2 = 31$$

$$x^2 + y^2 = \underline{13xy - 2x^2y^2 + 31}.$$

$$(2) \quad x + y = 11 - xy$$

$$(x + y)^2 = (11 - xy)^2$$

$$x^2 + 2xy + y^2 = 121 - 22xy + x^2y^2$$

$$x^2 + y^2 = \underline{121 - 24xy + x^2y^2}.$$

$$\therefore 121 - 24xy + x^2y^2 = 13xy - 2x^2y^2 + 31$$

$$x^2y^2 + 2x^2y^2 - 24xy - 13xy = 31 - 121$$

$$3x^2y^2 - 37xy = -90$$

$$x^2y^2 - \frac{37xy}{3} = -30$$

$$x^2y^2 - \frac{37xy}{3} + \left(\frac{37}{6}\right)^2 = \frac{1369}{36} - 30$$

$$= \frac{1369 - 1080}{36}$$

$$= \frac{289}{36}$$

$$xy - \frac{37}{6} = \pm \frac{17}{6}$$

$$xy = \pm \frac{17}{6} + \frac{37}{6}$$

$$\therefore xy = 9, \text{ or } \frac{10}{3}.$$

$$(2) \quad x + y = 11 - xy$$

$$= 11 - 9$$

$$= 2$$

$$\left. \begin{aligned} x^2 + 2xy + y^2 &= 4 \\ 4xy &= 36 \end{aligned} \right\}$$

$$\left. \begin{aligned} x^2 - 2xy + y^2 &= -32 \\ (x - y)^2 &= -32. \end{aligned} \right\}$$

Now as the square of any quantity is positive, the value $xy = 9$ is inapplicable.

$$(2) \quad x + y = 11 - \frac{10}{3}$$

$$= \frac{23}{3}$$

$$\left. \begin{aligned} x^2 + 2xy + y^2 &= \frac{529}{9} \\ 4xy &= \frac{40}{3} \end{aligned} \right\}$$

$$\left. \begin{aligned} x^2 - 2xy + y^2 &= \frac{400}{9} \\ (x - y)^2 &= \frac{400}{9} \end{aligned} \right\}$$

$$\therefore x - y = \pm \frac{\sqrt{400}}{3}$$

$$\left. \begin{aligned} x + y &= \frac{23}{3} \\ \therefore 2x &= \frac{23 \pm \sqrt{400}}{3} \end{aligned} \right\}$$

$$2y = \frac{23 \mp \sqrt{400}}{3}$$

$$\therefore x = \frac{1}{6}(23 \pm \sqrt{400}), \text{ and } y = \frac{1}{6}(23 \mp \sqrt{400}). \quad \text{Ans.}$$

ARITHMETIC.

Suppose the population of a country would increase annually by 3 per cent. were it not for emigration, which annually carries off 5 per cent. of the people, what will be the increase per cent. in the population after 5 years? What is the population of a country from which, at the above rate, 81,000 persons emigrate in 2 years?

Annual increase = $2\frac{1}{2}$ per cent.;

$$\begin{array}{r}
 100 \\
 \cdot 2\frac{1}{2} \\
 \hline
 102\frac{1}{2} \text{ (end of 1 year)} \\
 2\frac{1}{2}\% = \frac{1}{40} = \frac{2\frac{1}{2}}{102\frac{1}{2}} \\
 \hline
 105\cdot0625 \text{ (end of 2 years)} \\
 \frac{1}{40} = \frac{2\frac{1}{2}}{105\cdot0625} \\
 \hline
 107\cdot6890625 \text{ (end of 3 years)} \\
 \frac{1}{40} = \frac{2\frac{1}{2}}{107\cdot6890625} \\
 \hline
 110\cdot3812890625 \text{ (end of 4 years)} \\
 \frac{1}{40} = \frac{2\frac{1}{2}}{110\cdot3812890625} \\
 \hline
 113\cdot1408212890625 \text{ (end of 5 years)}
 \end{array}$$

