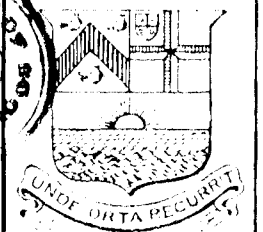
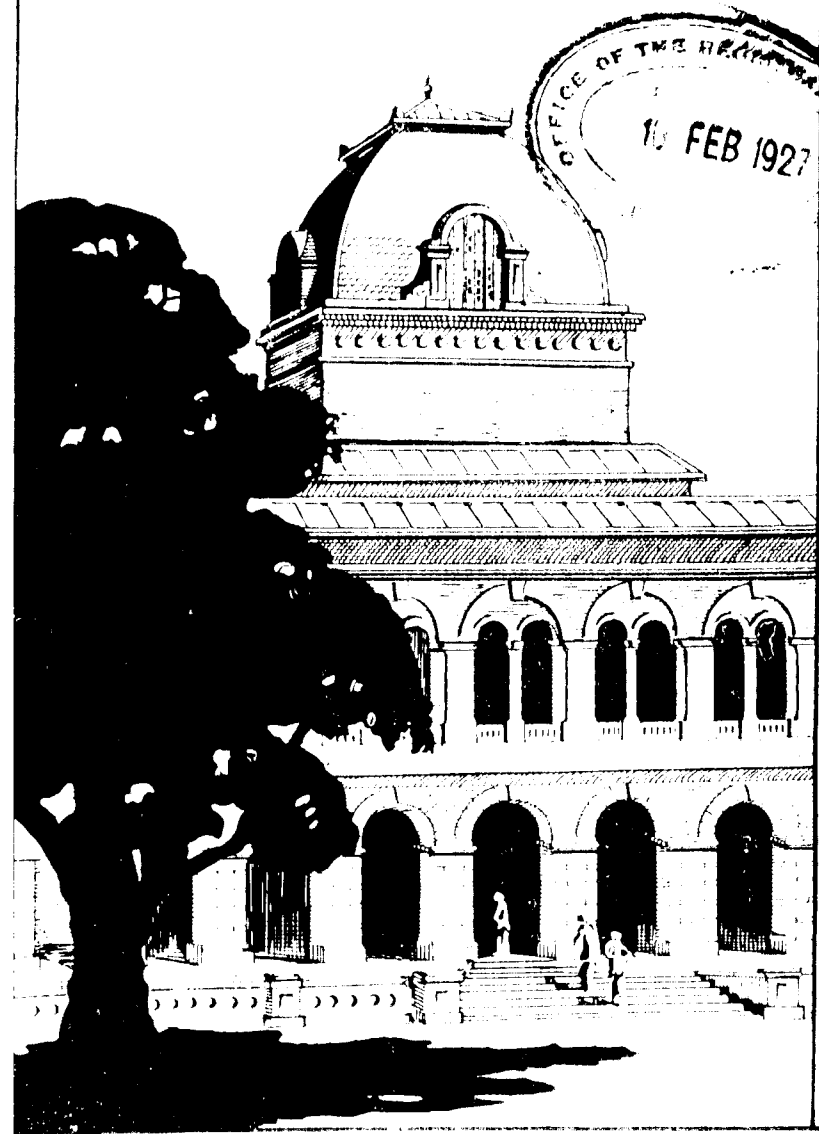


THE PRESIDENCY COLLEGE.



M
A
G
A
Z
I
N
E

OFFICE OF
10 FEB 1927

The Presidency College Magazine

Editor.—S. E. RUNGANADHAN, M.A.

Associate Editors:—P. D. STRACEY AND S. CHANDRASEKHARA SASTRI.

PUBLISHED TERMINALLY.

Annual subscription for all except present students of the College, Rs. 2-8-0.

Price of single copy One Rupee.

Vol. II

DECEMBER, 1926.

No. 5

CONTENTS.

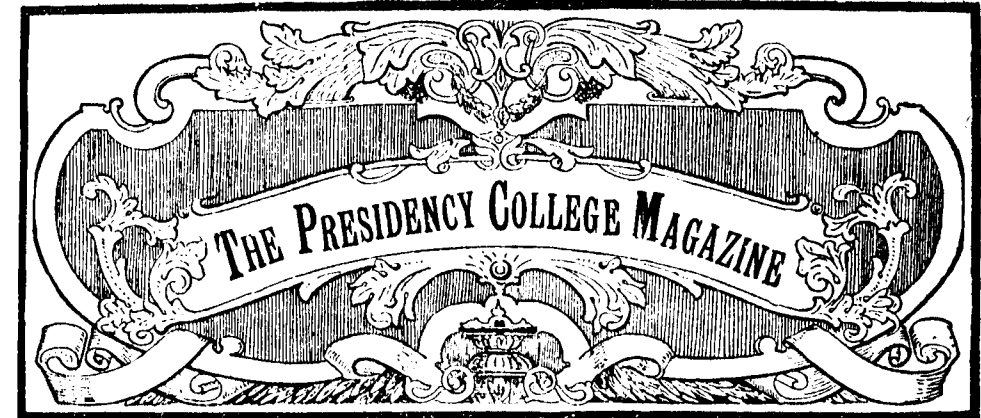
	PAGE
THE LEAGUE OF NATIONS—by the Hon. Sir C. P. Ramaswamy Ayyar, K.C.I.E. ...	203
INDIAN PAINTING I—by James H. Cousins, D. Litt. ...	207
AN ANONYMOUS GIFT—A Short Story—by S. E. R. ...	213
THE OLD YEAR—A Poem—by R. A. St. C. ...	216
EVOLUTION IN THE LIGHT OF MODERN KNOWLEDGE—by P. F. Pyson, M.A., F.L.S. ...	217
SCIENCE EXHIBITIONS AT THE COLLEGE ...	225
ON FANCY—A Poem—by D. L. ...	228
RAMAMURTHY, TENNIS CHAMPION, AT HIS BOOKS—A Sketch ...	229
IMPRESSIONS OF A VISIT TO THE GERSAPPA FALLS—by V. R. Sundararaman ...	230
EXCURSIONS AND TOURS ...	233
AND THE BRIDE IS COMING HOME—A Poem—by N. ...	237
THE UNIVERSITY TRAINING CORPS—by L.-Cpl. N. K. Murthy. ...	238
THE STORY OF THE FRENCH REVOLUTION—by C. Srinivasan. ...	241
THE CAREER OF AN UNEMPLOYED—by M. Damodaran, B.A. ...	246
A PRIMER OF HINDUISM II—by D. S. Sarma, M.A. ...	249
A TRIPPLICANE TRAGEDY—A Sketch ...	256
THE PSYCHOLOGICAL LABORATORY, MYSORE—by T. C. Hari-Krishnan ...	257
A PANTHER SHOOT—by P. D. S. ...	259
SPORTS NOTES ...	262
BOOK REVIEWS ...	267

Contributions to the Magazine from the Members of the Staff and the past and present students of the College will always be gladly received by the Editor.

All communications should be addressed to the Editor "Presidency College Magazine," Madras.



THE HON. SIR C. P. RAMASWAMY AYYAR, K.C.I.E.
One of India's representatives at the League Assembly, 1926.



Vol. II

DECEMBER, 1926

No. 5

The League of Nations

The work so far accomplished by the League of Nations has been valuable and significant mainly because holding fast to certain ideals, the leaders of this world-movement have nevertheless kept before themselves the sense of limit and have never failed to perceive the demarcating lines beyond which, under present conditions, the most intense effort cannot reach. With regard to the future, also, it may be predicated that the success of the League's efforts will be in proportion to the extent to which it declines to be bound by any hypnotising shibboleths. Therefore it is necessary for the League while pursuing its international aims not to run counter to salutary national ideals. According to the covenant of the League, the high contracting parties have resolved to promote international co-operation and achieve international peace and security by the prescription of just and honourable relations between nations and by the firm establishment of international law as a rule of conduct. Indeed, it is not too much to say that the aim of the League is ultimately to regulate the relations of the nations of the world *inter se* as Municipal Courts of Law regulate the relations of private individuals and corporations. Centuries ago Cicero asserted in his *DE OFFICIIS*, "It is a hard matter to take active concern in the affairs of others although Chremis of Terence thinks that *nothing human is alien to man*." It may be stated that the work

of the League is conditioned by the two principles involved in the above sentiment of Cicero. The League takes upon itself in the first place the ordering of the affairs of humanity in general. On the other hand, it has to reconcile this activity with the principle that there are limits to interference with the internal affairs of nations and countries. The process of reconciliation is necessarily a slow and a difficult one; but it may, I think, be safely asserted that international diplomacy of the old school is ended, never to be resuscitated. A few statesmen sitting round a table can no longer, it is hoped, arrogate to themselves the ordering of peace and war either in the physical or economic sense. The recent pronouncements by the leading bankers of the world in favour of international economic peace and the various treaties that have been concluded in pursuance of the policy of the League of Nations bear witness to this tendency. The shrinkage of the world and the new conditions produced by the improved modes of communications and transport have demonstrated that nations can no longer live in segregation or aloofness and one of the main lessons of the war has been the inculcation of the truth that economic warfare is perhaps even more disastrous in ultimate effect than the use of poison-gas and tanks.

The underlying idea of the League and its allied organisations, the Court of International Justice, and the International Labour Office is the pursuit of the methods of conciliation and arbitration consistent with security and the two most important resolutions of the 1926 Assembly of the League of Nations, are firstly those relating to the preparations for a Disarmament Conference when ways and means will be devised for taking a world census of armaments and for limiting their production. The recent circular of the Earl of Balfour and many important bankers on the need for international action with reference to the economic position of the world and the suggestion by the International Chambers of Commerce for a permanent Commission on Tariffs is the result of the other resolution calling upon the nations of the world to convene a Conference having for its object the removal of economic barriers and tariff walls between various countries. It is a matter for great satisfaction that notwithstanding the insistence on unanimity as the condition precedent to any action on the part of the League these two far-reaching ideas have gained acceptance.

There are differences of opinion as to the actual quantum of work turned out by the League and its utility but in the language of General Hertzog it may well be affirmed that a loss of faith in the League will lead to a panic among the nations of the world especially among the smaller nations which are beginning to rely more and more upon their membership of the League as a bulwark against wanton aggression or unfair dealing on the part of more powerful nations.

Turning now to the actual work accomplished by the League it is not often remembered that it has done a great deal for the amelioration of health and economic conditions and the co-ordination of activity in regard to them, that it has set up a Committee designed to foster the growth of intellectual co-operation among the nations, that it has already turned out notable work in connection with the settlement of Greek and Bulgarian refugees and the financial reconstruction of many distressed localities like Hungary and Austria and Danzig and moreover that it has led to the formulation of 700 treaties of peace and arbitration and conventions relating to extradition, post, telegraph, aerial navigation and transit matters. The valuable International Labour Organisation which works in close co-operation with the League has, by means of the Washington Convention, led to the enactment by the Indian Legislature of the Factories and Mines Acts and the limitation of hours of work in mines. It must also be acknowledged that disputes which in the old days might have led to warfare have been adjusted by means of the peaceful intervention of the League as in the case of the controversy between Britain and France as to compulsory enlistment in Tunis and Morocco and in the case of the Mosul dispute between Turkey and Great Britain. Not only has the League initiated a new sense of self-respect and self-assertion on the part of the small nations of the world but in recent years it has devoted its attention to Eastern problems such as the problems of malaria in Persia and research regarding eastern epidemics which has been concentrated in the Singapore Bureau. Some of the most original and creative minds of the world look up to the League as the one means of solution for the many baffling problems confronting humanity to-day. Men like Viscount Cecil, Dr. Nansen, Sgr. Scialoja, Dr. Benes and the Japanese statesmen Ishi and Adatchi are convinced that the League offers the best field for the exercise of practical idealism in the ordering of the affairs of men at this juncture.

India has been an original member of the League and has taken a not insignificant part in the deliberations of that body. If the question is asked as to what India or any other country derives by way of immediate profit or advantage from the League, the answer would be difficult to give even though it is true that some nations and peoples have already reaped material benefits both positive and negative from the operation of the League, but men do not live by bread alone and if the League creates, however slowly, a sense of international security and a confident feeling that it is possible to bring about a reign of international law as the rule of life, this achievement by itself would be of incalculable value.

The relieving of the tension between capital and labour, the softening of the mutual acerbities of races and communities, the freeing of the energies of mankind from the preoccupations of the battlefield are the ultimate aims of this great organisation. India has nothing to lose and everything to gain by being a participant in the activities of the League and those who labour to create a self-governing India may feel sure that even in the matter of a new status for the country, India's membership in a world organisation of this character will not be a small factor. No one ought to minimise the difficulties in the way; human nature cannot be changed in a second and racial and national jealousies and ambitions may delay or retard the efforts of the League; but men who believe in humanity and its future cannot but realise also that the surest means of achieving world harmony is by such organisations as the League and its allied bodies.

C. P. RAMASWAMY AYYAR.



Indian Painting

I

THE CLASSICAL BACKGROUND

To those who have taken even a passing and slight interest in the new enthusiasm for painting which has manifested itself in India within the past twenty years, and especially within the last ten, the name Ajanta is known as standing for an era in Indian art which began not less than a century before the opening of the Christian era and ended (at least in its original form of wall painting) after the opening of the seventh century. The school arose out of the artistic necessity of the Buddhist monks who gathered together in secluded places for meditation and study in the monsoon season and decorated the walls and ceilings of their excavated dwelling places and places of worship. With the absorption of the Buddhist population back into renascent Hinduism in the seventh and succeeding centuries the Buddhist phase of Indian art passed away. Hundreds of artists found their way to China, which had embraced the faith, and carried the art tradition of Ajanta as far east as Japan. Others went to Central and Western Asia. Their places of retreat at Ajanta (now in the Nizam's Dominions) and elsewhere fell out of human ken save to occasional sadhus and tribesmen and the wild creatures of the jungle. Early in the last century the art world was stirred with news of the discovery of richly frescoed cave temples on the Indian Deccan. A few years ago an expedition for the systematic copying of the frescoes at Ajanta that had escaped the ravages of time and weather and vandalism was carried out. Reproductions of these priceless remnants of a glorious but vanished age of creative art in India are now published and have become increasingly familiar in books and magazines.

Shortly the literature of art will be further enriched by a monograph on another set of ancient frescoes which has been made by the Archaeological Department of Gwalior State. This will consist of reproductions of copies of pictures and friezes still visible in

This is the first of a series of three articles which Dr. Cousins is contributing to this Magazine.—Editor.



the excavated temples of Bagh at the south-west corner of Gwalior State. The Bagh frescoes are taken by competent authorities to be contemporaneous with the later Ajanta frescoes. In craftsmanship they are similar. Their mood of solemn reserve even in the midst of joy is the same. But while the Ajanta frescoes are mainly religious in theme, depicting incidents from the previous lives of the Buddha, the Bagh frescoes are entirely human and depict scenes from the religious and social life of the time. The exquisite austerity of Ajanta tends to obscure the personal element of the artist; the worker disappears in the vivid reality of the work. But in the Bagh frescoes the humanity of the theme gives free rein to the joy of the artist. The aesthetical element which is latent, almost cold, in Ajanta, is patent and warm in Bagh. A glance of an eye, the poise of a foot, the delicious turn of a hand, and a hundred other details of expression and decoration, show the surplusage ("the little more and how much it is" beyond the exactly necessary) of energy in creation which bespeaks the flame and expansion of delight. Even a scene of sorrow, in which one lady comforts another who is weeping, is painted with such beauty of line and tone, such sympathy and chastity, that it touches the sensitive observer with the pain of aesthetical joy that only great art can communicate.

Until seven years ago the frescoes of Ajanta and Bagh were regarded as the only intelligible remnants of India's golden age of

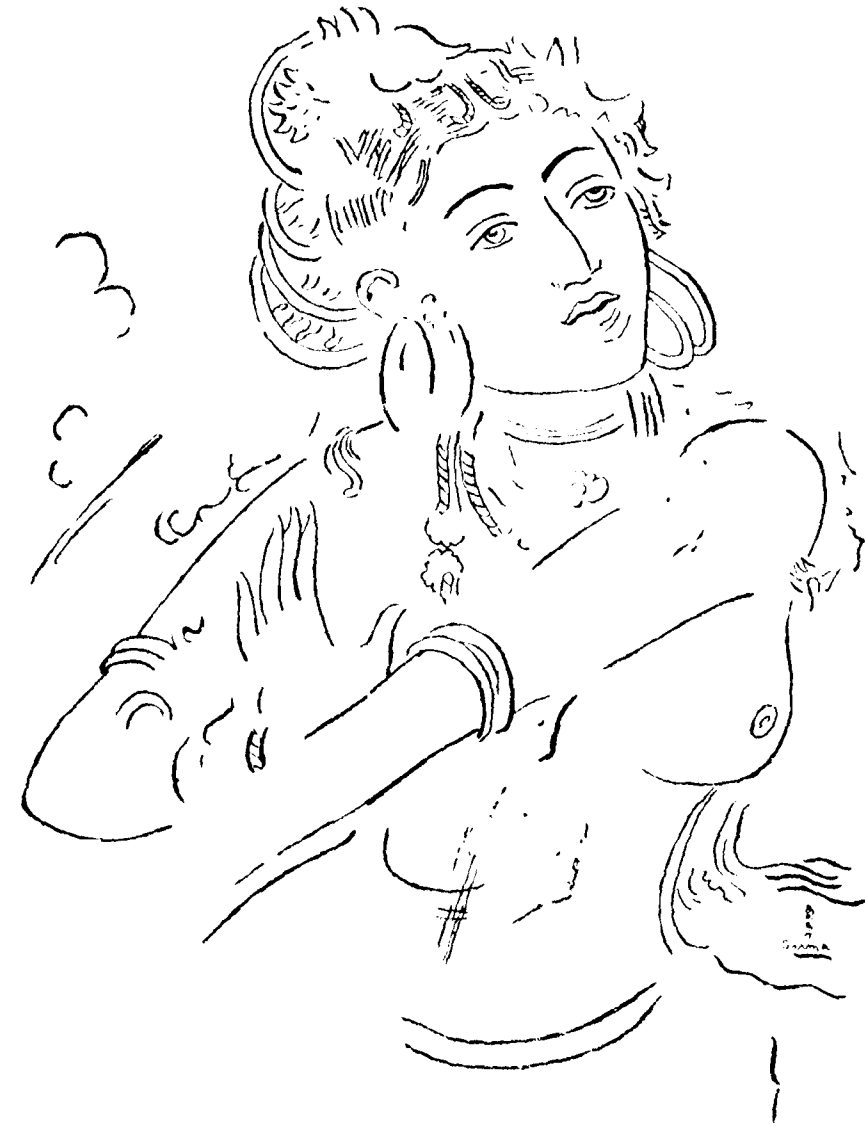


painting. But a discovery was then made in Madras Presidency which added a large area to the influence of the classical artists. Sitannaval is a small village in the state of Pudukottah. A couple of furlongs beyond the village a hill rises, and about fifty feet up the side of the hill is a mantapam cut into the solid rock. The mantapam is not in itself of any special importance. Many such excavated religious buildings are to be found in South India. But Sitannaval mantapam is distinguished by the fact that the whole of its interior was in ancient times covered by wall paintings of fine quality.

