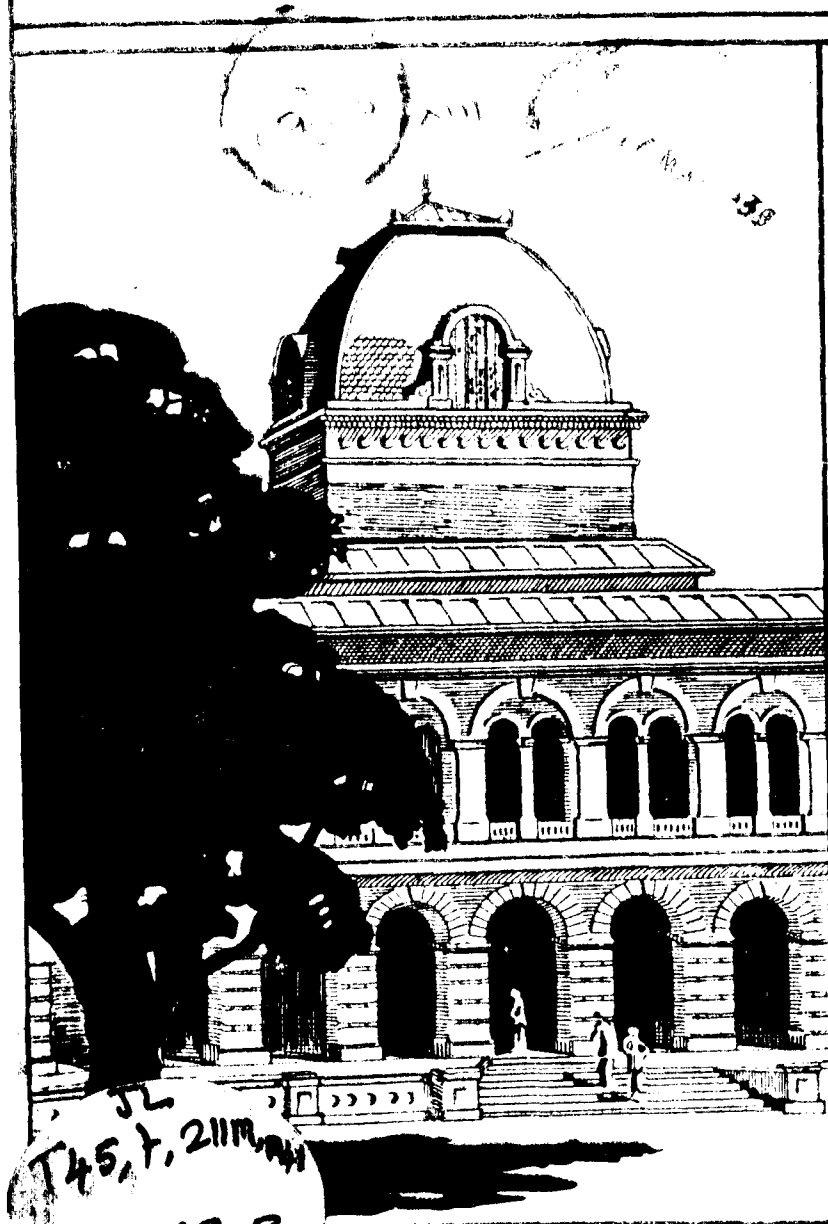


The PRESIDENCY COLLEGE³⁵²



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Presidency College Magazine

Editor :—V. K. AIYAPPAN PILLAI, B.A. (OXON.)

Associate Editor :—N. R. KEDARI RAO, M.A.