$\therefore$ Increase after 5 years = $13\cdot1408212890625\%$. Ans.

$$\text{Emigration in 2 years} = \frac{1}{2}\% + \left(\frac{1}{2}\% \times \frac{102\frac{1}{2}}{100}\right)$$

$$= \frac{1}{2}\% + \left(\frac{1}{2} \times \frac{41}{200}\right)\%$$

$$= \frac{1}{2}\% + \frac{41}{80}\%$$

$$= \frac{40 + 41}{80}\%$$

$$= \frac{81}{80}\%$$

$$\therefore \text{Population} = 81,000 \times \frac{80}{81} \times 100$$

$$= 8,000,000. \text{ Ans.}$$

I bought 15 horses and 12 cows for £345. I sell the horses at a profit of 10 per cent., and the cows at a loss of $1\frac{1}{2}$ per cent., and receive in all £365 14s. What did I give for a horse and a cow?

$$(1) \text{ Cost of horses} + \text{cost of cows} = £345,$$

$$(2) 10\% \text{ of cost of horses} - 1\frac{1}{2}\% \text{ of cost of cows}$$

$$= £365 \text{ 14s.} - £345,$$

$$\frac{1}{10} \text{ cost of horses} - \frac{3}{200} \text{ cost of cows} = £20 \text{ 14s.}$$

$$\text{Cost of horses} - \frac{3}{20} \text{ cost of cows} = £207,$$

$$\begin{aligned}
 (1) \text{ Cost of horses} + \text{cost of cows} &= £345, \\
 \therefore \text{Cost of cows} + \frac{3}{20} \text{ cost of cows} &= £345 - £207 \\
 \frac{17}{20} \text{ cost of cows} &= £138, \\
 \therefore \text{Cost of cows} &= £138 \times \frac{20}{17} \\
 &= £120.
 \end{aligned}$$

$$\text{Cost of horses} = £345 - £120$$

$$= £225.$$

$$\therefore \text{Cost price of a horse} = £225 \div 15$$

$$= £15;$$

$$\text{„ „ cow} = £120 \div 12$$

$$= £10.$$

GEOGRAPHY.

1. Draw a Map of Egypt and the Soudan.
2. Describe the Mountain System of Asia.

The great watershed of Asia stretches from N. E. to S. W., through the whole continent. The northern slope is the great plain of Siberia; the southern slope is diversified by extensive plateaus and lofty mountain ranges, intersected by deep valleys. The principal ranges stretch in a westerly, south-easterly, and north-easterly direction from the Bolor Tagh Mountains, which reach 19,000 feet in height. The principal ranges to the west are Hindookoosh, Paropamisna, Elburz, Mountains of Armenia, Taurus, Anti-Taurus, and Lebanon. To the south-east there are the Himalayas, the loftiest Mountains in the world, Mount Everest being 29,000 feet high; the Karakorum Mountains in Thibet, the Mountains of Aracan and Cambodia, and the lesser ranges, Vindhya, Ghants, Neilgherries in Hindustan. Stretching to the N. E. there are the Kuen-Lun, the Pe-ling, Thian Shan, Altai, and Yablonoi Mountains and the Aldan Mountains in the extreme east of Siberia.

In these ranges there are many lofty peaks, and the mountain system of Asia raises the average height of surface of the continent of Asia much above that of the other continents. The Mountains are the sources of many large rivers.

3. What accounts for the dryness of the climate and the general sterility of a great part of Africa?

The greater part of Africa is situated within the tropics. It has few Mountains, and those which it has are situated near the coast. Its coast is very little indented. As the land receives so much heat, and there are no Mountains whose cold summits would condense the vapours carried over the country from the oceans, the air instead of being chilled is heated as it

passes over the country, and its capacity for holding moisture is increased. There is, therefore, little rain, and the climate is dry. The absence of moisture and the nature of the surface, which is made up in great part, especially in the north, of sand and salt, accounts for the sterility of the soil.

ON TEACHING ARITHMETIC.

• BY SYDNEY LUPTON.