The existence of the frescoes at Sitannaval was discovered by the late Mr. T. A. Gopinatha Row in 1919. He formed the opinion that they were as old as the cave itself. The discovery was followed up by Monsieur Dubriel of Pondicherry, who, in a pamphlet, pointed out the similarity of the frescoes to those of Ajanta, and claimed for the newly found paintings an original excellence at least equal to that of the great gallery of the northern Deccan. There is nothing in the cave itself to show its age, but from various archaeological data M. Dubriel concludes that the paintings belong to the Pallavas who ruled in the district about the sixth century A.D., when the Buddhist era, of which Ajanta was the crowning achievement in art, was coming to an end. This is the latest date that may be assigned to them, but they are probably older.

The excavated mantapam at Sitannaval is twenty-four feet long and twelve feet broad and high. The three sides of the cave are of living rock. The open face is adorned with four pillars, two being in the round and two half-round, that is, half cut out of the rock with the other half, as it were embedded in the rock. The back wall is pierced by a door four feet by two leading to a cell ten feet each way. There are sculptured figures within the mantapam but they cannot be identified, as all detail has disappeared, if indeed they are not mere rough sculptural foundations on which the complete figure was made with plaster and colour.

The paintings on the upper portions of the mantapam and cell are still intact, though much faded. They give the indication that the artists who painted them were masters of their work. The free, flowing and decided outline shows the determined hand of the expert. The colouring is rich and harmonious. Red, green,



blue, yellow, black and white are used, with red and green predominating.

The fresco on the ceiling of the mantapam is an aeroplane view of a lotus tank wherein are depicted the creatures of the four kingdoms of nature.

The pillar paintings have almost vanished. Only on the upper portions of them are found faint traces of human figures, two of these being women dancers in characteristic classical dance postures. Only the body above the waist is visible, the rest having disappeared. On another side of a pillar is a beautiful drawing of a male head (which may be that of a deity or a king) with a couple of other heads seen over his shoulder. Only the bare red outline of these figures is faintly visible, with traces of a reddish back-ground. The outlines are in some places reinforced by a darker colour.

Not all of the yet visible paintings have been published, but most, if not all, have been copied by Mr. M. S. Sundara Sarma. So much of the frescoes as has been made public inspires the wish that the reproduction and publication of the whole be undertaken without delay, and with the same thoroughness and efficiency as have been bestowed on the other remainders from India's classical era in art. There is obvious in the Sitannavasal frescoes the same high mood of solemn serenity, the same rhythmical graciousness, as are found in the Ajanta and Bagh frescoes, and the discovery of these precious works so recently, gives new hope that within, and perhaps beyond, that area, research will bring forth other examples to expand and enrich our knowledge of one of the most important phases in world art.

JAMES H. COUSINS.



An Anonymous Gift



A SHORT STORY

Mr. Vembu Ayyar was a schoolmaster of the old-fashioned type. He wore an enormous turban so clumsily tied that one end of the cloth loosened and unwound itself, at frequent intervals, and fell so gently over his nose and ears that its gradual descent was a source of thrilling fascination to the boys. He was curiously indifferent about his personal appearance. He had on an old black coat which had done duty for years and was badly frayed at the edges. It was so curiously cut that it reached down to his knees, and the sleeves, in Chinese fashion, were so long that they had to be pushed up and the little finger of either hand stretched at right angles to the others to keep the hands from being completely covered. Being very short-sighted, he wore a pair of powerful glasses for reading, and these were either sharply pulled down perilously close to the tip of the nose or pushed up over the eyebrows when he spoke to the class.

He was the history teacher for the higher forms of the Karuppur High School, and had endeavoured most conscientiously for more than thirty years to instil the facts of English history into his pupils' minds. They, unfortunately, however, displayed no great enthusiasm for learning that the House of Lancaster had a red rose as its badge or that the Treaty of Utrecht was signed in 1713, and spent the time either in hilarious talk or in mutual recriminations. When the din rose beyond a certain well-recognised pitch, Mr. Vembu Ayyar would thump the table smartly to impose a fleeting silence on the boys and then proceed to impress a fresh historical fact on their minds. But he was of a kindly and benevolent disposition and was, on the whole, well satisfied with the behaviour of his young charges. Among all the pupils who had passed through his hands, there was only one whom he had ever actively disliked and secretly dreaded and that was Srinivasan. Srinivasan was as full of devilment as he was intelligent, and was in the habit of harassing his old teacher in many ways. But he had left Karuppur over two years ago to join a college in Madras and Mr. Vembu Ayyar had no serious trouble with any of his other pupils.

Things were going on smoothly thus when one day the school world was violently disturbed by a strange phenomenon. Mr. Vembu Ayyar turned up at the school not in his old thread-bare black coat but in a brand new coat made of the finest and glossiest tussore silk. When he entered the sixth form class room at 10 o'clock, the sight was so unusual that an unwonted silence fell on the class and the boys stared at him in amazement.

Mr. Vembu Ayyar realizing that the occasion called for some words of explanation from him, spoke to the boys thus :

"My young friends, I was most pleasantly surprised to receive by parcel post a few days ago about twelve yards of this very fine stuff which I have made into two coats. I am entirely in the dark as to who sent me this beautiful present, but I have a feeling that it must be some old student of mine. I never realised till now that my pupils had so much true *guru-bakthi*, such affectionate regard and gratitude for their old teacher. I shall be very glad if you will find out and let me know who has sent me this gift that I may thank him for it."

There was much excitement in the school for some days after this incident and searching enquiries were made in every nook and corner of Karuppur to discover the anonymous sender of the gift. But it was all to no purpose. In spite of the most vigorous efforts of the youthful members of the school detective society, the thing remained enshrouded in mystery.

Then it happened that Natarajan who had gone to Madras on business, called on his old school-fellow, Srinivasan. Natarajan, in his boisterous way, greeted his friend effusively and dropped heavily into a well-upholstered cane chair.

"Hallo, hallo, Srinu", he shouted, after a quick survey of the room, "heartly congratulations, old boy. I knew you had been married, but I had no idea you were so terribly prosperous. By gosh, gold wrist-watch, diamond ring, a Spalding tennis racket and shoes galore !"

"Thanks, Natarajan, I am fairly well off" said Srinivasan with a smile. "And how is good old Karuppur ? It looks as if it is ages since I was there last."

"Nothing doing, my boy. 'Tis dreadfully dull. The most exciting thing there, just now, is that old Vembu Ayyar goes about in a new silk coat. The boys are tremendously intrigued

about it and are trying hard to find out who sent him the silk. You have not forgotten our old history teacher, whom you used to worry so much, have you ?"

"Not at all", replied Srinivasan. "And so he has made up the silk into coats, has he ? I'm so awfully glad !"

Natarajan leapt out of the chair and laying his large hands on his friend's shoulders, shook him excitedly and said, "So it was *you* who sent him the silk, is it ? *You* of all persons ! My dear Srinu, tell me all about it at once. What on earth made you send the stuff to him ?"

"Well, if you are keen on knowing," said Srinivasan, "it was I that sent him the silk. That piece of silk caused me more acute worry and anxiety than anything else in my life—not excluding my honours preliminary examination. I was, in fact, hesitating whether I should burn it or throw it into the sea, when I had a sudden brain-wave and thought of Vembu Ayyar and his shabby old coat. So I sent it off to him at once and was jolly glad of the riddance——"

"But, Srinu, you mystify me. Why did you want to burn or throw away the silk ?" asked Natarajan, interrupting his friend.

Srinivasan got up and opening his table drawer produced a sheet of paper which he handed over to his visitor. "There," he said, "that is the list of presents which my father-in-law had agreed to give the bride and me for the wedding."

Natarajan scanned the list, which ran as follows, with great interest :—

TO THE BRIDE

Jewels		 value Rs. 3,000
Saries and silver articles		.. 1,000

TO THE BRIDEGROOM

Gold watch	}	Rs. 1,000
A diamond ring		
2 silk suits		
A dozen silver-lace cloths	}	Rs. 3,000
Cash		
Total		Rs. 8,000

"Not a bad haul, at all, my dear fellow, not a bad haul," remarked Natarajan, as he handed back the paper. "I notice that two silk suits are included in the list."

"That's just what I was coming to", observed Srinivasan. "You know, my father, don't you? He has many good points about him, but he is something of a Jew. When the presents arrived the day before the wedding, he examined them most minutely to satisfy himself that they were quite all right. He then discovered that a piece of silk about twelve yards in length had been sent and that it had not been made up into suits as stated in the list. He grew furious about it and insisted on the bond being fulfilled to the letter. He sent the silk back at once to the bride's people with a note that it should be made up into suits according to the list sent. Then, of course, the fat was in the fire."

"What happened?" asked Natarajan eagerly.

"Well my father-in-law lay low till the wedding was over and then sent the wretched silk back. He wrote a stiff letter saying he had never expected to be treated so badly. He was a senior Deputy Collector, and though he had given his daughter in marriage, he was not going to be dictated to by any of the bridegroom's people, and so on and so forth....."

"By jove! It must have been very unpleasant for you, Srinu", marked Natarajan, sympathetically.

"Dashed unpleasant, indeed. Well, my father stormed and raged and with his usual obstinacy, refused to accept the silk; and back it went again. Needless to say, it was returned a few days later by my father-in-law. And so the wretched stuff went to and fro at least half a dozen times. Then on the day I was leaving the place for Madras, an office peon brought it again to me with an oral message from my wife's mother that she begged me to get it made up into suits and that she would send me money later on to pay the tailoring charges. That settled it for me. The disgrace of it all was unendurable. I took the cursed stuff, in spite of my father's orders to the contrary, put it into my trunk and brought it away to Madras. But the very sight of it was hateful to me. I spent some sleepless nights thinking how best to get rid of it. I could not insult any of my friends by offering it to them. It had either to be burnt or flung into the sea. Then, I suddenly thought of Vembu Ayyar. It was sheer inspiration."

Natarajan roared with laughter. "Gosh! My younger brother tells me that Vembu Ayyar constantly refers to the gift in class as a *guru-dakshina* from a grateful and devoted old pupil!"

"Well, that was scarcely my motive in sending it," said Srinivasan with a smile. "But he is a dear old man; let him nurse his illusion. It will do him no harm. Life would hardly be worth living without our illusions. My father is quite happy because he is firmly convinced that the senior Deputy Collector has been taught a lesson, while my father-in-law is under the impression that by the firm attitude he took in regard to the silk, he has made my father have a wholesome respect for him. Neither knows that that silk now adorns the person of Vembu Ayyar."

When Natarajan returned to Karuppur, sheer curiosity led him to his old school one day, where sauntering round the verandah, he paused for a moment at the window of Mr. Vembu Ayyar's class room. His old teacher was there, exactly as he had known him for years, except for the silk coat, enforcing silence on the class by tapping the table vigorously with the palm of his hand. And Natarajan heard him saying:—"Boys, you must show your respect to your teacher by observing strict silence in class. My old pupils never gave me any trouble. I have often told you how one of them has shown his affection and regard for me by sending me—"

Natarajan did not stay to hear any more. He went away vowing to himself that he, at all events, would never tell Mr. Vembu Ayyar from whom the gift had come.

S. E. R.



To The Old Year

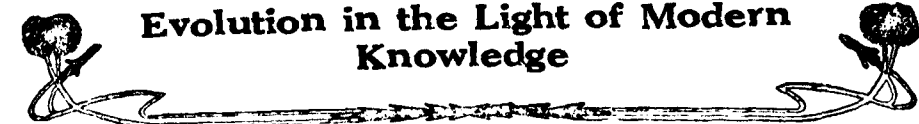
Old year, a-dying with the moon
Pale in a starless sky,
I hear the melancholy tune
Of the distant bells that sigh,
Solemnly swinging,
Solemnly ringing
You out.

And chequered memories sad and gay,
All that your hours have brought,—
New thoughts, new friendship, many a day
With happiness full fraught,
Come to me thinking,
While you are sinking
So fast.

Depths in my heart you have revealed
That were not known before,
Those stirrings are forever sealed
Within your closing door,
Days that are dying,
Leaving me sighing
For you.

The memoried past alone remains ;
Has it been well or ill ?
I care not ; now a New Year reigns,
And I must fight on still :
No use regretting,
Best be forgetting
The past.

" R. A. ST. C."



Evolution in the Light of Modern Knowledge

This book sets out to give the most up to date information as to our knowledge of evolution and the effects of Darwin's great theory of evolution, on all branches of knowledge. Darwin's theory, of course, refers only to living things but the idea of change and development has permeated all branches of knowledge.

The thirteen chapters are written each by an expert in his own sphere and deal with the birth and growth of stars and the solar system ; of life ; mind and religion. In the first Dr. Jeans, Secretary of the Royal Society and one of the foremost mathematicians of the day, writes of Cosmogony—the story of the stars. The most famous theory of their origin and formation is that of Laplace, a French mathematician of the 18th century. His theory was that the solar system, arose from a great hot rotating volume of thin matter (gas) which contracting under the attraction of its particles one to another condensed and in condensing became hotter and hotter, rotating at the same time faster and faster. Such a body would be supposed to throw off by centrifugal force successive rings which, condensing, ultimately became the planets as we now know them ; and they threw off in their turn also their satellites. This theory held the field for over a hundred years but has been given up because the present speed of rotation of the solar system as a whole—its total "angular momentum"—is not great enough to account for such effects, for to suppose that the total has decreased is against universally accepted principles. Moreover mathematicians now calculate that a great mass of condensed gas would not under ordinary circumstances throw off rings in this way, but would divide into two approximately equal bodies, and the telescope shows the heavens to be full of such double stars.

An important discovery of recent years is that stars can be arranged according to colour and size in two series, one from very large reddish stars, through yellow and white to smaller blue stars : and the other from blue to white, yellow, red and dark stars of small size but great density. The colour of a star is an indication of its temperature, and stars are now conceived as beginning with great

EVOLUTION IN THE LIGHT OF MODERN KNOWLEDGE. A Collective Work
(Blackie & Sons).

condensations of gas, glowing because of their huge size with 10 or 50 thousand times the luminosity of our sun, which contract and become hotter and therefore whiter in colour till they reach their hottest (at a temperature of perhaps 30,000°). After that much more slowly they pass through white as our sun, to yellow and red and finally dark cold bodies. The whole is supposed to take about 200 million years and the greater part, nearly all in fact, of this prodigious length of time to be occupied in the downward grade from blue to dark. This is why the very bright stars like Sirius are rare, the less luminous ones much more common. About half the stars of the heavens, it is supposed, are dark.

But the young, giant stars, how did they begin? They had their origin as Laplace supposed for the solar system, in a great nebula, a rotating mass of gas, in which condensations formed on its outer margins and became stars. There are several of these nebulae in the sky, and they show various stages of the story. They are all very far away, far beyond the group to which our sun belongs, (the thousands of stars which form the 'Milky way') and are of inconceivable size. Each might in time form a separate system of stars.

The breaking up of our parent star into sun and planets is supposed to have been caused by the influence of some star which came comparatively close to ours and created such a disturbance that the planets were thrown off. Such a chance formation of a system of sun and planet in place of the normal double star must be comparatively very rare. So on this theory there are not very many solar systems with planets capable of bearing life as we know it. Once separated, our earth quickly cooled to a globe of liquid, and on this liquid globe, rotating in about 4 hours the tide raised by the sun became so large that a part separated off and is now our moon. After that a crust formed by cooling of the liquid and the story of the rocks began. The origin of our continents has long been a subject of discussion. It is certain that the centre of the earth—and in fact the greater part of it—though hot enough to be molten is so compressed by the great weight of the overlying parts as to be harder than steel. But as shown by the lower streams that come from volcanoes there is certainly molten rock close below the surface. It is supposed that the crust of the earth rests indeed on a fluid and semifluid stratum. As the interior cools and contracts the surface skin becomes wrinkled and

thus were formed the great mountain chains of the world. A few years ago Wegener propounded the interesting theory that even within comparatively recent times the continents have moved on the liquid substratum. The chief argument in favour of this hypothesis, which is by no means universally accepted, is the remarkable similarity between the west coast of Africa and the east of South America, a similarity which extends to the formation of the range of mountain chains, as if these two had once been connected and America had drifted away from Europe and Africa.