Student Editors :— { S. V. RAMANIAH
S. CHANDRASEKHARAN

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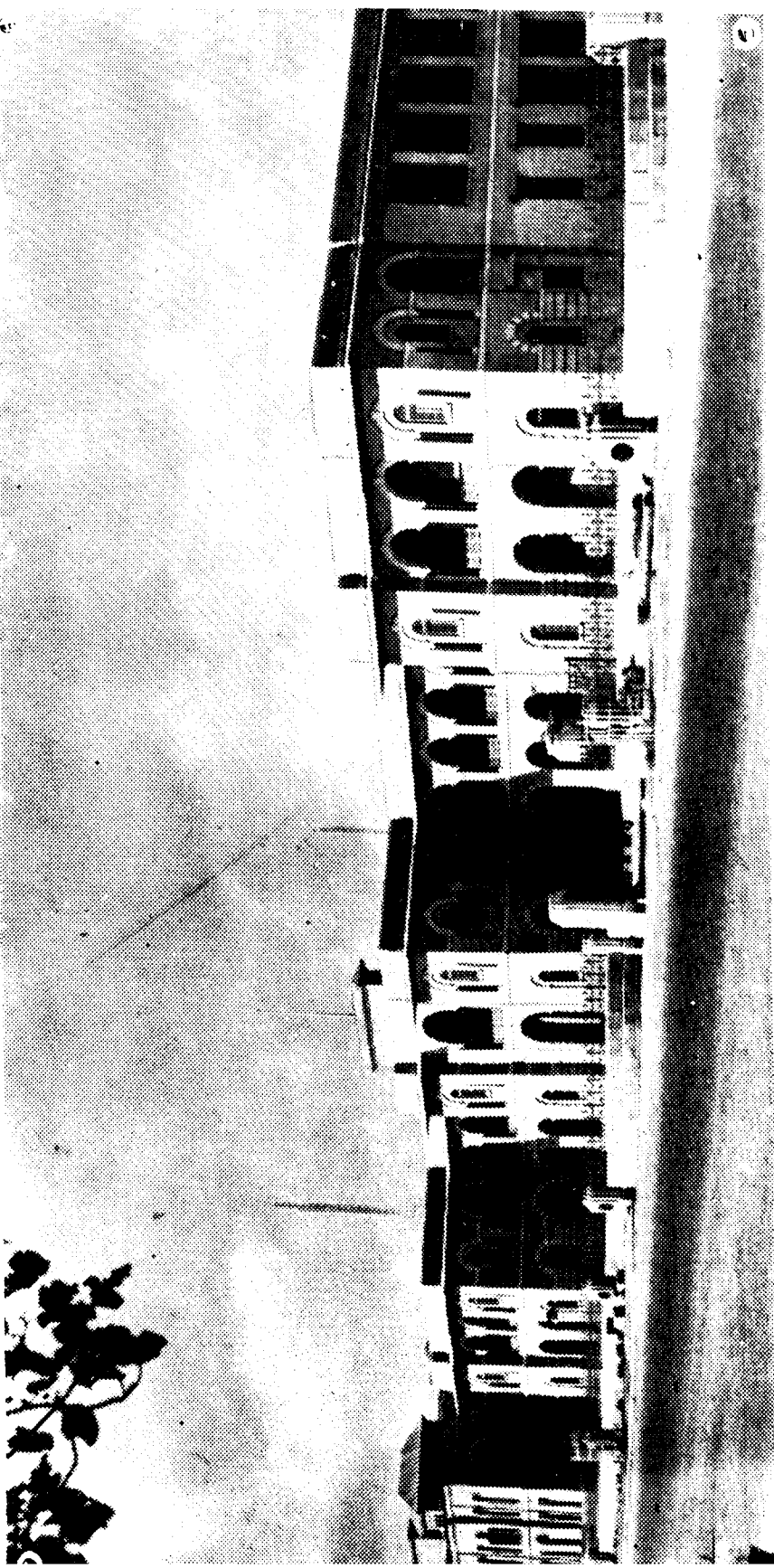
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Contributions to the Magazine from the Members of the Staff and the past and the present students of the College will always be gladly received.

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





Vol. XIII

FEBRUARY 1938

No. 3

The Opening of the New Natural Science Buildings

THE New Science Buildings for the Departments of Botany, Zoology and Geology were opened by His Excellency the Lord Erskine, Governor of Madras, on Tuesday, the first of February. It was a very grand and impressive occasion, when all the members of the College were present and over six hundred guests—the elite of the city.

The function took place in a specially erected shamiana in front of the New Buildings.