It is a matter of notoriety that the study of arithmetic is extremely laborious and irksome to the great majority of boys, while it is regarded as "certainly unnecessary and probably vulgar" by almost all girls. Though we may not agree with Dr. Octavius Sturge as to the close connection between arithmetic and St. Vitus' dance, especially among girls, we must allow that the feminine appellation of ciphering—doing nothing—is frequently too truly applied to lessons in arithmetic. A brief discussion of the reasons and remedies for the far too numerous failures in this important branch of education may not be without interest to the public as well as to schoolmasters.

The two grounds for the widespread agreement as to the value of the universal teaching of arithmetic have been forcibly stated by Locke:—"Arithmetic is the easiest and consequently the first sort of abstract reasoning, which the mind commonly bears or accustoms itself to. And is of so general use in all parts of life and business, that scarce anything can be done without it. This is certain, that a man cannot have too much of it or too perfectly."

In opposition to the ancient practice, the older text-books, from Cocker to Colenso, regard arithmetic entirely from the second or utilitarian point of view, and are, in fact, mere manuals of computation, while the majority of modern teachers and text-books are too much bound by the dictum:—"Teach principles in school, and application will come afterwards." However true this may be in other branches of study, in arithmetic both theory and practice demonstrate its fallacy. In the case of a good computer, the operations of addition, subtraction, multiplication, and division should be automatic, and if this faculty be not acquired in youth, when the memory is fresh and unburdened, it is rarely attained afterwards. That a thorough knowledge of arithmetic is rare among boys, is only too well known to examiners; that it is rare among grown-up persons, anyone can prove among his own friends. Most men perform by rule-of-thumb the various arithmetical operations they commonly require in business, and refer all unusual problems to an accountant. Boys also now-a-days are obliged to apply arithmetic long before they enter into practical life, since the introduction of science-teaching into schools brings them face to face with numerical problems of considerable length and perplexity. Every branch of

science, and especially physics and chemistry, which for various reasons are generally chosen for school-teaching, is more and more ceasing to be a collection of isolated observations, and becoming reducible to a series of deductions from general laws, the majority of which are in their essence quantitative. Hence numerical relations seem likely to occupy a still more important place than at present in the education of the future.

The slight value too often attached to a careful training in arithmetic is due to a variety of causes. A mutilated and unpractical arithmetic has grown up in schools, and is made as difficult and repellent as possible to the pupils. Clever boys are unduly hurried through the subject in order that they may have more time for the higher branches, and those more dull are frequently given up as hopeless. Teachers themselves have usually been pushed through it rapidly as boys and in many cases do not supply their deficiencies afterwards. How often does a high wrangler begin to learn arithmetic *after* he becomes a schoolmaster? In no other subject is it so difficult for the ignorant to perceive their own deficiency, since in most cases, in after-life, arithmetical questions can be shelved or shirked. Nevertheless complaints from parents of their sons' weakness in arithmetic are far too numerous for the comfort of the schoolmaster.

Arithmetic falls naturally into two divisions—"pure arithmetic," which is a portion of the science of discontinuous number, and deals with numbers apart from the quantities which they represent; and "applied or commercial arithmetic," which deals with numbers as representing concrete measures of length, area, volume, mass, value, &c. The first of these divisions is a necessary introduction to the second, and both are of the greatest value as intellectual exercises. Yet the distinction between them, which was insisted on by De Morgan, is fundamental from the teacher's point of view, and has too often been neglected, to the confusion of the learner.

The present tendency of educational methods, especially on modern sides, is towards rapidity and superficiality by means of much tutorial help and carefully edited books, at the expense, it is to be feared, of much of the self-reliance and grip which was engendered by worrying a difficulty. The well-thumbed grammar has become a thing of the past, and with it much exactness and power of application. To supply its place as the back-bone of education, we can only look to a more thorough study of mathematics and, for the majority of boys, of arithmetic.

The true place and value of arithmetic in education has been discussed with great force and clearness by Whewell, in his too-often-forgotten essay on "A Liberal Education," p. 158.