In the chapter on Geology, Dr. Watts gives a very good account of the geological history of the rocks and the evolution of life on it, and the latter is treated more fully by Professor Macbride in the chapter on Zoology. Looking at the progress of life as a whole we see that there has been a progressive evolution of new types of animals and plants, boneless animals, fishes, lizards, birds and mammals; and that each type began in a very small way probably in its early stages having to save itself from extinction at the hands of the more vigorous long-established types, by hiding. Dr. Watts calls this the 'period of retreat.' As the new type had progressed and multiplied, its superior efficiency enabled it to beat its enemies, and then succeeded a 'boom period.' This came to an end when another type emerged from its period of retreat to become in its turn dominant. Thus, in very early times the seas were peopled with graptolites. These were colonies of minute animals of the simplest construction which lived together in rods of horny materials. They flourished till the fishes emerged and wiped them out. The early fishes had heavy plates to protect them from enemies, but were soon beaten by others who trusted to speed. Defensive armour plating has indeed always proved a snare. Later on we find great animals of the lizard tribe and later still of the rhinoceros type which had heavy plates to protect them, but were in turn ousted by more nimble competitors. We find the same in modern warships. Speed and guns, it has been found, are more valuable than armour plating, offence is more valuable than defence. After the fishes came the lizards. They attained a huge size, but have left only diminutive and unimportant successors. Then came the birds. They are still in the boom period but are probably declining. Then the mammals, the last and most advanced of whom is man. An important event was the coming in of grasses. Before that animals were dependent on the leaves

of trees and when the lower leaves had disappeared their place was being taken by others out of the animals' reach, the stock of food tended to become too little. But when grasses came in animals found adequate food at their feet. For grasses differ from other plants in growing very close together, and with closely matted underground parts which prevent their being pulled up and destroyed (as leaves are) by a grazing animal. In consequence there was a great increase of herbivorous animals. On these again carnivorous animals fed, and thus we find a rapid evolution of spread and strength to enable each side to hold its own. We also find animals learning to form herds for mutual defence and less often (as with wolves and red dogs) for combined offence. Such are the facts shown by the record of fossils in the rocks. No one can doubt this evidence. It is when we come to try and explain the means by which new types and improved types of animals and plants have come in that difficulties arise and men differ. Charles Darwin, 60 years ago, after collecting facts and turning them over in his mind for twenty years, startled the world with his theory that new forms came into prominence, not by the creative act of a great God, but by the slow accumulation of small variations under the stress of competition. Any slight variation which helps an animal or plant to live and beget its kind are preserved by being handed on to its descendants, while harmful variations are (by the death of their possessors) eliminated. Darwin supported his theory by the evidence of the great change produced in domestic animals simply by selection. From the wild cow have sprung the different variety we find say in South India *e.g.*, the large Nellore and the small Coimbatore breed. In Europe we have dogs of every size and almost every shape, from huge wolf hounds standing 30 inches at the shoulder to lap dogs not more than 6 inches high, and from strong thick-set bulldogs to the thin very speedy grey-hound. If man can do so much in the short space of his domesticity of the animal, what can't nature accomplish in the aeons of thin animals that have lived in the earth. But Darwin was too able an investigator, too conscientious a theorist, not to see that there are many organs which are not of sufficient value for the perish or survive point of view, for us to think of these as being evolved entirely by selection, and he considered that there was some inheritance of acquired characters *e.g.*, by a child of some, (if only a trifle) of the skill or strength acquired by his father through

practice. In this way he considered that instinct, which figures so largely in the life of all animals and especially of insects, was the result of endless repetition of the same action through countless generations. The difficulty in the way of this theory—first brought into prominence by Lamarck before Darwin's day—lies in the explanation of the actual mode of transmission of the acquired character. Since every animal (or plant) arise by the union of two minute single cells, one in animals just visible perhaps to the naked eye the other requiring to be magnified 50 to 100 times before it can be seen, it is difficult to conceive of any mechanism by which the characters are transmitted. Hence arose the school of the Neo-Darwins led by Weissman who denied the possibility for such transmission, and sought to explain evolution of new types by natural selection alone (but helped according to Weissman by a sort of struggle and selection between certain hypothetical 'determinants' inside the cell itself). Weissman's theory is not now believed in and many naturalists now ascribe value to the inheritance being of acquired characters, which Darwin had allowed. Professor MacBride is the foremost of the school, and in his chapter on Zoology he states the case for it.

The first serious objection to the Darwinian theory of the accumulation through inheritance of minute variations in any one direction, which ultimately leads to a definitely valuable change, was the discovery that this does not occur in certain cases when exact measurements have been made. Thus Johannsen weighed a bean seed and raised a plant from it. Fertilizing the flowers with their own pollen he obtained a crop of beans. He separated the heavier from the lighter, sowed them and obtained self-fertilised seed from each set. On weighing the next crops he found no difference between the weights of beans from the heavy and from the light seed of the first crop. Selection had not diminished or increased the weight. Similar work has been done on wheat, waterfleas, and the little slipper animalcule "paramoecium", a microscopic animal which reproduces by simply dividing and from which many generations can be raised in a short time. Separating the bigger from the smaller made no difference to the size of the descendants. This led to the principle of the "Pure Line", which is that the descendants of any one plant or animal (if free from intermixture with others) will vary only within certain limits, and selection makes no difference. This

seemed a blow at Darwin's theory, but in nature there are no pure lines, every animal or plant intercrosses with others. The discovery of this principle however led to the idea that evolution must be by sudden and pronounced variations, "mutations", as they are called. Devries about 20 years ago was the foremost exponent of this school, and he received strong support from workers in Mendelian inheritance. For according to the laws which Mendel discovered pronounced differences between two parents are not diluted in their offspring, but reappear in full strength. As Prof. Macbride points out, however, all recorded mutations are in a sense pathological, they are departures from the normal and of no advantage to the owner. Much work has been done in recent years to show that changes made in the life time of the individual in some cases pass on to the offspring and this has led many to believe that there is a real inheritance of acquired characters. One experiment was with mice which were trained to expect food on the ringing of a bell. It takes sometime to teach them, but they do learn after a while. *Succeeding generations learnt more quickly.*

Another series of experiments was founded on the Chinese habit of rearing peculiarly shaped and coloured gold fish. Some are almost globular, some have their eyes protruding far from the head, some have much enlarged and irregularly shaped fins, some are almost black in colour. Tornier found that the Chinese reared these strange forms in small vessels kept in the dark, so that they had not sufficient oxygen and light. He tried the effect of insufficient oxygen on newts, and found or thought he found succeeding generations more strongly affected. Two or three years ago Krammer, an Austrian scientist claimed to have found a similarly inherited change in the proportion of yellow and black pigment in the skin of a salamander. All these go to support Lamarck's theory of the inheritance of acquired characters, and Professor Macbride quotes a good deal of other less direct evidence in favour of such inheritance. Be it noted that Darwin while believing that the chief agent in evolution was spontaneous variation, did admit Lamarck's theory to a limited extent. Indeed modern biological work seems only to confirm Darwin's greatness and the extraordinary fairness of his well-balanced mind.

Dr. McDougal in his chapter on "Mental Evolution" gives a history of the development of our ideas on the origin and nature of mind. Darwin had followed Lamarck in believing that

mind had developed along with the physical characteristics of animals, and in his courageous way, for the idea was very new at that time, did not shrink from the conclusion that the brain and mind of man are but an extension through natural development of the brain and mind of animals. Wallace his co-worker in the theory of evolution by Natural Selection did not go so far. He was so impressed by the great difference between the brain of the highest animal and the lowest races of man that he required for man a separate creative act in the formation of his mind. During the fifty years which followed there was acute controversy on this subject, and it is bound up with the whole theory of evolution.

If we believe with Lamarck of old, and Professor Macbride of today, in the inheritance of acquired characters it is clear that mind acting on the physical body may be the creative agency required for initiating new developments. For it must not be forgotten that in Darwin's theory there is no such agent. He built his theory on spontaneous variation. But Professor McDougal who writes on mental evolution confesses that Lamarck's theory has not been proved and is difficult to explain, and therefore a creative role cannot be assigned to mind except on the assumption that the germinal cells themselves have some mental activity which seems impossible. The great problem of the how of evolution still remains unsolved, nor can we with confidence postulate either an evolution of mind apart from the body or of body uninfluenced by mind.

A very interesting chapter is that on Anthropology by Dr. G. Elliot Smith. Anthropologists are divided into two schools, those who believe in culture having arisen separately in each section of the human race; and a newer school which believes that when the same idea or craft is found in two races it has not arisen spontaneously in each, but was borrowed by one from the other. Dr. Rivers in 1912 started this idea and Professor Elliot Smith has been a strong supporter. An important recent work on this subject was Professor Perry's "Children of the Sun."

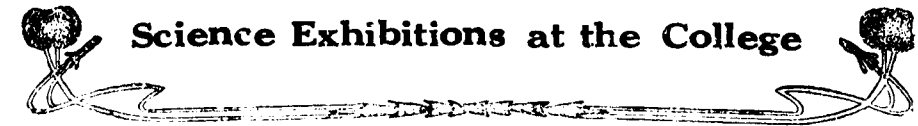
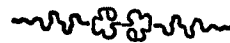
Egypt is considered to have been the cradle of civilisation. Here men first learnt not only to live in orderly, organised, communities, but to work in metals, precious stones and pottery, and thus to rise from the stage of the mere animal. In their search for gold and copper, the first metals known, and for precious stones, especially turquoise, the Egyptians carried with them all over the

world their newly discovered crafts. Through Arabia, India, the Malay Archipelago, to the islands of the Pacific, Mexico and in the Southern States of North America their influence has been traced. In many places the craft they taught was lost when the colonists died out, the local tribes being unable to develop or improve them. In this way is explained the existence of prehistoric remains showing a higher degree of culture than exists at present, and of customs that have now no meaning. It is a new and fascinating story which this school is working out, and there can be little doubt that on these lines there will be great development in the near future of our knowledge and of the development of human culture, as more and more work is done in excavating the sites of old cities, and in studying primitive peoples.

Students of Physics and Chemistry will find plenty of interest and value in Professor Soddy's chapter. Here is described very clearly the modern conception of the structure of the atom. Stress is laid on the enormous strength of the force internal to the atom. No chemical changes affect them (except in the outermost ring of electrons), and even the high temperature of some stars, at one time thought to be the cause of the simple spectrum usually seen, is no longer believed to have any effect in the direction of breaking them down. Transmutation of one element into another though it goes on slowly in certain radio-active case, is not likely ever to be effected by man. Thus ends the alchemist's dream which recently has had a slight revival: and there is no 'evolution' of the elements in the same sense as there has been of animals and plants.

Dr. Taylor writes on Philosophy, and Canon Wilson whose mind at the age of 90 is still clear and his mental force unabated, on the 'Religious Effect'. This is written entirely from the standpoint of the Christian and will hardly be understood by those not familiar with Christian doctrines. For he treats of the effect of the idea of Evolution, on these doctrines. "The most obvious way", he says, "to regard sin in the light of evolution is as a survival and a rebellion of the animal and lower elements in man, after the emergence of those higher moral and spiritual elements in him which make him human, and have begun to claim control". There is much else of value in this chapter, but I must leave it to be read by those interested.

P. F. Fyson



Science Exhibitions at the College

Physics

The College Physics Association held its second annual exhibition on Saturday the 20th November in the well-equipped physics laboratories, and attracted a great crowd of visitors, mostly students from other colleges, including a fair sprinkling of lady-students. The exhibits were one and all interesting, and the arrangements for passing the stream of eager visitors from room to room were thoroughly successful and well conducted.

It would be difficult to single out any one exhibit or section of exhibits for special mention, though of necessity some were more interesting than others, and attracted a greater amount of attention. The machine-room with its whizzing belts and flying wheels, was one of the earliest sections to be visited, and here one could see highly tempered steel tools cutting screw threads, engraving brass rods or cutting slots in solid plates of metal. From here we passed on to the wireless room, and in view of the great interest now being attracted to wireless all the world through, this was one of the most popular sections. Here were displayed all the successive stages in the development of wireless, from the simplest of crystal detectors to the complicated six or eight valved sets. A miniature aerial mounted on a frame, could be used as a "direction finder," and the possibilities of such an apparatus in peace and war immediately struck one.

From here the visitor passed on to another interesting set of exhibits, which dealt mainly with the physics of the senses. The phantom bouquet fascinated while puzzling one, and the series of optical illusions struck an entirely novel note. One also examined various devices wherein the laws of light were applied for practical purposes *e.g.*, in the principle of the periscope, telescope, and other optical instruments. Some mechanical peculiarities were next on view, one of which was a cone which apparently rolled upwards! a seismograph for recording volcanic disturbances, and a "camera lucida".

The next section contained some striking exhibits. There was an experiment to illustrate the phenomenon of lightning and its destructive influences on plant-life. Then a model gyroscope proved very instructive, enabling one to see how an Atlantic

diver may be kept accurately to a course without the aid of human watchfulness. There was an ambitious, (but perfectly simple when explained) experiment to weigh the earth, and another to calculate the impinging force of a bullet. The experiments in the Heat section—the principles of hot-air and steam engines, etc.,—were particularly interesting.

The electricity room held some up-to-date models of an electric lift, an electric locomotive, and telegraphic and telephonic instruments. From here one went to the X-ray lecture room, where several interesting experiments on the phenomena of X-rays were shown, accompanied by a few words from a lecturer, and illustrated by lantern slides. Adjacent to this was another dark room where a method of examining a wheel or other piece of apparatus revolving at high speed, was demonstrated. By a purely mechanical device the wheel was made to appear stationary, when it could be examined. One was much interested in the ultimate structure of matter and the reasons for chemical affinity of certain elements, which was next given. Just before leaving the exhibition the visitors were treated to a broadcast programme of one or two gramophone records which were played deep down in a cellar, and broadcasted through a loud speaker to the audience upstairs—a fitting termination to the interesting couple of hours spent in the exhibition.

Chemistry

The fourth annual exhibition of our college chemical society, held on Monday, the 22nd November attracted a large number of visitors from the various schools and colleges in Madras. The inclusion of another hall marked an improvement upon last year's arrangements, but there was at times an obvious need of more room, and one was tempted to "slip" a sight or two, rather than undergo a literal fight for a position of vantage.

The first section exhibited the various applications of chemistry in the manufacture of every day requisites like inks, matches, paper, pencils and paints. One was also shown the industrial preparation of sulphuric acid (contact process), bleaching powder, purification of mineral oils and sugar refining, to mention a few of the more interesting exhibits.

An interesting section was that run by an expert from the Madras Leather Trades School, where the tanning and preparation

of the finest leathers from the crudest of skins and hides, by chemical means, was demonstrated. There were also fine samples of various leathers and tanned skins.

The next room contained perhaps the most interesting sights of the exhibition. One could here follow the various processes of such industries as those of soap, candles and glycerine, the electrolytic preparation of many common elements and chemicals; the treatment of sewage; and the analysis of blood and urine. The glass blowing needs special mention. It is wonderful how skilled fingers can mould, from a shapeless mass of half-molten glass, the delicate pieces of apparatus which were on sight. This struck one as calling for infinite skill and patience.

No knowledge of chemistry or even a scientific turn of mind was needed for an appreciation of the chemical magician's entertainment. He paradoxically produced "snow" by heating, did marvels with various coloured liquids, and intrigued one with his zoological and botanical transformations, to say nothing of his artificial lightnings.

Into the X-ray room which was next, one had to manfully fight one's way, to see the interesting phenomena of electrical discharges through rarified gases, the power of the X-rays, and an absolutely cold flame of phosphorus over which one could unconcernedly hold one's hand! One would have liked to linger a moment before the portraits of the pioneers of chemistry, but the demands to "move on" were too insistent. Here were exhibited samples of chemically prepared cosmetics, scents and toilet powders. There were also curious crystal-growths rearing themselves from the bottoms of vessels containing them, so as to form a literal garden.

After this there is scarcely anything worth mentioning, except two or three interesting pieces of apparatus, one for keeping a bath of water at a very constant temperature, a liquid air plant, one of four such in India, and an air compressor of a high power.

On the whole, but for the inconvenience of the pushing through the jostling crowd, one spent a most interesting time going the round of the various exhibits. The explanations given were for the most part lucid, and as far as possible devoid of technicalities. The Chemical Society and the members of the chemical staff are to be congratulated on the work they turned out in making the exhibition the success that it was.

On Fancy

Cut the bonds and let loose Fancy—,
Loose her wings and set her free :
Go with her awandering,
On her light and airy wing,
Through her fine and mystic realm,
Which with pleasures overwhelm.

She'll take you into fairy-land,
With a touch of her magic-wand ;
Where you can like a honey-bee
Skip on and on delightfully,
From scene to scene with pleasure full,
Varied, and yet so beautiful.