His Excellency, who was accompanied by Lady Marjorie Erskine, was, on arrival, received by Mr. H. C. Papworth, the Principal, Dewan Bahadur S. E. Runganathan, Vice-Chancellor, the Hon. Dr. P. Subbaroyan, Minister for Education, Mr. M. O'Brien, Chief Engineer, and Mr. J. S. Westerdale.

His Excellency then inspected the Guard of Honour presented by the College Contingent of the University Training Corps.

After His Excellency had taken his seat on the dais, Mr. Y. Ramakrishna Prasad, President of the College Union, garlanded His Excellency and Lady Marjorie Erskine.

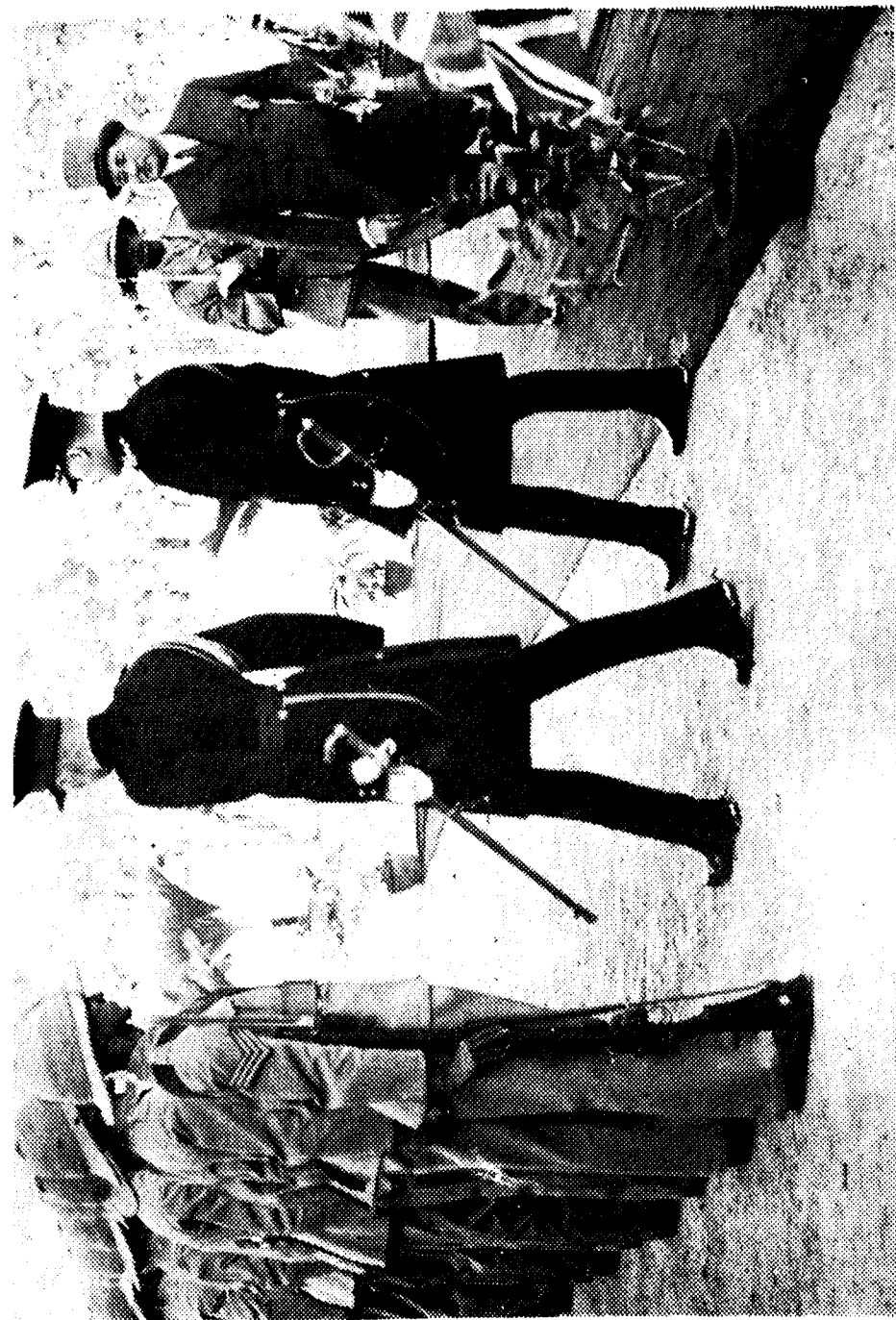
Mr. Papworth, the Principal, next spoke inviting His Excellency to declare the New Buildings open.