Great as is the value of applied arithmetic to every member of a civilized community, those who specially require the art of computation in after-life may be divided roughly into the classes:—Boys with such an aptitude for mathematics that they will be able to work backwards, so to

say, and obtain arithmetical results from their knowledge of the higher branches. As far as our present inquiry is concerned, they may be left to take care of themselves. Secondly, the large and rapidly increasing class of boys who, without advancing far in mathematics, enter the army, navy, or merchant service, become civil or mechanical engineers, and require the daily computation of quantities. And, lastly, those who enter commercial life and have to deal with questions of value, such as prices, interest, stocks, &c. The requirements of these latter classes, which are much the same, are at present unduly neglected in our schools, and thus in matters of calculation our commercial men frequently find themselves far behind foreign competitors.

Arithmetic, then, if taught in accordance with these views, should include both the educational and the practical side of each subject impartially; it should strengthen the mind, and provide it with an armoury of weapons for the future; it should not neglect scales of notation as useless, or annuities as of no educational value. Hence also the subjects and their arrangement would differ in some respects from those in general use, and a brief summary of the chief divisions may clear the way for further discussion.

PURE ARITHMETIC.

Numeration, Addition, Subtraction, Multiplication, Division.

Fractions (Vulgar, Decimal, and Continued.)

Ratio, Proportion, Arithmetical and Geometrical Series.

Involution, Evolution.

(Scales of notation. Theory of numbers.)

APPLIED ARITHMETIC.

1. *Measures (of Quantity).*—The Metric and English systems of measures.

Mensuration of areas and volumes.

Mass, volume, and density.

The use of tables of reciprocals, squares, cubes, square and cube roots.

The use of tables of the logarithms of numbers. The slide-rule.

2. *(Measures of Value). Money.*—Standards of value, Exchange and chain-rule.

Value of a number of units of quantity (Practice).

Partnerships, Profit and Loss.

Interest, simple, compound, use of tables of. Discount, &c.

Stocks. Equation of payments.

Use of tables of annuities and life-insurance. Book-keeping.

Numeration and the "four rules" are best taught *at first* by concrete examples with the fingers, marbles, the abacus, &c., and fractions with appeals to the eye in the case of lengths, volumes, &c. But the mistake may be made of continuing the use of these artifices too long, as has been pointed out by Mr. Fitch in his admirable "Lectures on Teaching," to the chapters on arithmetic in which I may refer my readers for many most valuable suggestions.

Under numeration, more attention than is usual should be given to the place-value of digits, and thus, according to one of the hints given in the report for 1884 of the Committee on Arithmetic to the Association for the Improvement of Geometrical Teaching, decimals would be regarded as an extension of numeration, and not as a subsidiary division of vulgar fractions. The higher units, billion, trillion, &c., should be universally recognised as having a definite meaning. A billion may mean 10^9 or 10^{12} , according to whether the newer or the older notation is used. In multiplication, it is more simple to commence with the extreme left-hand than with the extreme right-hand figure of the multiplier.

Under decimal fractions, Oughtred's short method of multiplication, modified as above, and his short method of division, should be given; the advantage also, where a long number has to be frequently used, of preparing, once for all, a table of its multiples from 1 to 9, should be pointed out. Thus a table of the multiples of .0027397 will serve to reduce any number of days to decimals of a year. Continued fractions of the more simple kinds should be included, not only as furnishing excellent examples of gradual approximation, but also from their utility in solving practical questions; *e.g.*, in finding the chemical formula from the percentage composition of a substance.

The idea of ratio is always extremely difficult to boys, and even among mathematicians (Merrifield's "Technical Arithmetic," p. 67) some doubt seems to exist as to whether the antecedent and consequent must necessarily be of the same kind. Proportion is at first best attacked by the unitary method, but it should afterwards be considered by the more rapid and powerful dot-method, or as multiplication by a "numeric."