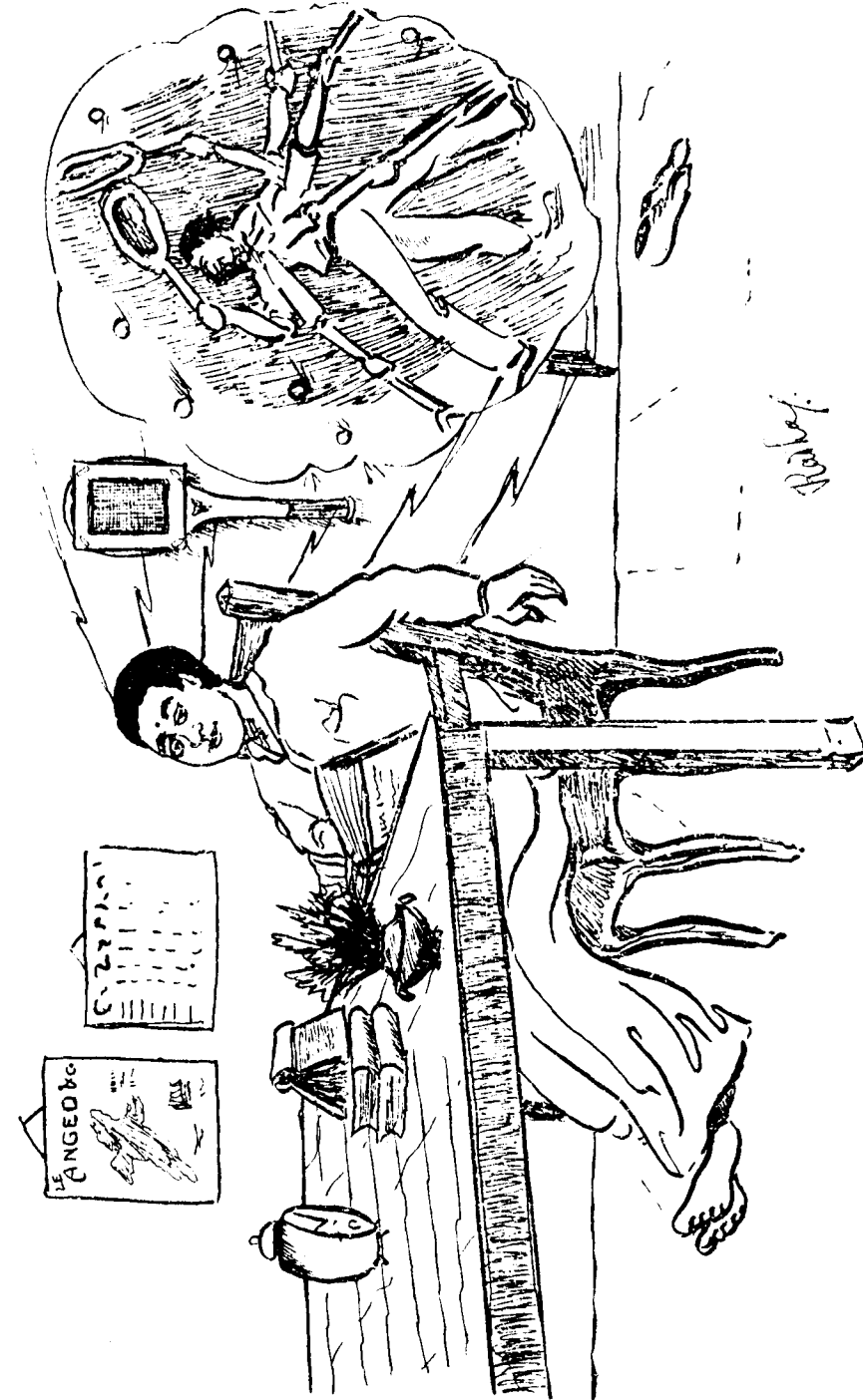
She is such a magician sweet,
She can change her moods complete,
And come to you in such attire,
As can charm you of your ire,
And make your lips compressed with grief
Smile a smile of sweet relief.

She 'll take you unto fairy bowers
Crowned profuse with sylvan flowers,
Where the grass is emerald-green,
Through which the daisies intervene,
And the birds discourse in song
Of angels and the heavenly throng.

If you are of the pensive-kind,
Or have a stern puritanic-mind—
She 'll take you into quiet woods
Where golden silence sits and broods,
Where e'en the birds close up their throats,
And e'en the breeze most softly floats.

Cut the bonds and let loose Fancy—,
Loose her wings and set her free :
Go with her awandering,
On her light and airy wing,
Through her fine and mystic realm,
Which with pleasures overwhelm.

D. L.



Ramamurthy, the Tennis Champion, returns to his books after an exciting match.

Impressions of a visit to the Gersappa Falls

Up to Shimoga—the terminus on the Mysore State Railway on the Birur to Shimoga line—the train takes you whether you come from the Madras or the Bombay side. From Shimoga to Jog is a distance of sixty-three miles, with Sagar, the bus terminus and taluq head-quarters on the extreme north of Malnad, coming after the first forty-five. For the rest of the distance one has to make one's own private arrangements. Owners of pleasure cars have no serious difficulty to surmount, for they could motor right up to the falls in all except the rainy season when the ghat road with its sharp hair-pin curves is particularly dangerous. Shimoga to Sagar is generally done at a stretch but we, being a party gone there to study the flora of the region, did it in two stages with an intermediate stay of three days at Annapur, a quiet place thirty miles off Shimoga. All along the way we passed through deciduous forests with trees not reaching very great heights, but with a fairly rich underwood. Over extensive areas the teak predominates.

Our next halt was at Talguppé, another humble Mysorean village. The bus took us to Sagar and thence we footed the nine miles to that village. The *kháns*—as the dense beginnings of rain-forests are here called—afforded not only rich material for collection and study on the way; there was also beautiful scenery in their stately trees and giant climbers.

From Talguppé to Jog is another nine miles which again we footed. Rain forests definitely began to appear which till now were met with only in the *kháns*. Tall and stately trees rose on either side and these were intertwined with huge creepers. The underwood became loose, though at the fringes rich growths of *strobilanthes* gave us a false idea of its denseness inside. The road cuttings were deep and on them flourished a variety of mosses and liverworts. The ghat road abruptly bends in these parts at frequent intervals and is steep in its ascents and descents. About a mile up its course above the falls we have to cross the river Sharavati. Convenient arrangements have been made at the ferry for the transshipment of tourists' vehicles. Over three boats joined together is built a platform of bamboos commodious enough to contain a fairly big-sized motor-bus. It is a frequent sight to see cattle and bullock-carts being transported in this way.

After a furlong or two from the ferry the murmur of the falls is distinctly heard. As little by little we were nearing the goal, the murmur grew by slow degrees into a roar until at last even when we were still half a mile away it sounded like the noise of breakers raging in a stormy sea.

The falls known locally as the Jog Falls from the neighbouring village of Jog, are more widely known as the Gersappa Falls from the ruined city of Gersappa eighteen miles away to their west. Honawar, a port on the Arabian Sea belonging to the Mysore State is 35 miles west. The falls are on the Sharavati river which taking its rise in the ghats has a course of about 60 miles and empties its waters finally into the Arabian Sea. Over the falls the breadth of the river is 230 feet, and hurling over a cliff 830 feet high the river traces its silvery course southwards. Near the crest of the cliff it is split by masses of rocks into separate streams which roll over in four main channels. These, as they fall, have received the names, the *Rajah*, the *Roarer*, the *Rocket* and *La Dame Blanche*.

From the books at the Bombay bungalow we learn that Jog eclipses every other fall in India and has few rivals in the world. In height it is excelled in the world by *Cerosoli* (2,400 feet), *Evanson* (1,200 feet) cascades in the Alps, and *Arne Cataract* (1,100 feet) in Savoy, and even these it surpasses in the volume of water. To Niagara (24,000 tons per second) it is inferior in the quantity of water (2,000 tons per second), but again it excels Niagara in height by 164 feet!

The edge of the gneissic cliff over which the river falls is shaped like a hook on the Kavara side with a straight handle on the Mysore. *The Rajah* and the *Roarer* fall in the hook, while the *Rocket* and '*the Lady*' over the straight handle. The pool into which they fall below is 130 feet deep.

For the following general description again we are indebted to the notes kept at the Bombay bungalow: *The Rajah* also known as the *grand fall* or the *main fall* or the *horse-shoe fall* is a sheer fall, all the 830 feet. It takes its name from a chief of Bilga who proposed to build a small shrine on the top of the cliff. Lines for the foundation are said to exist on a large table-shaped rock that hangs over the chasm. *The Roarer* is so named from the noisy fury of its waters. It is only half seen from the Mysore side

and for a full view one has to go to the Bombay side. The fall first takes a southerly course and turning suddenly west throws its waters steep into a basin. Thence it rushes down a chasm and unites in mid-air with the waters of *the Rajah*. *The Rocket* after a first sheer fall of 100 feet strikes against a prong from which it darts out like a rocket. Brilliant jets of foam and spray are thrown out constantly from it and they disappear on their way into airy nothing like falling stars or shooting meteors! *La Dame Blanche* most appropriately named, is less violent than her sisters. She spreads her waters over the cliff and stretches them across like the folds of a silver gauze.

In the afternoons when the sun is facing the falls, one sees from the Mysore side some of the most beautiful colour effects on the falls. Two bands of rainbows stretch across the falls and the sight of the spectral colours playing on the shooting spray is magnificent. At all times, clouds of water vapour rise heavenward from the bottom, as smoke from a boiling cauldron, and shrouds some or all of the falls oftentimes—regularly at nights and in the mornings—thick mists wrap the whole scenery.

From the Bombay side we see *the Roarer* complete in all its awful splendour; but the “white lady” is half-hidden. From this side we can walk right up to the edge of the cliff over which the river falls. There is a pinnacle of rock which stands out from it hanging, as it were, over the chasm below, and from this the best view of the falls is had. You lie down and creep to the edge of the pinnacle and peer into the valley below, while two of your companions from behind are firmly holding your legs. The sight of *the Rajah* rolling abruptly down does not, as would be expected, make us giddy; on the other hand we are impressed the more with its grandeur and awe.

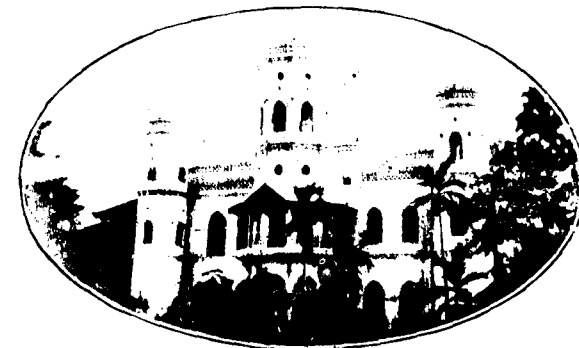
Though for their grandeur and magnificence, the falls are best seen from the Bombay side, for their general beauty we must view them from the other side. From the Mysore side of the valley there are excellent views for the photographer and you have wider scope for sitting and being lost in raptures of admiration over it.

Had we the time,—how I wished we really had—we could have sailed down the river to port Honavar. Then we from Madras would have made a truly trans-Indian tour from the Bay of Bengal to the Arabian sea!

V. R. SUNDARARAMAN, V. Hons.



THE GERSAPPA FALLS



PALACE, MANDASSA



ENNORE CREEK



Excursions and Tours



The annual geological tour was this year directed to Mandassa State, in the Ganjam district, and over six-hundred miles from the metropolis, the party being the guests of the Raja, who had very kindly extended an invitation to them. The long journey along the Calcutta line was done by mail train, a fact which considerably lightened its tediousness and fatigue. The party arrived at Mandassa in pouring rain at about ten in the night, and were not very pleased at the prospect when they were told that the rain was likely to continue for a week or more. And so it did, with the result that the first few days were extremely uncomfortable ones for all concerned. The Raja had placed his summer-palace at our disposal and we were not long in settling down. Adjoining our quarters was a fairly large lake that served the whole party for washing and bathing purposes, while within a short half mile there rose up the thickly wooded hills that at this spot comprise the Eastern Ghats. After a day's rest, we commenced our geological work tramping out every morning in the steady rain, careless of soaking clothes and wet feet, climbing slippery hills and cutting through dense undergrowths in our search after "out crops" of rock, to return at one, two and even three o'clock in the afternoon, hungry as hunters in spite of damp and fatigue. After a couple of days of this we became so used to the rain and damp that we hardly troubled to change into dry clothes each morning, but clapped on the same damp things of the previous day. But fortunately it cleared after 5 days or so, and our spirits rose. The work of exploring all the surrounding land went on apace, and we had soon completed the area immediately surrounding Mandassa village. But it must not be imagined that we worked untiringly to the exclusion of everything else. With judicious forethought we had brought along with us some cricket gear and many an evening was whiled away like this, every one, even the rawest amateur, trying his hand at the wielding of the willow.

One evening the whole party paid a formal visit to the Raja, who entertained us to an exhibition of a great array of shooting-trophies. The verandah of his palace was literally covered with tiger and panther skins, among which we noted more than one man-eater. In the palace yard was a veritable menagerie of

animals, two or three sambhur, a pair of black buck, spotted deer, two black bears and a bristling porcupine all chained around along the walls. We were later shown his armoury of guns, which ranged from the lightest sporting-rifle to ponderous elephant-guns and deadly high-velocity weapons, costing thousands of rupees. Altogether it was a very pleasant and interesting visit.

When we had explored all the near-lying hills and outcrops we shifted camp to Ruti, a small village some fourteen miles from Mandassa, and on the sea-coast. Bullock-carts and jutkas transported us seven miles along the road, and we tramped the remainder of the distance across country along a sandy path in the falling dusk of evening. What was our dismay when we arrived at the bungalow to find that the saman which included those all-important items, provisions, had not arrived. It was past eight o'clock and we were both tired and hungry. On ascertaining we learnt that the carts conveying the things had not been able to proceed further than a deep nullah some two miles back, which effectually barred their progress. There was no help for it, and hastily commandeering a number of porters from the sleeping village, we returned to salvage our belongings. But our astonishment and indignation was great when on coming to the nullah we found the convoy-party—which consisted of half a dozen students who had elected to accompany the carts—coolly seated around a blazing fire on which boiled a pot of rice. Despairing of reaching Ruti that night they had set about preparing a meal for themselves, forgetful of us who had gone on ahead without anything. For a few minutes the hubbub was deafening as the two parties hurled defiance and insults at each other, then sinking our differences, we set about unloading the carts and dividing up the saman amongst the porters. It was almost ten o'clock before we returned to the bungalow, and midnight when we sat down, ravenous, to a hastily prepared meal! Three days at Ruti sufficed to cover the surrounding area, after which we returned to Mandassa.

After a day's rest the party set out to climb Mehandygiri, a hill about eleven miles distant, and of the same height as Coonoor in the Nilgiris. It was a strenuous climb, but was well worth the reward, for the atmosphere was cold and bracing and the views superb. Three days at this altitude gave everybody chapped faces and hands, and we were not sorry to get down again. We had now completed a thorough exploration of Mandassa state, an

area of some eighty square miles, and were ready and eager to start for home. We waited a couple of days longer, however, to witness the Ayudha Puja celebrations, and to enable the Raja to give us a farewell entertainment that he had planned. The former consisted of a long and magnificent procession from Mandassa village to a small hill some distance away from it, the Raja, the heir-apparent, and the dewan being carried in state to the beating of tom-toms, the braying of trumpets and the singing of nautch-girls. Arrived at the mound, the high priest of the temple performed puja to the whole collection of the Raja's arms and weapons, upon which the latter came forward and fired off his favourite gun at a bunch of flowers stuck high upon the tip of a bamboo. Then followed a perfect fusillade of shots, every one of the retainers firing off a gun, while the old brass state cannons went off at loud intervals. It was a most interesting ceremony and one that we would not have missed for anything.

The evening upon which we left for home the Raja entertained us to a right royal tea in his gardens. Speeches were the order of the evening, our professor thanking the Raja in most felicitous terms for his lavish hospitality and kindness during our stay of twenty days in his state, while the Raja replied in a few well-chosen words. One of the students then expressed the thanks of the whole party and with three cheers for the Raja, the pleasant function came to a close, the party hurrying away to catch their train. We took away with us from Mandassa very happy recollections of a memorable visit, and of the friendly courtesy and hospitality of its ruler and citizens.

* * * *

Under the auspices of the College Natural Science Association a large party of students made an excursion to Ennore one Saturday afternoon. This marked the second occasion in the annals of the Association on which lady-students came out also, and a further happy note was struck by the presence of the Principal and Mrs. Fyson. A long, joyous but rather dusty drive in buses landed us at Ennore creek early in the afternoon, and we immediately took to the boats that were in readiness. A breezy, sunny voyage down to the bar and back again to the Government Fisheries Depot, where most of the students scattered to search for botanical specimens, while a few preferred to laze it on the soft carpet

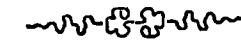
of pine needles beneath the shade of the sougning casuarinas. It was very hot and soon there was a combined outcry for tea. So we embarked once more for the bungalow higher up the creek, where tea had been spread. It was a long, pleasant row and we were thoroughly prepared for the good fare that our capable Secretary had provided. Tea was over as the sun began to set and reluctant to leave the cool waters of the creek, we went for a final row ere we were whizzed back in the waiting buses to town, tired, dusty but having had a truly delightful afternoon.

Encouraged by the success of this attempt the Secretaries arranged for a whole-day trip to Sri Perumbathur, which is about 25 miles from Madras. Although the party was smaller in point of numbers than before, yet a very enjoyable day was spent under the leadership of Prof. C. K. Krishnaswamy Pillai. An early start was made, once again in buses, so as to avoid the heat of the sun as much as possible, and the party reached their destination in little over an hour. A cup of coffee for each by way of a refresher, and they set out to search for fossils. Aided in their search by some luck, the students succeeded in locating several good fossil-shales areas, and some fine specimens were picked up. The mid-day meal in a spacious bungalow was a sumptuous affair and then came a light siesta. After tea came another long tramp, and just as dusk was setting in a start was made for home.

Spurred to emulation by the achievements of the Natural Science Association in this matter of excursions, the Union Society organised a three-day trip to Mahabalipuram, a village famous for its submerged temple-ruins, and about twenty-seven miles to the south of Madras, situated on the sea-coast. An eager party of students embarked in two boats on the Buckingham Canal, which at the Lattice Bridge, Adyar, the starting-place, is far different from what it is immediately behind the Presidency College.

The start was timed for 4 P.M. and the boats proceeded steadily until seven o'clock, when a halt was called for dinner, which was served on one of the banks. The moon was out in all her glory, and a pleasant if rather sleepless night was spent to the accompaniment of music and card playing. The party had the opportunity of seeing the lock-system of the canal in action, as well as the lake which forms a common meeting-place for the canal and the sea. Early next morning found them disembarking at

Mahabalipuram. The morning was spent in rest and settling down, and in the afternoon a tour of the ruined temples—for which the place is famous—was made. A pleasant walk to the beach and back completed the day's activities. The next morning, Sunday, the party went by bus to Tirukalukunram, 10 miles away. The same afternoon they left for Chingleput where they visited the Reformatory school. They left by the Rameswaram express the same day, arriving at Egmore station late in the evening. The party wish to express their gratitude and thanks to the Jamadar of Mahabalipuram and the Trustee of the temple at Tirukalukunram, who did so much to make the trip pleasant and comfortable.