He said :—

" May it please Your Excellencies,

It is my privilege on behalf of all the members of Presidency College to offer Your Excellencies a sincere and hearty welcome. Your Excellency has been pleased to visit us on a previous occasion and to preside over our Annual Sports, but this is the first time that Your Excellency has honoured us with a ceremonial visit to preside over an academic function. We are especially delighted to welcome Lady Marjorie Erskine on her first visit to the College.

The purpose of this ceremony is to declare open these New Buildings which have been erected for teaching and research in Botany, Zoology and Geology. Our participation in these subjects goes back to the year 1886, when they were first introduced as courses of study by the University of Madras. At once the Government of Madras realised the necessity of opening classes in these subjects in Presidency College, and recruited Dr. A. G. Bourne as Professor of Biology in 1886. Dr. Bourne, still well known as Sir Alfred Bourne, an eminent scientist and a Fellow of the Royal Society, guided these departments, which were then united under the title, Department of Biology, from 1886 to 1903, when he left the College to become Director of Public Instruction. Sir Alfred Bourne's work as a pioneer in the teaching of Biology in this College and University is still gratefully remembered. He was succeeded by my predecessor, Mr. P. F. Fyson, who was in charge of the department of Biology until 1910. In this year, owing almost entirely to the teaching, the researches



HIS EXCELLENCY INSPECTING THE GUARD OF HONOUR.

Courtesy, "Hindu."

and the writings of these two scientists, the study of the Natural Sciences, as they were then called, had so far advanced in the College, and therefore in the University—for these two professors guided the University in its prescription of these sciences as courses of study—that it became necessary to divide the department of Biology into the three separate departments of Botany, Zoology and Geology. Thus, in 1910 Mr. Fyson became Professor of Botany, Mr. Ramunni Menon was recruited as Professor of Zoology (he afterwards became Vice-Chancellor of the University), and Dr. Murray Stewart was appointed Professor of Geology.

The services of these men, pioneers in the study and teaching of their subjects in the Madras Presidency, were not only available in Presidency College, but were also placed unreservedly at the disposal of the University; and this meant further rapid advancement in the courses of study in these subjects which the University was able to prescribe. Hitherto, for twenty-six years, the study of these subjects had not gone further than the standard of the Bachelor of Arts Degree, but in 1912 Honours courses were drawn up by the University, and Honours classes in Botany, Zoology and Geology were opened in Presidency College. And so, for a further period of nineteen years we took the Bachelor of Arts Honours courses in Botany, Zoology and Geology, and were the only College to do so. Those who were privileged to take these Honours courses will ever remember with gratitude the names of Mr. Fyson, Sir K. Ramunni Menon and Mr. H. Narayana Rao.

Then, after sedulously working these Pass and Honours courses for forty-five years, our next landmark came in 1931, when, as a consequence of the University inaugurating a separate Faculty of Science, we dropped the Bachelor of Arts courses in these subjects, and undertook the new and better Bachelor of Science courses both in Pass and Honours. Again, we were the first to introduce Bachelor

of Science Honours in these three subjects, and even now we are the only College which has ever sent up any candidates for the Bachelor of Science Honours examinations in Botany, Zoology and Geology of the University of Madras. Having advanced so far, we could not, of course, stop there; and as soon as some of our students became science graduates in Honours, we were obliged to open classes for the Master of Science Degree, and to provide research facilities for advanced students.

I think it fitting that I should give you this short resume of our achievements in these directions; and I confess that it is with a considerable amount of pride that I invite your attention to the pioneer work that this College has been enabled to do in study and in research for the higher and advanced University courses. It is fitting, too, that Presidency College should pioneer in these directions; should guide and help the University in prescribing higher courses of study; and should be the first to impart instruction in them to undergraduates and graduates, and provide research facilities for specialists. You will agree with me that this is indeed fitting work for us to do, when I remind you that the University of Madras is itself our child. The University of Madras sprang from Presidency College. We were founded in 1840 and were first called "The High School of Madras University," and for seventeen years the College and University were one organization. For short, we were known simply as "The Madras University," and it was not until fifteen years after our foundation, that is in 1855, that we formally received our present name of Presidency College; and it was not until 1857 that by an Act of the Legislature, the University was given an existence separate from the College.