A careful study of involution should of course precede any attempt at evolution, and even then it is probably well to discard the ordinary method for cube-root; though, for the better boys, Horner's method is an admirable exercise. A cube-root may be rapidly obtained with sufficient approximation for all ordinary purposes by Hutton's formula, that if x be nearly the cube-root of a number N , $\frac{2N + x^3}{N + 2x^3} \times x$ is a still nearer approximation.

A still more simple method is to consider the required root as a binomial in which a is nearly the required root and therefore b is small. $N = (a + b)^3$

and $\therefore b = \pm \frac{N - a^3}{3a^2}$ nearly. Both these processes are much facilitated by a small table of squares and cubes.

Scales of notation and the theory of numbers are probably better relegated to an appendix than treated in the body of the work.

A knowledge of the metric system is now a necessity for scientific and commercial purposes, and would be far more easily and better taught by mathematical than, as it now is, by scientific masters. It is so much more simple than the English system that it furnishes a convenient introduction to it, and proves to the pupil the advantage of decimalisation, which otherwise he is apt to consider an unnecessary trouble. It is a point of the greatest importance, too often neglected in English schools, to have examples of the various measures before and in the hands of the boys, and to use them for weighing and measuring common objects in the room. The results so obtained furnish excellent examples in mensuration.

The English system will always remain a severe tax on the memory, and a laborious exercise of patience in the reductions. If it be impossible to replace it by any more rational system, a careful revision of the tables given in the text-books is imperatively demanded, since the obsolete and illegal measures handed down from antiquity render the confusion worse confounded. Few things would more facilitate the spread of arithmetical knowledge in England than a short Act abolishing all local measures, and reducing the number of multiples and submultiples of the legal standards. We should soon cease to regret "weights," "ells," "perches," "drams," and "quarters," and beginners would not so frequently be disgusted with arithmetic when they have scarcely begun it. The conversion of metric and English measures affords a much more valuable exercise than reductions in our own system.

Far more than at present might be done towards decimalising our system. Some answers might be left as decimals of the higher instead of reducing to lower units. This is common among engineers, and recognised by Parliament; for instance in the Sale of Gas Act, where a cubic foot of water is defined to weigh 62.321 lb. and not 62 lb. 4 oz. 2 dr. 4½ gr. Many reductions also might be much simplified by giving in the tables lower units as fractions and decimals of the higher, as well as the higher as multiples of the lower ones:—

1 ton = 20 cwt. = 2240 lb.

1 cwt. = 4 qr. = 112 lb.

1 qr. = 2 st. = 28 lb.

1 st. = 14 lb.

1 lb.

Of a ton.

$\frac{1}{20} = 0.05.$

$\frac{1}{80} = 0.0125.$

$\frac{1}{160} = 0.00625.$

$\frac{1}{2240} = 0.0004464.$

The sections on area, volume, mass, and density afford most interesting and instructive problems, and constitute an invaluable introduction to all branches of natural science.

The methods of using tables are now so long deferred that the great majority of boys leave school without an idea of the existence of any means for facilitating calculation, and never subsequently acquire the knowledge. In strict logic, this section, of course, belongs to pure mathematics, but several considerations point to this as the most convenient place for it. In the earlier work, the examples may be so constructed, that long and tedious calculations are avoided; but now, especially if he is engaged in practical physics or chemistry, the pupil should be able to deal with ordinary calculations as they come, and must do so in the practical questions of the last two sections. Hence, he feels the want, and is grateful for the assistance provided, instead of considering the tables as an additional encumbrance.

Of all tables, those of common logarithms are of the greatest value in lightening the irksomeness of calculation, and in after-life, while in the laboratory, they are simply indispensable. Experience shows that the use of them presents no difficulty to an ordinary boy, and is acquired in a couple of hours. Even if it be considered necessary to show how logarithms can be calculated, the characteristics present no difficulty, and the use of a small table of the values of the decimal powers of ten, such as that given by Long (*Phil. Trans.* 1724), reduces the calculation of any logarithm to a series of divisions, and that of any anti-logarithm to a series of multiplications.