"And the Bride is Coming Home"

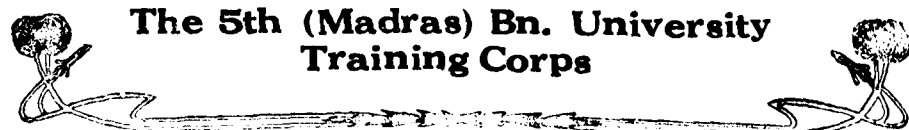
The front door is decked
With green leaves new plucked
From the young mango tree
By the children, in glee
For the Bride is coming home.

The hearth-stone is swept
Of all dust and dirt,
And the incense-sticks slim
Are singing the sweet hymn
"And the Bride is coming home."

The children, quite wild
And the mother mild
And the old father
Are waiting for her
For the Bride is coming home.

The Bride comes home, the Bride comes home,
And gone are all 'darkness and gloom,'
For the Bride brings laughter and love
To her husband's home, to remove
All dolour and darkness and gloom
When she comes home, when she comes home.

'N'



The 5th (Madras) Bn. University Training Corps

Fourth Annual Camp, September, 1926.

The most interesting part of one's training in the U. T. C. is the annual camp usually held in Bangalore during the summer vacation. Great was the disappointment felt, when it was announced that the camp had been postponed from the summer to the Michaelmas holidays. The fourth annual camp was therefore held during the latter half of September at Poonamallee, a cantonment thirteen miles from Madras. September being a full working month for some Colleges, all could not be represented fully for the fortnight. Some had to come late and some leave early.

We, of the 'E' Company (Presidency College) left Madras by train on Friday the 17th September and arrived at Avadi, a place five miles from Poonamallee about seven in the evening. Having put our luggage into double-bullock carts, provided by head quarters, we started marching, in full marching order with rifles, pouches, etc. The way was long and the monotony of it was relieved by singing songs, cutting jokes and overtaking the D company (Pachaiappa's) who took rest more often than we.

The raw recruits found camp a little bit strange and were wondering at the ease with which the old stagers carried themselves. We divided ourselves into sections and arranged our kits accordingly. 'E' and 'F-1' companies, about a hundred men, were put together in one big hall. A new aspect of this camp was the provision of a separate mess for the junior N. C. O's. The guard room and the canteen (a very important affair) were about fifty yards from the barracks. The greatest pleasure of camp life was missed by our not living under canvas.

Saturday morning saw us donning our uniforms and trying to become officers by at least imitating their commands. Orders like, 'Look sharp' 'You there' 'Fall in' 'Get on parade' etc., came out in varied tones. After the washing and dressing people were eagerly waiting for the bugle to sound the call 'Come to the kitchen door, boys, come to the kitchen door.' The mess sergeant would not give us buns and coffee until the bugle was sounded. Even after the bugle had sounded a lot of ordering about had to be done to get the buns marching at least in twos.

After chota, we had strenuous work till 9 30 A.M., beginning with a physical training class which was very interesting with 'O'Grady on parade' and 'out of parade.' At 9-30 we had breakfast and parades till twelve in the afternoon. Lunch was at 1 P.M. and tea at 4 P.M., and sometimes company parades between 2 and 4 P.M. After tea we had games like hockey, football, and badminton. This was the daily programme, with slight alterations now and then. Once the whole battalion was taken round the cross-country race track. It was very funny running through fields, heading through knee deep water and jumping over small fences. Another day we had a route march about five or six miles from camp. Songs and the smart U. T. C. Band relieved the monotony of left-right-left, left-right-left.

From the start there was keen competition for the 'Willingdon Shield' which we had won for the year 1924-25. We were confident of retaining the shield. We worked up for the shield from the start, getting trained for the various competitions. Unfortunately for us we lost the cross-country race cup, which we had won for three consecutive years. We stood second in the competition and one of our men got the second prize. We had not secured a high place towards the Musketry cup, so we were feeling a little bit nervous about the shield. Added to this we lost the company drill cup just because one of our men unfortunately dropped his rifle on parade. But our six stalwart men, with the swanky sergeant and the wee corporal did wonderfully well and beat the 'B' Company (Medical College) who were running us close by winning the Guard Mounting cup. In sports again, the other companies found it impossible to beat R. S. M. Veerasinghe and his squad of sportsmen of the 'E' Company. Thus we won the much-coveted shield once more and we hope it will be won over and over again by our company.

The lighter side of life was not at all wanting in camp. We had heaps and heaps of it, stories, jokes, mimicry, songs and what not. Every one tried to put in his bit. But D. H. I. was by far the funniest of all, more funny than what he looks on parade. N. C. O's strutted about like peacocks showing off their chevrons and canes and ordering men about, putting all the ginger they could into their commands. The sergeants swanked about at night in their full uniforms before dinner. One thing we missed greatly was the camp concert for which a great many had

come prepared with songs, tricks, jokes, etc. We had only one concert, organised by the N.C.O's.

R. S. M. Whitney of the M. S. M. Rifles, our old instructor came to the camp before the cross-country race and bucked us up with his old saying "keep it up lads, keep it up. Remember you belong to the 'E' Company." R. S. M. Connock, our new instructor said that if we did not win the Guard Mounting cup, he would be done with us. With such bracing remarks, we naturally had to win the cup and shield and we did win them.

The night we won the shield and cups we lifted up our three sergeants shoulder high, and carried them round. We had a grand procession with torches and lights carrying the cups round the barracks. Our company officer, Lt. S. E. Runganadhan has promised to fill the cups with chocolates and we hope he will not forget to do so. But for his untiring zeal nothing would have been possible.

Another welcome addition to our numbers is the appointment of Mr. C. K. Krishnaswami Pillai as a 2nd Lieutenant in the corps. We are eagerly waiting for the announcement in the gazette. He attended camp and his presence encouraged our sportsmen a good lot. Our hockey team has come to the finals in inter-coy Hockey Tournament, and has to play the 'C' Company (Christian College) team.

The camp being held during the college working days we could not stay there for more than a week. Sunday the 26th September saw us packing and at 2 P.M. we left Poonamallee in three big buses coming straight to Madras after having spent a jolly good week.

L.-CPL. N. K. MURTHY.



The Willingdon Shield and other Trophies
won by the College Company of the U. T. C.
Poonamallee Camp, 1926



The story of the French Revolution



If the 17th century, which brings back to one's mind the glorious and illustrious names of Richlieu, Colbert, and Louis XIV, was the period of the expansion of France, the 18th century, coupled with such names as the regent Orleans, Louis XV and Madame de Pompadour, turned out to be the period of French decay and disruption. And the history of France during the period 1789-'99—the period of conflict, dissolution and agony, bewildering, violent and bloody,—was dominated by the Revolution, which is one of the great heroic events of the world's history.

President Wilson called France in an effusive moment the sweetheart of the world. A sweetheart is the greatest enigma to her lovers and France is no less a puzzle to the world. She appeared in her true form and in all her splendour in the Revolution in which she may be said to have realised her true self. This Revolution, which made a clean sweep of the clogging heritage of the mediaeval times—the theory of the Divine Right of Kings, the extravagance, the venality and corruption of the higher clergy, and the remorseless tyranny of the nobles,—established in their place, equality within the State, and the government of the State by its general will.

What led to this terrible and passionate outburst of human energy? What made the French Revolution inevitable? It is not worth while to give here a long catalogue of the abuses of the ancient regime or to enumerate in detail the miseries and grievances that oppressed the French people; but this quotation from La Bruyere, a hundred years before 1789 will furnish us with the real cause of the Revolution. "Like animals of certain species, male and female are to be seen all over the country. They are dirty, livid and sun-burned and seem to be held in some manner to the earth which they dig with invincible obstinacy. They have an articulate voice and when they stand upright, they reveal a human countenance. At night they retire into dens and subsist entirely on black bread, water and roots. They relieve other men of the necessity of tilling, sowing and reaping, hence they deserve never to want for that which they have themselves produced. They do want for it, however, during the twenty-five years that follow and they they die in droves."

At the end of the 18th century, there existed in France fatal and discordant class divisions. The nobility and the clergy, the two most important and privileged groups at the time owned about half the land of France, but they were almost exempt from the crushing burden of taxation. Thus the principle of taxation which obtained in their country was to relieve those who did not need relief and to burden those who were already overburdened.

By the 18th century, the third estate by which we must understand the commons, consisted of the bourgeoisie, the peasants and the artisans. If the bourgeoisie was undoubtedly prospering, the case was quite different with the large mass of the French subjects, consisting of the two utterly wretched classes, of the urban proletariat and the peasants. The obligations of the peasants exceeded all justice and reason; the lord of the manor exacted rent from them; the church levied tithes and the king collected taxes almost at will. The result was that the peasants did not have enough left over from their toil to live on. And if these regular taxes did by any chance leave anything in their hand, that little was constantly jeopardised by certain remaining feudal obligations.

With all this, the government of France was still a despotism that Louis XIV built. The Bourbons had consolidated their absolute powers and erected a fabric of despotic government unparalleled even in Europe in those times. The King ruled by the grace of God and did not render accounts to the nation. No subject had any security against the orders of arbitrary imprisonment authorised by "lettres de cachet" of the Crown. Louis XV, the predecessor of Louis XVI, had gone on merrily with his debauchery and profligacy and had followed the advice of his numerous mistresses in the matter of administration. He had squandered the revenues of the state with reckless disregard of the future. He had said, "After me the deluge." And the summoning of the States General which had not met since 1614, meant the opening of the sluice gate of the deluge. Such in brief was the state of France on the eve of this mighty Revolution.

Louis XVI who summoned the States General, consisting of nobles, representatives of the clergy and deputies of chartered towns, thought that the representatives of the people would quietly vote the necessary supplies and be grateful to their sovereign for having summoned them. He did not in the least dream that the

states would take upon themselves the task of introducing a drastic reform in the affairs of France.

The first task of the third estate of the States General, was to make the two other orders, namely, the nobility and the clergy, join their body. And on June 17, 1789, on the motion of Abbe Sieyes, the commons constituted themselves the National Assembly. The striking personalities that dominated the National Assembly were Abbe Sieyes, its brain, and Mirabeau, its voice. Behind all these stood the people who fought with the Assembly.

On June 23, 1789, the Royal session was held. The King was weak, ill-advised and vacillating. He wanted to separate the orders. He entered the Hall of the Assembly, commanded the deputies to separate, meet in separate chambers and deliberate. On his withdrawal, the Grand Master of the ceremonies entered and addressed himself to Bailey, the President of the Assembly. "Have you heard" he asked "the orders of the King?", and Bailey answered, "I am about to take those of the Assembly". Mirabeau advancing said, "Yes, Sir, we have heard the news wherewith the King has been prompted, but you have here no voice, or place or right to speak. Go, tell your master, that we are here by the power of the people and that we will not be driven forth but by the power of the bayonets". Mirabeau also proposed and passed a decree of inviolability of each deputy. From this time the Revolution may be said to have commenced. On June 27th, in order to define its position the word "Constituent" was added to its title and thus the States General had vanished and in its place arose the Constituent Assembly.

The dismissal of Necker who had become very popular on account of his advice to the King to summon the States General, on 11th July 1789, served as a spark to the fuel of excitement, which had thoroughly overtaken the Paris populace, and which was under the guidance of an intrepid young Parisian named Camille Desmoulins. And it was quite natural that the troops, in which there was a third estate, which bore all burdens and participated in no benefit, should fraternise with the city populace. The first step towards the enrolment of the citizen militia, which was to be composed of 48,000 men furnished by the districts was taken and thus the National Guard came into existence. The Assembly was engaged in the task of drawing a constitution amidst a tense atmosphere. In the meantime, one of the most significant

works of the Revolution was achieved by the Parisians. The Bastille, the burial ground of the living, who were the unhappy victims of the King's displeasure and his minions, and a veritable hell on earth, was laid siege to and after a heroic struggle stormed. The next stage of the Revolution was marked by the publication in 1789 of the Declaration of Rights of Man and Citizen.

To the theory of absolute monarchy forwarded by Louis XIV and Bossuet, was now to be opposed the new theory. "The principle of all sovereignty resides in the nation or in other words national sovereignty was to succeed sovereignty by Divine Right". "Laws affirming the Declaration are the expression of the general will, all citizens either personally, or by their representatives are entitled to assist in their creation. Henceforth the King was not to rule by the grace of God alone, but also by the will of the people. He can be no longer looked upon as anything more than the head of the executive power, the chief magistrate, and he is its first salaried servant. All forms of liberty that had been crushed under the Bourbon regime were now affirmed by the Declaration. Finally, the Declaration abolished titles and all other hereditary distinctions; it proclaimed that all citizens were alike admissible to public office on no other claims than those presented by their talents and ability."

The constituent assembly made many serious mistakes. It did not even succeed in organising a "Cabinet Government," which is the very essence of parliamentary regime. In administrative matters, its mistakes were no less disastrous. As politically, it had rendered the further existence for the King impossible, so administratively it set conscientiously to work to create a condition of complete anarchy. The situation might have endured under normal circumstances but the internal rebellion, the invasion of France by foreign powers, the execution of the King (1793), the fall of the Girondins, brought about a condition which necessitated the consolidation in the hands of a single body the administrative, legislative, and executive powers.

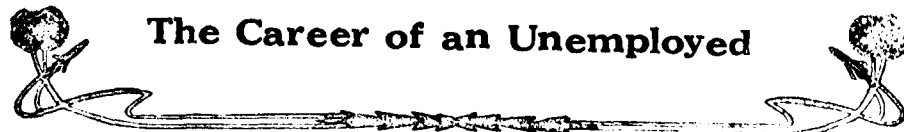
The foreign invasion, inspired out of sympathy for the crowned head of France, necessitated the most drastic step, namely, the execution of the sovereign and declaration of a Republic in France. Internal rebellion required vigilance and the institution of a court with powers of summary trial. The committee of Public Safety, with Marat, Danton, Robespierre and St. Just

carried on the work of violence methodised and perfected by every ingenuity that human contrivance could discover. The period of the Reign of Terror between 1793-94, witnessed the execution of patriot generals such as Custive and Houchard, of patriot deputies such as Virgnaud and Brissot, of patriot women such as Mme Rolland. The military exigencies called forth Napoleon Buonaparte and this most remarkable man established a dictatorship over France as long as he ruled. Every one knows that a period of war is not the best nursery for the growth of democratic institutions, but during his reign the peasants of France enjoyed a degree of prosperity which they had never before experienced. The net result of the French Revolution was the codification of laws that swept aside the obsolete feudal institutions and conferred upon every person equality of rights.

The period of the French Revolution was one of epic conflicts and produced epic characters. We have men like Mirabeau, of sublime talents but of despised morals. We have Danton, a man of extraordinary eloquence but liable to corruption. We have Robespierre, one of the most remarkable men,—a mediocrity raised to the highest position by assiduousness and steadfastness of purpose. We have Marat, a monster of cruelty, assassinated by Charlotte Corday, appealing to posterity by her beauty and purity, and a host of others of equal importance but too numerous to be mentioned here.

A hundred years of despotic and irresponsible rule had not taught the rulers of France wisdom and they had to pay heavily for it. The fight for freedom in every country assumes a characteristic feature according to the genius and temperamental proclivities of the race. In France, the Revolution had to pass through great violence and bloodshed. And the violence and the bloodshed perpetrated during the worst period of the Revolution are now advertised as the necessary evils of a too sudden change. But out of evil cometh good and no one will deny that the French Revolution was a step urgently called forth for the renovation of the world. Above all, the Revolution gave an impetus to democratic movements throughout Europe and as such it will have an abiding place in the history of the world.

C. SRINIVASAN, V. Hon. Br. 5.



The Career of an Unemployed

Rama was one of those healthy young men who during four years at College had carefully cultivated a discriminating distaste for books, a holy terror of professors and a creepy feeling down the back at the thought of examinations. For him the vacation had never been long enough. "They sort of fly by" he used to say, "on angel wings as the poetic Johnnies would put it, only much faster than that". So that when at last the University was done with him and a vacation came with no college, no professors, no examinations, no anything at the end of it, Rama hugged himself for joy and showed the happiness in his face.

"I have achieved my ambitions," he said during the days of vacuous freedom that followed his examination. "I am one of the leisured class". And to show that he was, he went to his home to spend the rainy season. Rama was proud of his home. "I hail from the west coast" he would tell us, though what he hailed we have never found out. People who are lucky enough to come from the west coast know how they spend the rainy season there. As a matter of fact they do not spend it; they hibernate and the season spends itself. Most of them sit on the doorstep and watch the endless down-pour. The doorstep is preferred for many reasons, but chiefly because it is the only place where the water does not come through. And this goes on for a pretty long time too—though not so long as envious calumniators would imply. If you have ever been told that it rains on the west coast for six months in the year it is a gross exaggeration; it doesn't for more than five months and three weeks.

Any how Rama went home and sat on the ancestral doorstep; and, like the lilies of the field, he neither toiled nor spun. But long before the rainy season was out Rama was passing into a new phase of unemployment. He no longer spoke jubilantly of what he called his artistic idleness. It was noticed that he was generally fidgety, manifesting now and then even a desire for the companionship of books. It is also to be presumed that at this time he was beginning to feel the disgraceful necessity of earning a living. There was general monetary stringency and purse strings tightened all round.