After the introduction of the Bachelor of Science Honours courses in 1931, we quickly realised that our old laboratories, adequate as they undoubtedly were when they were built over sixty years ago for the old courses, were



THE PRINCIPAL DELIVERING HIS WELCOME ADDRESS.

Courtesy, "Madras Mail."



HIS EXCELLENCY SPEAKING.

no longer sufficient for the new and advanced ones. It was then that Mr. Fyson began the work of conceiving and drawing up plans for these new buildings, which it has been my privilege to finish. They were designed by Mr. Reginald Dann, and architecturally they are based principally on the Italian Renaissance style, and are thus in keeping with the main college. To have followed this form of architecture in its entirety at the present time would have proved very expensive, and therefore it has been necessary in the subsidiary features of the building to follow simpler forms of art. They are thus a harmonious blending of the ornate Italian style and simpler forms, adapted to the necessities of our work and to the climatic conditions of South India. In these days, when so many inartistic buildings are made to suffice, I am sure you will welcome another building of architectural merit on the Marina.

Our gratitude for these buildings, which have been equipped as an up-to-date science building, providing lecture rooms, laboratories, museums, and a number of specialised research rooms, is very widespread. First, our grateful thanks are offered to the Government of Madras, who have always so readily realised the special function that Presidency College is expected to fulfil both in the Presidency and University ; have always consistently encouraged us in the pioneer work to which I have referred, and for nearly 100 years have so generously provided for all our needs. With this I would couple an expression of our gratitude to Mr. R. M. Statham, the Director of Public Instruction, for all the interest he has taken and all the help he has given us, not only in connexion with these buildings, but in all our expanding work, and in everything that pertains to the interest of the college.

Secondly, I would express my warmest thanks to my colleagues, the Professors of Botany, Zoology and Geology, who have drawn up plans of buildings, rooms and furniture,

and have watched with keen professional interest every inch of these buildings and every item of their equipment. I thank them very much for the hard and willing work they have done, and for the advice which they have given me at every turn.

Our thanks must also be given to the members of the Public Works Department, who have so assiduously carried out our exacting demands. I would especially express our gratitude to the Executive Engineers, Mr. Dickinson, Mr. Govindarajan, Mr. Berg and Mr. Stewart ; to Rao Sahib K. Srinivasa Aiyangar, the Assistant Engineer ; to his predecessor, Rao Sahib A. Chidambaram Pillai ; and to Mr. C. Ramarathnam Ayyar, the Supervisor, for his interest in and punctilious attention to every detail. Also, we are not unmindful of the work of the contractors and their employees who have been engaged on this task. We in the College are determined, I am sure, to show this gratitude by carrying on undiminished the high standard of work which it has been our privilege to attain.

Once again, on behalf of all my colleagues on the staff and of all members of Presidency College, I offer our respectful thanks to Your Excellencies for your presence here this afternoon, for your kindness in consenting to preside over this ceremony, and for all the help and encouragement that we have always received from Your Excellency and your Government.

I now have great pleasure in requesting Your Excellency kindly to declare these buildings open."

His Excellency was received with an ovation as he began to address the gathering. He said :—

" Mr. Principal, Ladies and Gentlemen,

It was with the greatest pleasure that I accepted the invitation which you, Sir, so kindly sent me, to come here and open these New Buildings to-day. But I must confess that it was also with some little trepidation :



THE PRINCIPAL WITH HIS EXCELLENCY AND LADY MARJORIE ERSKINE.