The general, but by no means universal, reluctance to place tables in the hands of boys seems to be due to mistakes in the method in vogue. The few boys who reach the solution of triangles are provided with an excellent 7-figure table, such as that published by Messrs. Chambers, and told to calculate. This is rather like dropping a thirsty man into the middle of Lake Superior. Such a book contains forty tables, of which two or possibly three only, are required for the work the boy is actually doing, and of which he will probably never require more. The logarithms of numbers give results to a ten-millionth, while his own experiments are good if correct to a thousandth, and occupy 200 pages instead of the eighteen pages required by 5-figure logarithms. The boy is fairly overwhelmed by the power of the instrument placed in his unskilled hand, and is reduced to the unenviable condition of Peter the Saint in the old legend of St. Dunstan. The caution given by Mr. Merrifield is well worth quoting:— "The best advice to be given is not to procure a table until it is absolutely or frequently needed, and then to procure as small a one as will answer the purpose. All ordinary work can be done with a small table of logarithms to five decimal places. Unless a man's work be very special, it is generally clumsy to use larger tables." Experience shows that even 4-figure logarithms are of great assistance to boys, and suffice for the reduction of all

results which they are likely to obtain in the laboratory. The use of large tables also tends to increase the error, to which boys are specially liable, of calculating results further than the data warrant; while the use of small tables educes ingenuity in adapting the numbers to the tables. What has been said about logarithms applies with equal force to all other tables—even the fourth figure of a cube-root is rarely in reality required. The single exception of compound interest tables for long terms of years would not be likely to fall in a boy's way. With this caution, I cannot too strongly urge upon masters the advisability of entrusting to their pupils the aids they use themselves, and, if authority adds any weight to the argument from common-sense, I would remind them that, though De Morgan wrote *one* arithmetic, he edited many tables, including two of logarithms, to facilitate calculation. In his preface he speaks of Barlow's tables as "useful to all—who are calculators by choice or necessity." If masters are calculators by choice, boys are certainly calculators by necessity.

The use of the slide-rule is far more general among mechanics and engineers abroad than it is in England. The value of it to all who have to deal rapidly with comparatively small numbers can hardly be over-estimated;—in the words of Prof. J. Hoüel, to whom calculators owe so much, "l'admirable instrument connu sous le nom de *règle à calcul*.....dont un préjugé inexplicable, contre lequel je ne saurais trop énergiquement protester, a jusqu'ici retardé l'adoption universelle par les calculateurs." If this be true in France, it is still more true, unfortunately, in England. To take an example of its utility, which will come home to mathematicians, in ordinary 5-figure logarithm tables, the differences decrease from 44 to 4, and even a very small slide-rule suffices to replace all the tables of proportional parts. To masters who are not mathematicians I venture on an *argumentum ad hominem*,—At the end of term, who has not had reason to be grateful to a Mark-reducer?

In opposition to the usual practice, "money" is postponed until last, in the belief that, though the problems connected with it are the most difficult, equally good instruction and more valuable knowledge can be obtained from "measures." The decimalisation of money also is far more readily grasped and appreciated by one who has had some practice in the metric system, than by one who considers it merely as an elaborate system of pitfalls prepared for his peculiar benefit.

If more attention were paid to methods actually used in the office, a boy would not have so often to forget what he has learnt on the form before his promotion to the stool, and, convenient methods might frequently be introduced into business.

The idea of a unit of value is somewhat difficult to grasp, and is rarely made very clear in the text-books. A sovereign contains 113·001 grains of gold, and the value of it is merely the value of this quantity of gold com-

red with the value of other commodities. Its value for some years, according to Stanley Jevons, has been slowly decreasing. The price of 440 grains of gold ($\frac{1}{12}$ of a troy ounce) is £3·8937, or standard gold is bought by Government for £3 17s. 10 $\frac{1}{2}$ d. per troy ounce. To compare the sovereign with the standards of value of other countries, we must first find the value *par*, which depends upon the ratio between the amount of gold in the two coins (an excellent table of which is given in the "Annuaire du Bureau des Longitudes") and the mint-dues, if any, and then the rate of exchange or all fluctuation in value produced by a variety of causes. Comparison of gold with a silver standard is much more difficult. To find the value of a number of units of quantity, decimalisation of money and quantity, allowed by multiplication, is usually so much the easiest method that it seems hardly necessary to trouble about practice.