This was the circumstance, I believe, that finally brought Rama into contact with that august body, the Staff Selection

Board (for shortness called the S. S. B.). One evening I happened to blow in on Rama and found him huddled up in a chair limp and weary and looking generally like the man who has tried life and found it a wash out. Inquiry revealed the nature of the trouble. The next morning he was to meet the S. S. B. and he was contemplating, in agony, the boredom of meeting the old fogeys. "I know the sort of stuff they will want to know" said Rama with cold ferocity. "All sorts of unpleasant things about my studies and all sorts of silly things about my health; whether there is a strain of lunacy in the family, whether I have suffered from any disease from abscess to yellow fever; date of vaccination; father's occupation if he is alive; his address if he is dead." Rama writhed at the thought of being taken advantage of like that.

To those who had seen Rama in this mood it was a surprise next day when he turned up uproariously happy after facing the cannonade of the S. S. B. One could see something had happened. "Oh, they are a decent lot, the S. S. B." he was saying. "For one thing they don't get at you alone but took us in a bunch and I had a topping time listening to what the other fellows were saying. And they don't ask many questions, unless they smell a rat, which luckily they do pretty often. And best of all they laugh, actually laugh." This last fact seemed to have impressed Rama very much, who was laughing to himself in a reminiscent way.

After this Rama was keen on the S. S. B. They rarely ever sat without his turning up. On their part, they too seemed keen on seeing him at frequent intervals, for they were obviously reluctant to send him off with an appointment. Anyway Rama became an expert on the S.S.B. and used to entertain all his friends by his accounts of what had happened at its different meetings. "There were lots of fun today," he would say in the evening in a vein of slow reminiscence. "A chap turned up in his national costume. I don't know where he comes from, perhaps from Tibet; for he was wearing the sort of gown which Tibetan lamas are supposed to wear. Only he had, in addition, a turban with gold lace and wore a dagger in his belt. The S.S.B. immediately sat up and there was a most entertaining conversation.

S.S.B.—Do you play cards?

X.—Yes (this not without some hesitation).

S.S.B.—What game do you play at cards?

X.—(with greater hesitation) Three hundred and four.

S.S.B.—Do you gamble—bet at cards?

X.—(like a man who sees that just what he feared has happened). No! No, No! No, No, No!

S.S.B.—(controlling a smile): Do you play bridge?

X.—(happy and feeling himself on sure ground). No.

S.S.B.—Do you play goats and tigers?

X.—(happy again). No.

S.S.B.—(leaving the candidate aghast). You ought to".

Then there was the story of another chap who became famous in the circle of Rama's friends as the "Otomatic" though none of them had ever set eyes upon him. This gentleman had been asked what games he played at college. "I didn't play anything," said the Otomatic. The S.S.B. wanted to know the reason why. "When I took up the honours course I had lots to read and otomatically I had no play". By various signs the S.S.B. showed themselves suffering from internal disturbances.

"Don't the candidates ever score off the Board?", somebody asked and Rama looked flattered at finding himself considered an authority on these matters. "No, not often" he said thoughtfully. "Only twice, within my experience. Once, when the S.S.B. thought it knew something about a candidate which he had not mentioned in his application. "Are you a relative of Mr. So and So?" "What if?" retorted the candidate. Another time it was when a Presidite was asked why he wore glasses. The question was, of course, asked by the medical member. Another member who didn't want to be behind-hand asked. "Do you *always* wear them?" The answer, given with an innocent air of being strictly veracious, was "Not when I go to bed."

Rama spent a pretty long time cultivating the acquaintance of the S. S. B. and enjoying its humours. But that is all that the poor chap has as yet got from it. And that is how Rama passed into the third—and final—phase of his unemployed career. "I belong to the Residuum" he said the other day; and asked what a Residuum was, he replied that Professor Marshall called it "the large-though-it-may-be-hoped-now-steadily-diminishing-class of persons who are physically, mentally or morally incapable of doing a good day's work with which to earn a good day's wage."

M. DAMODARAN.

A Primer of Hinduism

II

THE FIRST ASCENT

Pupil.—Sir, shall we now resume our discussion of Hinduism?

Teacher.—Yes. But let me see. What did you learn last time?

P.—Sir, last time you gave me a clear idea of all the authorities of Hinduism. You taught me that the Shruti is the primary authority and that the Smṛti, the Itihāsa, the Purāna, the Darsana and the Agama are secondary authorities. The aim of the latter is only to develop, illustrate and embody the principles of the Veda. The primary authority is for all time but the secondary authorities vary from age to age. You further taught me that the aim of all Hindu scriptures is to make man a perfect spirit like God and to bring into existence institutions which will help him to reach this goal. I take it therefore that, according to Hinduism, man's life on earth is to be considered a journey towards Divine Perfection.

T.—I think all the great religions of the world agree in that. The path is the same though it has different names.

P.—Sir, I should like to know more about this journey. What is the first thing that a man has to do who wants earnestly to start on it?

T.—The first thing he has to do is to turn away from all evil. As the Gita says, vile and wicked men can never reach God. The first ascent of the path to God is, therefore, entirely characterised by the faithful performance of one's own Dharma.

P.—What exactly is Dharma?

T.—Dharma is the eternal law of righteousness.

P.—But what is one's own Dharma?

T.—It means the round of duties pertaining to an individual in accordance with his position in life and with his own mental and moral development.

P.—What is the relation of the eternal law of righteousness to the round of individual duties?

T.—The eternal law when applied to individual cases gives rise to sacred duties and obligations. The moral law is the same for all, but it takes different forms with different individuals. The duties of men therefore differ according to their stations in life. A soldier's duty, for instance, is different from a doctor's. The one takes out life, the other saves it. Similarly a master's duty is different from a servant's, a teacher's duty is different from a pupil's, a father's duty is different from a son's and so on. The well-being of a community is secured only when these respective duties of all its members are discharged in a spirit of good-will and co-operation. A house that is divided against itself will fall. Dharma therefore implies social harmony and happiness, while Adharma implies social discord and misery.

P.—You have said that a man's Dharma depends also upon his mental and moral development. May I know what that means?

T.—I will explain what I mean by an illustration. Take the case of Buddha. It was his duty as a Kshatriya prince to remain in his kingdom and learn the arts of peace and war. But when a higher duty of retiring from the world to find out the cause of human misery was suggested to him by the higher powers he had to obey the call. If he had disobeyed it he would have been false to the lights he had, and incurred sin. Thus what was Dharma before his enlightenment would become Adharma after his enlightenment.

P.—So righteousness depends not upon the external acts but upon the inward spirit of the man who acts?

T.—Quite so! The Hindu scriptures often point out that ethical disposition is more important than good conduct, that inward righteousness counts more than external righteous acts. Even our early law-givers who insist on the formal observance of the law and the performance of rites and ceremonies distinctly say that ethical excellence is far more important than ceremonial purity. And in their lists of penances for various sins they distinguish between sins of thought and sins of word and deed. The former are punished as severely as the latter.

P.—If moral excellence is more important than ritual purity what is the use of rites and ceremonies?

T.—The use of rites and ceremonies lies in the training they give us. They are not ends in themselves. They are only a means to an end.

P.—What is the end?

T.—The end, as I have said, is the purification of the spirit (Citta Suddhi). The Gita says, "Sacrifices, gifts and austerities purify the wise". Rites and ceremonies are the initial steps in moral progress. They are the reminders of the law. They are intended to lead to virtues.

P.—How can rites and ceremonies lead to virtues?

T.—All wisely-directed rites, when they are not simply commemorative or symbolical, have corresponding virtues in view. For instance an offering to the gods is a rite and it is intended to lead to self-sacrifice which is a virtue. Alms-giving is laid down as a rite and it is intended to lead to generosity which is a virtue. Fasting is a rite and it is intended to lead to self-control and so on. It is only when rituals are made ends in themselves without leading to any virtues or to any chastening of the spirit that they become dead wood impeding the growth of the soul.

P.—But I should like to know, Sir, why a man should lead a virtuous life.

T.—A virtuous life purifies the soul. God is eternal Purity and to approach Him the soul must become pure. We have already seen that the end of man's life is to become divine. Therefore the first ascent of the soul's journey consists in acquiring ethical purity. The bride must put on fresh flowers and jewels before she meets the bridegroom. Virtues are the soul's ornaments.

P.—What are the virtues that one has to cultivate in the first stage of the journey?

T.—Almost all virtues known to man come within the province of every religion. But each religion emphasises only a few of them and brings the rest under one or the other of these cardinal virtues. It is the cardinal virtues of a religion that determine its individual character.

P.—What, according to Hinduism, are the cardinal virtues?

T.—The cardinal virtues according to Hinduism are amply indicated in the Epics and the Puranas. They are exemplified

943921

the ideal characters which all Hindus love and venerate. And what is remarkable, they are more or less common to Hinduism, Buddhism and Jainism. Therefore they may be regarded as the distinctive marks of the religious spirit of India. They are these—(1) Purity, (2) self-control, (3) detachment, (4) truth, (5) and nonviolence.

P.—Will you please explain to me what is implied by each of these? What exactly is purity?

T.—It implies both the purity of body and the purity of mind. All the cleanings and washings, all the purificatory baths and ceremonies which are enjoined by the Hindu scriptures, and the elaborate rules which are laid down regarding food and drink are meant to suggest purity of mind and spirit.

P.—Why should there be any rules for eating and drinking? How is religion concerned with what one eats or drinks?

T.—Religion is not a separate activity of life. It is an influence that pervades or ought to pervade all our activities. If our aim in life is to make our souls perfect in God, anything that checks the growth of the soul should be carefully removed. Our food and drink which sustain the physical basis of the soul are not such unimportant things as you seem to imagine. For instance it cannot be a matter of indifference from a religious point of view whether a man drinks water or brandy. So within certain limits it is quite necessary that there should be some general rules for the common people in these matters. Had not Hinduism in its days of vigour put its foot down on the drink habit we should have had here, as in the west, the shameful spectacle of decent men openly fuddling themselves with liquor. Even among our masses it is only after our contact with the west that the drink problem has assumed serious proportions.

P.—What are the general rules with regard to the purity of food according to Hinduism?

T.—I cannot do better than quote what the Gita says on the subject.

“The foods that promote length of life, goodness, strength, health, happiness and cheerfulness and those that are sweet, soft, nourishing and agreeable are the favourites of the good.

“The foods that are bitter, sour, salted, overhot, pungent, dry and burning and those that produce pain, grief and disease are liked by the passionate.

“And that which is stale and tasteless, putrid and mouldy, which is of the leavings and unclean, is the food dear to the dull.”

P.—But, Sir, do not such rules about eating, washing and cleaning, which are made much of by our priests, make a religion mechanical and soulless?

T.—Yes, they do if a man stops with mere external purity. But the Hindu sages emphatically say that external and visible purity is intended only to lead to internal and invisible purity. The former without the latter is of course worse than useless. It is only a decorated corpse.

P.—Does not inward purity mean a host of virtues?

T.—Yes. I have already said that each cardinal virtue comprises a large number of kindred virtues. Purity comprises cleanliness, straight-forwardness, frankness, innocence and absence of envy, pride, malice and wrath.

P.—Next we come to self-control—the second cardinal virtue. What does this imply?

T.—Self-control implies the control of the flesh and the spirit. We have to eradicate the sins of the flesh and the sins of the mind. The latter are more subtle than the former. Sins like gluttony, drunkenness and lust bear their condemnation or their very faces. They attack us in all their nakedness and we easily recognise their beastly nature. But the sins of the mind put on the guise of virtues before they attack us. Hypocrisy, pride and bigotry are easily mistaken for virtues. Generally the masses are a prey to the sins of the flesh, and the classes are a prey to the sins of the mind. Self-control means the control of both the body and the mind. The Gita points out how *kāma* or selfish desire has for its seat the senses, the mind and the understanding. The enemy has to be fought on all these fields before he is vanquished.

P.—So self-control also implies a whole group of virtues?

T.—Yes. It implies patience, forbearance, modesty, humility, self-sacrifice and self-effacement. When a man has acquired the two cardinal virtues I have described, namely, purity and self-control, he becomes, in the language of the Gita, a *Visuddhatma*

and a Vijitatma—that is one who has purified himself and who has conquered himself.

P.—Does not self-conquest mean asceticism?

T.—Yes. Self-conquest is sometimes called asceticism by those who would give a bad name to it.

P.—Does not Hinduism glorify asceticism?

T.—Hinduism glorifies asceticism not for its own sake but for the sake of the liberation of the spirit from the thralldom of the flesh. A man who pampers his body is not fit for the kingdom of the spirit. All great religions prescribe courses of discipline like fasts and vigils and vows for the mortification of the flesh. The flesh is not totally suppressed but is taught its place. Hinduism recognises that the body is a *dharma sadhana* or an instrument of righteousness. Accordingly it only seeks to regulate its appetites and cravings. It takes into account all the factors of human personality—body, mind, soul and spirit—and prescribes a graded discipline for the various stages of a man's career. The householder is allowed to acquire property (*artha*) and to gratify his desires (*kāma*) within the limits prescribed by righteousness (*dharma*). It is only by slow degrees that the soul has to be weaned from the desires of the flesh. But the goal of complete restraint which has to be reached in the final stage of life is constantly pointed out in the Hindu sacred books by the glorification of the ascetic ideal. Hence all the great men of India have been ascetics from Buddha down to Gandhi. And all Hindus, though they may not be able to live up to the ascetic ideal, are ardent admirers of asceticism.

P.—The third cardinal virtue you have mentioned is detachment. What does that imply?

T.—Detachment is freedom from attachments or earthly ties. Every man is generally attached to his possessions, his family, friends and relations and his opinions—in fact to every thing which he calls his own. Naturally the attachments are very strong in early life. It is the first shock of death that opens the eyes of youth to the ephemeral nature of these ties. When calamities come undisciplined minds are thrown off their balance and become either pitifully grovelling or impiously blasphemous. For they have not thought about the conditions of our tenure in life. They have not reflected on the fact that we are all creatures

of time. We and the objects of our love are only like the pieces of wood that drift together for a time on the ocean flood and then part for ever. These are given to us so that they may be utilised for the finer issues of the soul. Everyday we see misers cut off from their hoards of wealth, tyrants from their positions of power, and all men from their nearest and dearest. Death casts its pale shadow on all our pleasures and merriments. Weak men weep and wail when they encounter the ills of life. Brave men stoically endure them and pass on. But religious men know how to meet them. Janka, when his capital was on fire, calmly said "Mithila is burning, but nothing that is mine perishes there." So complete was the detachment of the king from his kingship. The Gita on almost every page says that a man should give up all earthly ties and establish a single heavenly tie if he is to know the bliss of God. Sanga or earthly attachment should give place to Yoga or union with God. The former is the source of all our misery, and the latter is the only guarantee of everlasting happiness.

P.—Sir, I can understand detachment from our possessions being regarded as a virtue. But I cannot understand how detachment from our brothers and sisters, from our friends and relations could be a virtue.

T.—My dear boy, even our sacred domestic affections are not ends in themselves. Yāgnavalkya in a famous discourse to his wife in the Brhadāranya-kopanishad says, "Verily, my dear, it is not for the love of the husband that the husband is dear, but it is for the love of the spirit that the husband is dear. Verily, my dear, it is not for the love of the wife that the wife is dear, but it is for the love of the spirit that the wife is dear." The pure love that our hearts learn in the family circle should be extended gradually to all. The whole world is a family and God is the father of all. Till we look upon our dearest ones as only parts of a whole our affections are not free from the taint of selfishness. Friends come and go but friendship remains for ever. Death takes away those whom we dearly love, but it cannot take away the love from our hearts. Therefore I say, paradoxical as it may sound, friendship is more real than friends, love is more real than the beloved. Love, friendship, sympathy and kindness are divine qualities, and the more we cherish them in our hearts the nearer we are to God. And the way to cherish them is not to be blindly attached to the particular objects of our feelings. It is, of

course, human to love our relations and friends, but to transcend such narrow loves is divine. It is a divine character and not simply a human character that our scriptures reveal to us. Does not Rama show a certain detachment in his love to Sita? Did not Buddha transcend his human love of Yasodhara and Rahula and afterwards take them into his fold in heavenly love? So detachment does not mean the sacrifice of our affections but their extension and purification.

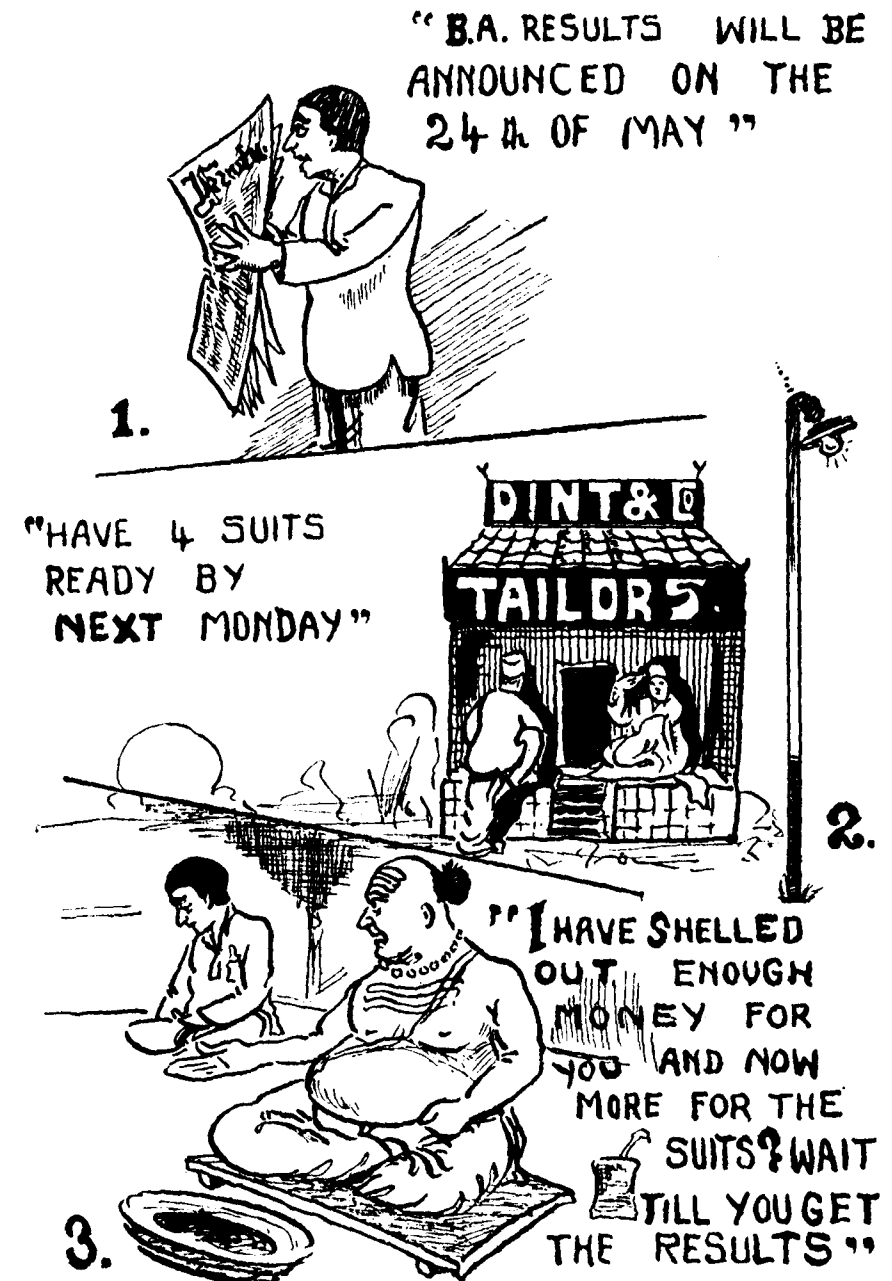
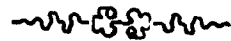
P.—But what is detachment from one's own opinions?