for these are buildings specially dedicated to the pursuit of Science, and by no stretch of the imagination can I claim to be a scientist myself. I took comfort, however, from the thought that neither are you, Sir, a scientist, and if in spite of that you were able to make an appropriate speech on such an occasion, I felt that I too might manage to say a few words without too obviously betraying my ignorance. I was further encouraged by the fact that, though not a scientist, I have yet seen a good deal of things scientific, particularly during the past three years. For I have seldom been permitted to visit a school or college in this Presidency without being taken on an inspection of its scientific side, whether it be an exhibition or merely a laboratory in working order: and I have noticed that the main feature on such occasions is almost invariably a group of frogs in process of disembowelment. That, I believe, is the sort of thing that Natural Scientists do. So I may fairly claim to know something about the subject. I have a suspicion, Sir, that something of the same sort may be in store for me when I visit your Exhibition later this afternoon, and I am the more obliged to you for having arranged that I should be fortified for it by having my tea first.

Seriously, though, I am indeed very glad that the Presidency College is now to have a habitation worthy of the excellent work which its Natural Science department has been doing. You have taken legitimate pride, Mr. Principal, in the manner in which the College has led the field in this branch of study, and I might add that India has good cause to be grateful for the very fine standard of training which the College has imparted to its students. The part which Science in all its branches has played and has yet to play in the economic betterment of the people of this great country is incalculable. It is good to know that many of those who have made real contributions to the advancement of their fellow-countrymen, whether in the

services, in industry, in business or through research, received their training in this College, and that those who come after them will have even greater opportunities of acquiring knowledge and of devoting it to the welfare of India as a result of the facilities offered them by these new buildings. I am confident that they will use those opportunities to the fullest possible extent. Though we have passed through times of economic stress, the Government have succeeded in finding the ways and means to provide the College with these excellent buildings. That in itself is striking recognition of the importance attached to the work that is done here. But I am sure that money has never been spent to better purpose and that it will be amply repaid in kind by the contribution which future students of this College will make to the material and economic progress of the Presidency.

AN EXCEPTIONAL RECORD.

Though this may be the first ceremonial visit that I have paid to the College, yet you may be sure that I am not unmindful of the very high position which it holds in the academic life of South India. The Presidency College does not claim to be the only outstanding College in Madras, but from its inception, it has had a very exceptional record. Its graduates have been prominent in every walk of life. I see many distinguished Old Boys of the College around me to-day and I am glad to know of the keen interest which they continue to take in the College's welfare. I do not doubt but that the hold which the College has on the affection of its past students is largely due to its insistence on the value not merely of academic studies but also of extra-collegiate activities. Old Boys look back with gratitude not only to the high standard of training imparted to them, but also to the fine record of sportsmanship which the College has encouraged and to those other activities which go to make up the corporate life of young



men. I feel sure that, so long as the College maintains its sound traditions of work and play, it will continue to turn out men who will make great names for themselves within and without the confines of India.

It will now be my pleasant duty to declare the new Natural Science Block open. In doing so, I would like to add my own congratulations to all those who have had a hand in enriching our Marina with yet another dignified and graceful building, fully in keeping with the beauty of this wonderful sea front which is so much admired by every visitor to Madras. It would not, I think, be too much to say that at this moment, the Presidency College presents the finest group of educational buildings in an admirable location in the whole of India. I would like, too, to pay tribute to the part which you, Mr. Principal, have played in bringing these buildings to completion: for I know that we have largely your keenness and energy to thank that the work has been so well and speedily done. I thank you for the very kind terms in which you have welcomed me and would again assure you that it has given me and Lady Marjorie Erskine very sincere pleasure to be with you this afternoon."

Dewan Bahadur S. E. Runganathan, the Vice-Chancellor of the Madras University, then said:—

"I propose a very cordial vote of thanks to His Excellency and to Lady Marjorie Erskine for their presence here this evening, and to His Excellency for performing the ceremony of opening these new buildings. As one who has had the privilege of being connected with this College for many years, I am naturally proud of the great part which the College has played in the field of university education, and I rejoice to see its advance from strength to strength. My own subject,—and I am glad to find that I am in very good company—was in its external aspects at any rate not so spectacular as Science. But though

the requirements of humane studies in regard to accommodation and equipment were far more modest than those of Science, I may be permitted to say that the progress of this College, even in those studies, has been quite as great and impressive as its achievements in Science to which Mr. Papworth has referred."