Annuities and the repayment of capital by annual instalments are of great practical importance, and should present little difficulty to one who has studied geometrical progression and knows how to use logarithms. The use of tables of compound interest and annuities much lightens the labour of calculation, and, as they are rarely given in arithmetics, those in Thomson's "Arithmetic," the "Annuaire," and in Beeton's "Ready Reckoner" may be mentioned as cheap and not too large.

Many of the problems presented by life insurance and contingent annuities are extremely complicated, but their great practical importance makes it necessary to attempt to show how the tables are used, and even indicate how they are calculated. The two most common cases for consideration are—(i.) What amount must be paid by a person of given age to entitle him to an annuity of given value. (ii.) What annual payment must be made by a person of given age to secure a certain amount at his death.

The ordinary methods of discussion are, of course, too complicated for boys, but the following considerations may suggest a method by which approximately true results may be easily arrived at. Both of the questions depend upon what is technically known as "the value of the given life"—that is, the value of an annuity of £1 to continue during the life; that is, upon the rate of interest and upon the probable duration of the life. The probable duration or expectation of life is the number of years after which only half the persons of the given age remain alive, so that the chances are equal that a given person be alive or dead after that time. Dr. Farr's results, determined from his tables of mortality, are given in *Whitaker's Almanac*.

All insurance companies are carried on with a view to profit, and incur expenses, but if the calculations were made on the exact assumption of the probable (strictly mean) duration of life the chances are equal that the company would gain or lose. That the company may gain on insurances, a fictitious life, must be taken shorter than the probable life, and that it may gain on annuities, the fictitious life must be taken longer than the probable

life; so that, on the whole, the company may make sufficient to provide for working expenses, risks, and profits. A table drawn up so as to give any age the probable duration of life, the fictitious life for annuities, and the fictitious life for insurance, would reduce Problem (i.) to finding what is the present value of the given annuity for the fictitious life, and Problem (ii.) to what annual payment is required to produce the given sum during the fictitious life.

A knowledge of book-keeping would be of value to most persons in after-life, even if they were not directly engaged in mercantile pursuits.

The spread of a thorough knowledge of arithmetic throughout all classes of the community would be indirectly advantageous in a variety of ways. Improvements in our measures and commercial methods would be more rapidly appreciated and introduced. The wild theories of social and political enthusiasts would be brought to the stern test of figures. The accounts of Government and of local authorities would be more generally understood, and more keenly criticized, to the great benefit of the over-burdened tax and rate payer.

When we turn from what ought to be learnt to how it ought to be taught, we are met by still greater varieties of opinion. Some teachers maintain that instruction in arithmetic should be entirely oral, and only place in the hands of their pupils books of examples. Though this view is held by many to whose opinion great deference is due, I cannot help thinking that they are mistaken. It is possible that the method might succeed where a few clever boys are taken for a considerable time by one able master; but when, as is usually the case, a considerable number of boys are taken together and passed on in a term or two from one teacher to another, it seems to fail in practice. The pupil meets with differences of method, which, however valuable to the advanced student in causing him to regard the same thing from different points of view, to the beginner are simply confusing. Again, either the book-work must be dictated and taken down with a considerable expenditure of time which might be better employed, or, in the absence of the teacher, the pupil has no means of recovering a forgotten or misunderstood fact or method, and too often ceases work in despair, or conscientiously reduces himself to a hopeless condition of muddle. Lastly, the advocates of the no-book system still teach algebra, geometry, and trigonometry with the aid of books, and it is hard to find any reason for the disuse of books on arithmetic which does not apply with equal force to all other branches of mathematics. A master cannot too often oblige himself to remember that, however simple arithmetic may seem to himself, to his pupils it presents very real and serious difficulties. Standing on the mountain-top in the clear sunshine of algebra, he is very liable to make little of the difficulties upon the dark and slippery path up which they are painfully struggling, with but a dim idea of what they are leaving, and with no notion of where they are going.