T.—There are many who can get over their attachment to their possessions and their attachment to their relations and friends but not their attachment to their opinions and prejudices, the children of their minds. For this is the subtlest form of ahankāra or egoism. A true Yogin cultivates a detachment even from his own mind. He knows he ought to be greater than his mind and he ought not to identify himself with even the most dearly cherished schemes of his heart. He should have detachment enough to consider all sides of a question. He should have no interests other than those of Truth. And if his inherited or acquired opinions stand between him and Truth they should unhesitatingly be brushed aside. This work would, of course, be less painful if he should cultivate the habit of detachment from the beginning.

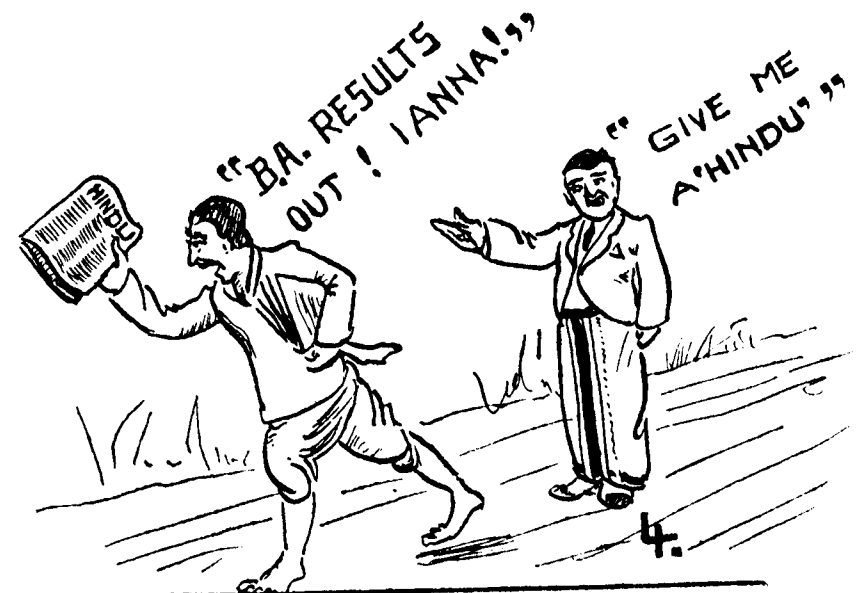
P.—This brings us to the next cardinal virtue—Truth. But truthfulness is a virtue inculcated by every religion worth the name.

D. S. SARMA.

(To be continued.)



A TRIPLICANE TRAGEDY



A TRIPLICANE TRAGEDY

The Psychological Laboratory, Mysore

Most of us in Madras do not know what a psychological laboratory really is. We are under the impression that a laboratory has no right to be classified as such unless it has Kipp's apparatus and Bunsen burners and scale-pans and balances. For psychological investigation there is no need for all that; for it is concerned not with the laws governing matter, but that subtler thing we usually call mind.

The Mysore psychological laboratory which does most useful work in this direction is the only one of its kind in our Presidency. When one enters the laboratory one does not smell the pungent odour of hydrogen sulphide or hear the unmusical grinding of the dynamo, but wanders to behold living beings experimented upon, their very emotions and intelligences measured and recorded! One has but to sit before the psychogalvanometer and his emotions are determined with mathematical precision.

It is an accepted fact today that when living beings are swayed by emotions, an electric phenomenon takes place in them. Just as in the physics laboratory a galvanometer is used to measure the strength of an electric current, so also a psychogalvanometer is used to measure, though indirectly, the intensity of emotions in human beings. The hands of the subject are cleaned with alcohol and ether and the electrodes are attached to the palm and back. The electrodes are made of zinc and are connected with the skin usually by a paste of kaolin and a saturated solution of zinc sulphate and are thus rendered non-polarisable. The wires are connected to the galvanometer through a resistance box. The external current introduced is very feeble. The operation is the same as in the physics laboratory.

The small mirror in the galvanometer is illuminated and the reflected patch of light moves along a scale when the current changes, on account of the change of resistance in the subject due to varying emotions. The subject is asked to respond verbally to the words presented to him, and the results are very interesting. Each word serves as a stimulus for drawing out an emotional reaction which is recorded by the moving spot of light along the scale exhibiting an increase or decrease of the current according to the intensity of the emotion. The reactions that are

registered are beyond the control and arbitrary influence of the person under test and the recording cannot be affected by the bias of the observer.

We were told that some of the students of the Mysore University were poor and these were put to test with the help of the apparatus. The verbal stimulus to which they were made to respond was "comfort", and at once there was a sudden increase of the current indicating their great yearning for comfort, a yearning which was proved beyond doubt by their poor condition!

Thus the psychogalvanometer attempts to find out the emotional "make up" of individuals and by so doing to turn their energies into proper channels, instead of wasting them on things for which they have no aptitude.

We were really interested to find a number of apparatus, to describe which space will not permit, to measure the sensitivity of people for electric shock, for sound, and for odour. The tetchethoscope is another simple device to measure one's suggestibility. There is an apparatus even to test one's steadiness of hand.

More wonderful still there were a number of tests to measure a child's mechanical ability. The child is given the various parts of, say, a lock or a cycle bell. If the child has an aptitude for this kind of work it at once sets the points in a proper position, though their exact setting it has not seen previously. Would you believe me when I say that one of us on being given the same test failed to do that which a child of seven did quite correctly, and in a very short time too? Surely we find here a difference in mental abilities. One would make a good mechanic and the other—at any rate not a mechanic.

We were really interested to find researches conducted in things which are purely of academic interest—for example an investigation to find out whether the offspring of white rats can adapt themselves to water when a number of generations of them are made to do so.

The excursion did us immense good; we returned with a broader outlook and a clearer insight into the immense potentialities of psychology. Our thanks are due to Mr. N. S. Narayana Sastry and to Professor A. R. Wadia of the Mysore University for their great kindness to us.

T. C. HARIKRISHNAN IV HONS.



A Panther-Shoot



On a recent geological tour in one of the minor Native States of our Madras Presidency, I was privileged to be present at a panther shoot, when the Raja bagged a beauty, and I shall here try to jot down my impressions of the affair. I was taken completely by surprise one night at about half-past-seven o'clock when told that the Raja had come to take me on a panther-shoot. Of course I was wild with delight at the prospect, and we set out immediately. Preceded by a man with a lantern and followed by half a dozen shikaris, carrying various things including two guns, we skirted along the bank of the small lake adjoining our bungalow, making direct for the blackness of the near-lying foot-hills. We proceeded almost in silence, picking our way along the difficult path by the light of the dancing lantern, I, a good deal excited and anticipating a vigil for the panther on a crazily constructed platform in the branches of a tree. Soon we left the lakeshore and plunged into the blackness of a grove of mango-trees. A bull's-eye lantern in the meanwhile had been lighted and an old shikari was busy trying the effect of the broad divergent ray. We stood around and watched while he tied various pieces of dirty cloth across the eye of the lamp until he had apparently satisfied himself that he had obtained the correct illumination. All the while I had been wondering what the bull's eye lamp was intended for, and on questioning the Raja was told that it was a vital necessity in the killing of the panther, upon which I was still more puzzled, for wouldn't any wild animal be scared away on seeing such a light? However, there was no time for further questioning and I comforted myself with the thought that anyway I was soon to see how it would work. It was rather eerie, I must confess, standing there in the gloom of the shadowy rustling trees, the feeble light throwing our legs and bodies into bold relief and our faces into deep shadow.

Then on we went for a further short distance and halted once more. Two figures silently detached themselves from us and went ahead carrying the bull's-eye lamp, and the other having been put out, we were left in total darkness. I looked around with a slight shiver. We were just on the border between the mango-grove and the scrub-jungle proper, which sloped up towards the foot of

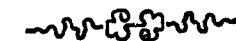
the hill that loomed black and menacing against the starry sky. From far away, and borne down upon the wind, there came to our ears the discordant clamour of the fields-men driving away the herds of pig and deer that rooted up their crops. I felt a touch on my sleeve and turned to follow; a few steps and it seemed that we had walked clean into a thorny bush that stood immediately before us. I was a little bewildered—then came a slight scraping noise as the Raja slipped through a low opening in the side of a small bamboo enclosure that must have been well hidden within the bush. Then I followed and behind me came two shikaris whom I felt, rather than saw in the pitch darkness, fasten us in. The Raja whispered that we were in the machan, and on putting out my hands I felt enclosing walls of closely knit bamboo-work. In front was a small square cut hole and looking through it I could see the light of the bull's-eye lamp which some one was busy arranging on the ground at the base of the machan, outside. The Raja sat down on the camp-chair that had been brought along, and I crouched behind it, trying my best to peer round his broad shoulders. I could see the broad diverging beam of the lamp, like that of a miniature searchlight, lighting up every single blade of dry grass in its patch and dimly striking against the opposite bushes of the little clearing. Just about one-third the full length of the beam and right in its middle was a shapeless mass—the kill. Presently, their arrangements having been completed, the shikaris outside turned back with a great pretence of talking, coughing and muttering. Gradually the noise of the departing men died away and all was silent.

The Raja felt for my head in the dark and whispered into my ear that when the panther did come it would appear as a faint white blurr upon the opposite bushes. A couple of minutes passed, and I was getting rather tired of my cramped position when the Raja's hand pointed. In vain I craned my neck to see. I could see nothing but the dimly-lit bushes opposite, and nearer still the body of the kill. Then a moment later and with a suddenness that made me draw in my breath sharply, a great shadowy white form, with blazing green eyes stepped majestically across the furthest edge of light, and vanished into the darkness on our right. "A big one," I hissed excitedly and one of the invisible shikaris warningly pressed my hand. Immediately after, the panther strode across once more from the right and this time closer to the kill.

Scarce had it disappeared into the enveloping darkness on our left, when the Raja's gun came silently forward, and poking out of the hole, rested upon the edge. Tensely I held my breath while I could feel my heart hammer against my ribs. Then for the third time, and right up to the kill, not fifteen feet away, stalked the panther. Taking one hurried furtive look into the bull's-eye from which shone that steady beam of light, it crouched over the kill, and immediately commenced to tear at it. A second I watched it fascinated, and with a terrific bang and a great blinding flash of light the Raja's gun went off. For the moment I stood dazed and blinded with the shock and flash, then while the Raja and his two men raised a united shout to warn the others of his success, I rubbed my eyes and peered out through the opening. There lay the massive beast, crouched over the kill, in exactly the same attitude as when eating. It had not shifted a foot, and the Raja's shot must have gone straight and true to the heart.

When the others came up, we joined them outside and went forward cautiously in a body to inspect the carcase, the Raja first with his gun cocked and pointed. But the precaution was vain for the beast was quite dead. We turned the carcase over and examined it—the bullet had pierced it just above the shoulder-blade and passing straight through the heart, had ploughed a departing furrow in the earth a few feet away. In one last convulsive gasp the panther had coughed up a large pool of blood, that felt warm and sticky to the touch. Before we did anything else the Raja knelt over the carcase, and with a match singed the tips of the animal's whiskers—to ensure that its spirit did not come to haunt him from the next world, as he told me. We then measured the carcase, and found that it was seven feet four inches from tip of tail to tip of snout—a fine trophy and the Raja's record. As we tramped home the Raja told me that this made the eighty-eighth animal he had shot in the way of big game, having up to now bagged sixty-six panthers and twenty-two tigers. Truly a mammoth bag!

P. D. S.





Hockey

Our Hockey XI has continued its victorious career in the inter-collegiate Hockey Tournament, having drawn but one match and losing none. This is quite a creditable performance, as we have had many stern struggles with some of the other colleges who seem determined to wrest the championship from us. However, if our luck holds we hope to come out on top once again. But whatever the result we of the Hockey XI are determined to do things in such a manner as to reflect no discredit upon the sporting traditions of the game and of our college.

We opened this term with a match against the Engineers at Guindy which we won after a fast and interesting game. Although we had a bit the better of the exchanges, our opponents were often very dangerous. As a matter of fact they scored the first goal early in the game as a result of a well combined rush led by Le Merle at centre. After about fifteen minutes hard play in the Engineers half, Afzul scored the equaliser with a pretty shot. In the second half, play was even more exciting, both sides being all out to win, and it was only the sterling qualities of our defence that saved us on occasions, Radakrishnan at right-half and N. Reddy at back being most conspicuous. It was almost dark when Afzul scored the second and winning goal, and full-time was piped shortly after. This game did not show our forwards at their best. Indeed they seemed to have almost lost the knack of

finishing off a good run with an effective shot at goal, for several well-combined movements failed to be taken advantage of due to faulty shooting. It must be said however that we were playing considerably below our full strength for Satur had dropped back to replace Veerasinghe and Radakrishnan deputised for Stracey at right-half. The former is one of our promising young players who plays with grit and dash, and is very seldom altogether beaten. On this occasion he put up a stout defence against a much more experienced left-winger.

Pachayappas were the next to fall to us on our ground, and by the big margin of four goals to nil. All four goals were scored in the second half, which seems to point to the inability of our forwards to settle down in the early stages of the game. The Loyola College not turning out one evening, we received a "walk-over," and then came the strenuous encounter with the Lawyers, from which we emerged with colors still flying but minus a point, for it turned out a drawn match.

A second match with the Engineering College resulted in a win for us by a goal to nil. We were rather lucky to win, for our opponents on one occasion missed an open goal. Afzul was once more in evidence with a terrific scoring shot that beat the goalie all the way. This was on the whole a most enjoyable match, for the Engineering College have always proved to be a most sporting set of opponents, and this game was marred by no unpleasant incident, as have been so many others between rival colleges. We met the Law for the second time a few days later, on their ground, and what should have been an honest victory for us was spoilt by the behaviour of the opposite side, who a few minutes before the close of play protested that the light was too bad for its continuance. The match, however, will be re-played shortly, when we hope to win. We next met the Medical College who partly avenged their defeat of last term by drawing with us, the score being one all. As events went, we were lucky to have equalised at all, as our forwards never throughout the game showed confidence. But a few minutes before the end, with the prospect of defeat staring them in the face, they played up strongly, and Afzul scored with a neat back-hand shot.

We are still leading by a point over the Christians whom we meet next week. This will be the deciding game of the tournament really, for the winning team will practically capture the

championship, although the Law College will remain to be disposed of. But they are a good way behind both the Christians and ourselves, with but one match to go, so that there should be but little fear from that direction.

The Presidency College hockey tournament for the Raja of Panagal's Cup is to come off shortly and our Hockey XI will have to defend their title as the champion team. Last year both our A and B XI's met in the final match, which speaks well for the strength of Hockey in the college. But this year we expect a more strenuous struggle, for several other new colleges are expected to participate.

Football

On turning to football it is indeed distressing to note the steady decline both in interest and in the standard of play of this game in the college. Never before has the latter at all events been as low as it is this year. And this is all the more surprising considering the large roll that the Presidency College can boast of. The number of its students run into very nearly four figures, and yet at times the captain has the greatest of difficulty in fielding a full eleven! In trying to find an explanation for this apparent complete lack of enthusiasm among our students for a game that flourished so well in the college not so long ago, as the tremendous interest that the Presidency College Football Tournament once aroused in all sporting circles in Madras served to show, we have taken into account the rapidly growing popularity of hockey and cricket. And yet we are not satisfied. There are more than enough students to go round for all three games, and it is indeed shameful to see of an evening two or three college players playing amidst a host of Triplicane-wallahs on the college ground. Even the latter, our near neighbours, have learnt where to come for a free game, without let or hindrance! Due to this lack of support and enthusiasm of a game that will always rank in the forefront of games for its manliness and sporting qualities, the college team has had to be withdrawn from the inter-collegiate Football Tournament, an action, that reflects very badly upon the ancient sporting traditions of our college. We launch an earnest appeal to all football-players of the college to take up the game with renewed enthusiasm, and to give their Captain every support possible in their power.