Continuing, Dewan Bahadur S. E. Runganathan said that the Principal had mentioned in his speech that the Madras University had sprung from the Presidency College, and that fifteen years prior to the establishment of the University, the College was known as the "Madras University." "Well, Sir," he said, "if the University borrowed its name from the Presidency College, I may say that it (the University) has done its best to repay the debt to the College, may I add, without seeking the aid of any special legislation, by associating the Principal and Professors of the College with the work of the University in the fullest measure."

The Principal had, he continued, rightly referred to the great work done by the science professors of the College, in introducing and shaping the Advanced Courses in Science in the University, and in providing for facilities in the College for scientific research. Mr. Runganathan said that he might say here that such help to the University had not been confined to Science alone. The Madras University had always had the benefit of the advice and assistance of the Principal and members of the staff of the College, not only in connection with its courses and examinations and its departments of study and research, but in almost all aspects of university work. The College had sent some of its men to hold administrative and executive posts in the University. Six professors of the College had, at various times, beginning so early as 1875 with Dr. David Duncan, officiated as Registrars of the University of Madras, and in recent years two of his immediate predecessors in office



Members of the College seated
in the Gallery.



Guests at Tea—A General View.



His Excellency talking to the Principal.

came from the Presidency College. Flanked as it was on one side by the new University Buildings and on the other by the Examination Hall of the University, it was symbolic of the importance and vital part which the College had played in the academic life and work of the University. He wished that it would flourish long and maintain the very high standards of educational training and discipline which they had learnt to associate with it.

The ceremony over, tea was served to the guests in the Quadrangle of the New Buildings, and to the members of the College in Fyson Park.

After tea, His Excellency the Governor, Lady Marjorie Erskine and the guests went round the Science Exhibition, held in connection with the Opening Ceremony.

We are glad to note that all the members of the College contributed to the success of this function, which will always be memorable as the last landmark in the first century of our history. We are very grateful to all those who by their hard work, courteous behaviour and regard for orderly arrangement contributed to the happiness of this function.

The Wanderers

I said, " But, father, this is scarcely fair.
You bid me follow, and I cannot see
The path before me, and the night is dark.
I stumble upon stones and thorns, unblest.
My feet can bear no more. The very air
Is out of breath and weary. Must it be
Such endless wandering? Will nothing mark
That we have reached the goal and so may rest? "

I heard him laughing as he walked ahead.
I heard him answer, " Fear not, follow me."
I had no guide to lead me but his voice;
And he was cruel, and my feet were sore.
I thought, " He knows the path and knows to tread
With perfect ease and comfort. How it be
With others does not vex him, for his joys
Are self-engrossed. His slave am I, no more."

I stopped and wept. I could not hide my grief.
He turned and came to me. I placed my head
Upon his shoulder. With such gentleness
As I had never known in mortal life
He pressed me to his heart. I felt a thief
So clinging to his pity. And he said,
" My child, I know your grief, but little less,
Believe me, is my own. Yes, mine the strife,
" And mine the weariness, and mine the pain.
The path is now not clearer unto me
Than 'tis to you. I cannot point the goal.
I only know that we must wander on
And be prepared to suffer. What the gain—
And whether there be such—I cannot see.
At least you have a father; and your soul
May seek his strength and counsel. I have none."

BURRA V. SUBRAHMANYAM
(Old Boy).



Women Students at Tea

E. T. Chengalvarayan



Members of the College at Tea in Fyson
Park—A General view.



A Group of III Class Students at Tea.

Itinerant Research

BY the peculiar process of association of ideas, the word 'Research' recalls to one's mind an awe-inspiring building with grim looking dons trudging to and fro, or long rows of book shelves, or a perplexing array of apparatus, as the case may be. But this was not the type of research that the Botany section of our College undertook last week. It was a research into the immeasurable expanses of manless and beast-ridden forest desert. Somehow or other, I was thought to be the most suitable individual to be in charge of an itinerary to the Amredi forest in the North Arcot District in the vicinity of Vellore. I do not know how I acquitted myself in this task ; but it goes without saying that the High Command in charge of this excursion was all geniality, courtesy, fun and pleasantness to all the participants, who were ten of the sex of the writer and six of the opposite.