On the other hand, the old phrase *quot homines tot sententiæ* is nowhere more true than among arithmeticians, and the force of their convictions has caused the appearance of a vast multitude of arithmetics of very various degrees of merit. Some teachers of great experience go so far as to say that none of these books are suitable for school purposes, but in my opinion the best of those which have appeared since the time of De Morgan are so equally good that their very excellence defeats the aim with which they were written. No one is so far superior to the rest as to be generally recognised, and a boy in passing from school to school, or even from form to form collects arithmetics (a friend of mine had five before he was sixteen) without attaining a thorough acquaintance with any one. What sort of knowledge of a language would a boy have if he had only dipped into five of its grammars?

It would be manifestly unfair, even did my space and competence allow it, to attempt to criticize in detail the somewhat numerous arithmetics I have read or looked at, since many others of equal value have probably escaped my notice, and the brief notes in the earlier part of this paper will enable the reader to see for himself the points I should look for in any book.

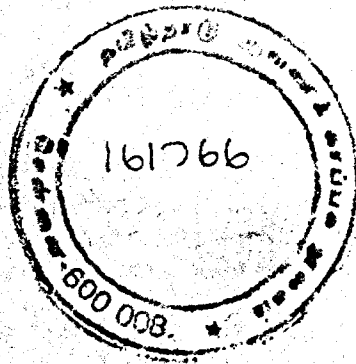
The number of tables is far from being as large as that of arithmetics, and, as a complete list of all the common tables in pure mathematics, accompanied by brief criticisms, is given in the Report of the British Association at Bradford, 1873, I may refer my readers to it for further information. Unfortunately, many of the tables there mentioned, e.g., De Morgan's five-figure logarithms, are out of print, and therefore useless for school purposes. The interest and annuity tables I have already mentioned will suffice for most purposes.

In conclusion, the great need at present seems to be a fairly cheap and not too cumbersome text-book, the methods in which should be recognised by all teachers and examiners, and in which a boy should feel at home as he used to do in his Latin grammar. The contents and the order in which they should be given have already been indicated, and each rule should be accompanied by fully worked-out and explained examples. Certain portions of the volume might be marked or reprinted in a separate form to serve as a primer for beginners. Uniformity of method would thus obtain throughout a boy's school-life.

A collection of tables should either be bound up with the book-work, or form a separate volume. They should comprise some such tables as the following:—(i.) Squares, cubes, square and cube roots, reciprocals from 2 to 1,000. (ii.) Five-figure logarithms of numbers from 1,000 to 9,999. (iii.) Amount of £1 at 2.5 p.c. compound interest for 50 years. (iv.) Amount of an annuity of £1. (v.) Present value of an annuity of £1. (vi.) Time required to pay off a sum at different rates. (vii.) Probable and fictitious duration of life.

The examples should be entirely separate from the book-work and tables, so that a teacher, while recognizing the general methods, might take what latitude he pleased in the exercises. Some boys require far more and some far fewer examples than those found in the ordinary text-books.

No one can be more sensible than the writer of the extreme nicety required in drawing up such a volume in order to secure any approach to universal acceptance; since even his own mind can find powerful arguments against many of the points urged in the present paper. And, also, experience has shown that no author, however eminent, has secured general allegiance. The general consensus of the opinions of teachers of arithmetic might possibly be ascertained by some such body as a Committee of the British Association; or the Committee on Arithmetic of the Association for the Improvement of Geometrical Teaching, which as yet too modestly hides its light under a bushel. With the assistance of a few persons who make practical use of arithmetic, such as engineers and accountants, a brief outline of the proposed book might be drawn up and widely circulated among schoolmasters and others interested in the subject. This syllabus, with the suggestions and criticisms to which it gave rise after discussion by the Association, would furnish a foundation upon which one or two competent men could easily and rapidly build.—(*Journal of Education.*)



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