Tennis

The tennis-courts have been as full as ever, in fact this game is gaining in popularity by leaps and bounds. This year sees the introduction of two new tournaments in addition to the ordinary College Tournament. These are a tournament for past and present students of the college and an open tournament in which students from other colleges will be allowed to compete. This last particularly should have the effect of raising the standard of play in the college, which on the whole, is not very high. True we have a few "star" players who rank high amongst the best student-players of Madras, but the number of second rate players is considerable. Still another new feature—and one which would have been received with enthusiasm had it but got going—was to have been the running of a Mixed Doubles Tournament. But the scheme, unfortunately, had to be dropped due to the reluctance of the lady-players in the college to participate. It is a pity that they did not come forward and co-operate, particularly as considerable trouble had been undergone to persuade the Principal, Queen Mary's College to allow them to play on our courts. While sympathising with the enterprising Captain and Secretary, whose active efforts towards this end have thus been rendered abortive, we congratulate them on their initiative, and wish them every success in any similar projects in the future.

Cricket

An unusual feature in our programme this year was the visit of the Poona Engineering College who tried conclusions with us. They did not offer much opposition to our bowling, falling for a meagre 60, Flory and Varadan doing most damage with the ball. We replied with a total of 69 for 5 wickets, Varadan scoring 34 not out.

We were paid another visit also by the team of the Bangalore Medical College, who gave us a close run. Though they could not score more than 107 all told, it did not seem as if we would reach that, for five of our best were dismissed ere we reached 20 runs. But Nogi saved the situation by his cool game, and was ably supported by Reddy, Veerasingh and Venkataraman, who hit out lustily. We were very close behind their score when our last man, Rangaswamy, went in, and in two strokes pulled the notch out of the fire. We owe this exciting victory to Nogi who was

undefeated with 29 runs to his credit. Jaganathan captured six wickets for 29 runs, a truly creditable performance.

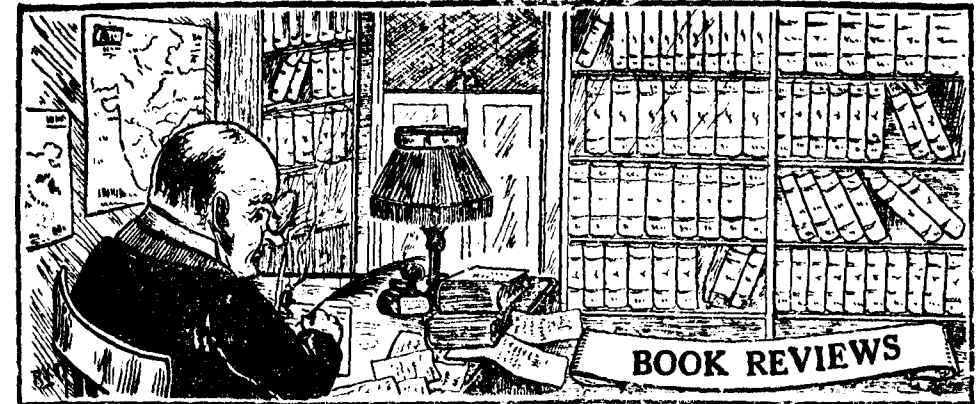
In the inter-collegiate tournament we have been fortunate in winning all our matches. The Medicoes we beat by the wide margin of 106 runs. Varadan, Kalyanaraman, Naick and Reddi scored 27, 46, 32 and 24 runs respectively, out of a total of 166 runs. Jaganathan helped us in our victory against the Christians with a lusty 47. We declared our innings closed for a total of 149 for four wickets. Of this Reddy and Rangaswamy scored 35 and 28 runs respectively. Our opponents replied with a meagre 60 runs, and the match was ours.

In the Law College team whom we faced next, were several of our last year's stars, but in spite of them we won the day. Our innings were opened by Kalyan and Jaganathan, who batted confidently till the former was dismissed for 22 runs. Nogi followed, and played a faultless not-out innings of 59. Varadan and Naick helped on our cause by contributing 22 and 20 towards a total score of 199 for 7 wickets. In reply the Lawyers could do nothing against the wiles of Jagannathan's lobs, and were dismissed for a score of 76, of which Ugappa was responsible for 20 runs. In our next victory against the Christian College, Varadan supplied 56, and Venkataraman and Reddi 34 and 44 each, to a total of 173 for 9 wickets. We won this match quite easily.

We are glad to be able to state that we have supplied more men than any other college for the Combined Colleges XI.

A Boat Club?

It is rumoured that some bright enthusiast has proposed the formation of a rowing-club in the college. It is a brilliant idea, and one that, we think, should receive every encouragement from the authorities concerned, especially the College Athletic Association. It is only fitting that our college should take the lead in such a matter, and in the event of the idea taking shape, we may yet look forward to an annual inter-collegiate Boat Race. The venue of operations will of necessity be the Cooum, and in this respect the sponsors of the scheme, should not allow their enthusiasm to be damped by its seemingly irremediable filthiness. We are sure that the formation of college rowing-clubs will soon have the effect of speeding up the Corporation's plan of "sweetening" the river. We wish the prospective rowing-club every success and hope that boating will soon be in the forefront of the college sporting activities.



A HISTORY OF INDIA—PART II. THE MUHAMMADAN PERIOD by H. L. O. Garrett and Sita Ram Kohli—PART III. THE BRITISH PERIOD by L. F. Rushbrook Williams.—(Longmans) 1926.

Time was when the whole history of India could be written by one individual but owing to the recent developments in the subject it is becoming more and more impossible for one, however talented and qualified, to cover the entire ground satisfactorily. The history of India naturally divides itself into three parts, Hindu, Muhammadan and British, and it is a good idea on the part of Messrs. Longmans, Green and Co., to have entrusted the task to different hands. Ever since the introduction of Indian History as one of the optionals for the Intermediate examination in our university there has been a crying need for a suitable text-book. The object of the authors and the publishers in bringing forth parts II and III is evidently to meet this demand.

Part II.—The Muhammadan period brings the story down to 1761 and has been written by two men who have direct experience of teaching the subject in college classes, and possess an intimate knowledge of the student's requirements. We are glad to note a chapter devoted to the condition of the people under the rule of the Sultans in which the authors have dwelt at some length upon the Bhakti movement and on the religious revival and rapprochement of the Hindu and Moslem under great religious teachers like Ramananda, Kabir, Ramanuja, Nanak, Tukaram and Ramadas. A chapter on Mughal art, painting and administration would have been a fitting conclusion to the book. Select books of reference on

the subject may also be usefully given at the end of every chapter ; and the attention of the authors may be invited to a recent work, Mr. Prasad's History of Mediaeval India.

Part III.—On British India by Rushbrook Williams is even more readable and interesting. There is a freshness in the presentation and an attractiveness in the arrangement which is far from conventional. The author generally maintains an attitude of aloofness and his opinions on persons and events especially in the early days of the East India Co. are sober and balanced. One welcomes the chapter dealing with the great Indians of the 18th century such as Mahadaji Sindhia, Ahalya Bai and Tipu. The problems of Indo-British commerce so necessary for the understanding of the economic aspect of the subject are also dealt with in a separate chapter ; and some fair idea of the recent political and constitutional developments is given in the last chapter on ' India in the 20th century.' The epilogue directing attention to the founders of Modern India may profitably be amplified.

In order to complete the series the publishers have tacked on Parts II and III specially designed for the Intermediate to Part I on the Pre-Mussalman period by Mr. K. V. Rangaswami Ayyengar published several years ago for the use of the High School classes. This is surely a mis-fit. While congratulating the publishers on their having gone a great way to meet the requirements of the Intermediate, we cannot help feeling that a separate book on ' Hindu India ' more befitting the series is still a standing need.

A. V. VENKATARAMAYYAR.

THE TIBETAN BANNER—A POEM by James H. Cousins.
Ganesh & Co., Madras, 1926.

Works of plastic or pictorial art have furnished themes for poets from Homer to Keats. The treatment has varied, ringing from the pure description of the shield of Achilles to the reflective and imaginative musing on a Grecian Urn.

In "A Tibetan Banner" Dr. J. H. Cousins has followed Keats rather than Homer, but his method is different from Keats'. In the "Ode on a Grecian Urn" we can see the urn. Dr. Cousins' poem does not profess to convey a visual impression of the banner. In order to see

" parrot green, pomegranate red.....

That tell in rude but vivid art
The story of the searching heart "

the reader must refer to the banner itself, reproduced as the frontispiece of the booklet, and to the interesting notes which accompany the poem. What the poem deals with is "the story of the searching heart" depicted in the banner, the legend of the Bodhisattva Avalokiteswara

" Invisible, incognita
Man-woman, grown to God-estate "

Who lived

" A thousand, thousand years ago
On a great mountain tipped with snow."

and who, on the intercession of the sage Lotup-nyng-po, the friend of the birds, crowded into one magic moment the expressions of a bird's life from spring to winter, and then, taking the form of a cuckoo and coming into the conclave of birds, teaches them the good news for which they yearned, the means by which they might escape the fate of man, "the cage of sense and mind," and pass straight to "the pure spirit's freedom." The teaching is a brief summary of the Buddhist doctrine of spiritual liberation through love.

" The wise ones look with love on all."

The Buddhist beatitude lights on those who live a life of unselfish prayer.

" Cease not to turn the pleading drum
And chant *Om mani padme hum* ;
For they who seek the spirit's end
Have all creation for their friend ;
For deep in all created things
Quivers the skyward lift of wings ;
And prayer for hearts that upward groan
Strikes back in blessing on your own."

The doctrine that spiritual liberation, for which even birds long, consists in "the attainment of spiritual identity with the life of the universe" we leave to wiser heads. We are among those who breathe with difficulty in the rarified air of spiritual Mount Everests.

The charm of "A Tibetan Banner" lies not so much in its philosophy as in its poetry, for with poetic charm the whole poem is suffused. The story moves clearly and evenly, the verse is smooth and harmonious. The banner, in its perilous passage from Tibet to Kalimpong,

"Came when Buddha's birthday moon
Rose like a festival baloon
Above the twilight's incense haze;
When, at the end of balmy days,
The sun's pulsating ladle spills
The molten silver on the hills;
And summer bringing new release
To fountain-heads of warm increase,
All night from icy caverns hears
The drip of tributary tears."

This is the work of a poet of delicate imagination, of an artist in words. Suggestive phrases meet us at every turn: "the shimmering cobra," "sunripe fruit and stingless wine," "the pleading drum"; early morning

"When the great broom of many dawns
Sweeps from the sky the starry awns";

the lines invoking inspiration for Miss Nathalia Crane, the American girl-poet.

"Whatever songs your lips indite,
Still may the gleam of inner light
Golden your thrumming finger tips;
Still your discriminating lips
Taste in tame rose and wild-heart gorse
The heavenly savour of their source.

Such felicities of diction are the hall-mark of the poet whose function it is to open our eyes and ears to new aspects and meanings of things.

W. C. DOUGLAS,
D. R. FYSON,

BOOK REVIEWS

ABOVE THE RAINBOW AND OTHER POEMS by J. H. Cochrane
Ganesh & Co., Madras, 1926.

Much that has been said in the review on "A Tibetan Banner" may be said also of the collection of poems entitled "Above the Rainbow." There is the same easy flow of musical verse, the suggestive phrasing, and the vision that goes beyond mere surface appearances. The poet steeped himself in the beauties of the Himalayas, and soared in spirit beyond their height.

"I take the challenge of the bird
Exulting past the rainbow's rise:
Lightly upon the spirit's word
I leave the earth and seek the skies."

He is moved to worship by the sight of Kinchinjunga's peak kissed by the sun's first rays.

"Surely to thee earth's morning prayers
In song and incense rise".

Under the cold eyes of the mountains he feels the futility of man's endeavour:

"And all my purpose is a petal crushed
Beneath the burden of immensity."

That sense of an immanent spirit, expressed in familiar lines by Wordsworth,

"A motion and a spirit that impels
All thinking things, all objects of all thought
And rolls through all things,"

pervades many of the poems.

It is the theme of those expressive nature-poems, "Tree Sacrifice," and "A Song by a Fruit-tree" (the latter fitly addressed to the great Indian scientist) and appears in a more abstruse philosophy in "The Complete Lover" and "Graven Images."

More lies behind the words than a single reading can follow but their music remains and may perhaps evoke trains of thought beyond even the author's ken.

D. R. FYSON.

Printed by W. L. KING at the Methodist Publishing House, Madras and Published
by the EDITOR "The Presidency College, Magazine," Madras.

AL 392
21
JL
1.2000.0041
N26-205

T. SHAMSHUDIN & SONS,

20, Rattan Bazaar Road.

Guarantee of excellence and efficiency
in making.

—SMART CUT, PERFECT FINISH, CORRECT DRESS—

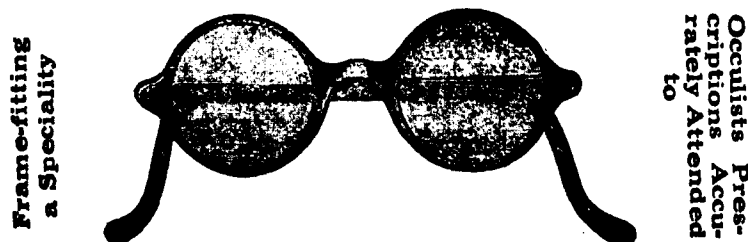
Our experience of more than half a century is at the back of every garment we finish in our establishment.

We undertake Military uniforms of all descriptions and Gowns, Hoods, Convocation Caps etc.

Our perfect cut, tailoring and finish by our experts secure the style and finish often absent from

Costly Tweed Clothes Made Elsewhere.

HIGH CLASS OPTICIANS
AT
MODERATE CHARGES



Messrs. M. PATHE & CO.,

OPHTHALMIC OPTICIANS

186, Mount Road, MADRAS.

20 per cent LESS TO STUDENTS.

Consult : T. S. RAM, Opticians,
Over 25 Years Experience Late of Mr. H. W. NAILER.



ESTABLISHED 1873.

ADDISON & CO., Ltd.

Mount Road, MADRAS.

COME IN AND HAVE A LOOK ROUND
OUR SHOWROOMS, MANY USEFUL
SCHOOL GOODS AT REDUCED PRICES

DON'T FORGET YOUR WALTON'S SYNTHESIS.

SALE

DECEMBER 1ST TO JANUARY 15TH

GIRI BROTHERS

28, Pycroft's Road,
TRIPLICANE

Step in on your way from College and see our
Stationery Goods, note books, pencils, pens, etc.

Why go all the way to town for things which
you can as well obtain here and even at a lower price.

BOOK BINDING A SPECIALITY.

USEFUL STUDY HELPS

FOR
Intermediate and B. A. Degree
Examinations.

Efficient and Highly Serviceable 'Guides'
at Low Prices

Apply for Monthly Book Bulletins.—

ROCHOUSE & SONS,
22, Baker Street, Opp. Law College,
MADRAS.

THE BEST AND CHEAPEST SHOP

Just have a Look at our
vast Boot and Shoe Stores

Then you will learn that we
successfully combine

High Quality
and
Low Prices

in our

FOOT WEAR.

MEDALS AWARDED.—Patronised by Their Excellencies
Sir Arthur and Lady Lawley, Madras.

PUNT & CO., CHROME LEATHER
WORKS,

P. Box No. 215. No. 170, Broadway, MADRAS.



ERNEST BARNES,

Optician, Jeweller and Watch-Maker

Bigger
Discount
to
Students
from
1st
November
1926.

25 %!

HOMework MAY

be doing him harm rather than good, if it comes after a day of strain—perhaps unconscious strain—in the effort to see. Make sure that your child can see clearly his books, the blackboard, in fact, at any distance, with the normal amount of effort. Any thing beyond this is a strain upon him—mentally and physically.

TOP PLACE

might be his for the keenness and industry which he shows, but he suffers from the pitiful handicap of defective vision. Many a child is reckoned a "duffer" when the trouble is not lack of brains, but lack of the full measure of vision.

A thorough examination now will satisfy you that your child stands an equal chance with his schoolmates.

197, MOUNT ROAD, MADRAS.

Tel. Address : "SENLAB" Madras.

OXFORD UNIVERSITY PRESS

History.—The Oxford University Press publishes a very large number of books on History, Indian, English, Ancient, etc. The titles given below are only a small selection.

A History of the East India Company.—Trading to China, 1635—1834.

By H. B. Morse. An interesting study, illustrated and with a full index. In four volumes. 70s.

Builders of the Empire.—By R. A. Williamson. Biographies, briefly told, of Cabot, Drake, Wolfe, Wilberforce, Rhodes and others. Fully illustrated, 3/6. Prize edition, 7/6.

Social Life in the Middle Ages.—By L. F. Salzman. "This delightful picture-book, full of well-chosen illustrations, may be cordially recommended both to children and their elders". *Spectator*. 7s. 6d.

The Gordon Riots.—By J. de Castro. Most people only know of this extraordinary and unexplained upheaval from Dickens', "Barnaby Rudge". This is a "historical study of first rate importance" illustrated. 18s.

The American Civil War.—By D. Knowles. A brief sketch of the great struggle between North and South that will be welcomed by those who want a general view of the war. 7s. 6d.

English Men and Manners of the 18th Century.

By A. S. Turbeville. A general view of social, political and economic history in England from 1700-1800. Very fully illustrated. 10s.

The World's Classics.—This series now has nearly three-hundred titles, and the range is so wide that every taste can be suited. There are short stories, essays, plays, novels, poems and literary studies. The books are printed on good paper and bound in green cloth with gold lettering. The Price is only 2s. each. These are some recent titles.

Crime and Detection (detective stories)

Ghosts and Marvels (ghost stories)

Treasure Island. Stevenson

Kidnapped and Catriona. Stevenson

Sybil. Disraeli

Selected Russian Short Stories

Selected Modern English Essays

Hajj Baba in England. Morier

A Short History of the French Revolution.—By Miss E. D. Bradby. "By someone who clearly has a wide and deep knowledge of the history of the Revolution. It is admirable both for its clearness and its simplicity". *Nation*. Illustrated, 7s. 6d.

Oxford University Press

BOMBAY

CALCUTTA

MADRAS