We were scheduled to leave on Saturday at 5-30 in the Bus which was to take us to Amredi, but could hardly stick to the scheduled time, owing to the late arrival of the cook. He came a little before 8 and we promptly started. Up to Vellore the transaction was, in students' parlance, 'dry' and even 'boring'. Double bullock-bandies with unpardonably callous drivers accomplishing locomotion at snail space ; and unsophisticated villagers going from one place to another—these were the only sights on the way. Poonamalle and Arcot, the only towns lying on our route, appeared to take little notice of us, although we sought to attract their attention by making all kinds of noises. Vellore came at last and we had breakfast.

Everybody sat down in his (or her) seat and the business of further travel began. Everything appeared to go on merrily. The road, which was no more than a

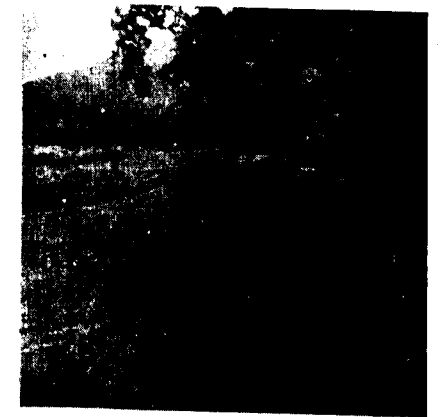
track here, gave us plenty of rocking and blasted all chance of the incidence of indigestion. Not less than thirty streamlets came on our way, and on every one of these occasions the driver, with a polite but firm courtesy, made it plain that the bus was not equal to the double task of negotiating the road and carrying us also; the result was we had to get down every now and then and walk a little distance. Those of my companions who were smartly dressed had an experience not altogether enviable—especially our friend Rai. It went on like this till we reached a Rest House at 4 o'clock in the evening, where we were told that we had taken the wrong route. There was nothing for it but to retrace our steps for some eight or nine miles. At last, when it was dusk, we reached our destination!

The gratification of a keen appetite fostered by a jolting rural journey became a matter of urgent importance. The member in charge rose equal to the occasion; and we did full justice to the dishes of Semia Kesari and Bajji placed before us. We then started on our mission, but it must be admitted that we achieved only a very moderate degree of success in it, as it was getting dark rapidly. We returned therefore with a feeling of complacency. Our host had prepared a superb supper; music followed. Krishnamurti and Miss Saraswati gave us a few choice Carnatic pieces, and Kurien and Miss Gordon a few European pieces. It was past ten and sleep overtook us before we could realize it.

It was an uninterrupted night of fine sleep and every one got up wholesomely refreshed. The river bath was really exhilarating and we got ready again for the deal. Chota Hazri was over at 7 and we sallied out. There was no other humanity in the entire range of Amredi except the Botanical section of the Presidency College and the density of the Forest added considerably to this lonely feeling. Prof. Narasinga Rao expatiated to us, in an amusingly semi-formal vein, on the peculiarities of the specimens we were



Amredi Forest—A view.



One of the streamlets that we crossed.



"Before our Rest House."

Photos by N. Anantanarayanan.

gathering, while Anantanarayanan's camera clicked frequently. Much good work was done till 11 o'clock, when we retraced our steps.

Mr. Narasinga Rao peremptorily commanded us to leave the place at once for Vellore, which we did. As it was unanimously felt that Vellore fort should not be eliminated in the sight-seeing side of the business, the Professor yielded and the company lost itself for a while in the emotional excitement of looking at the various scenes of historical import in the Fort. Afterwards we had Coffee in a hotel which I am afraid was not equal to the task, presumably because packs of guests twenty strong were few and far between in moffussil cafes.

We were in our seats again and sweet home was in the process of steady realization ; and it was 8 P. M. when Paradise was regained.

Madras, }
20-1-38. }

R. SANTANAM,
III B. Sc. (Botany)

Why is a bride given away ?

Because no one could possibly pay the price for her real value.

* * * *

Dr. Sir Muhammad Iqbal

“If the Peacock Throne is the pride of Persia and the lustrous Kohinoor the glory of the British Crown, Iqbal would surely adorn the court of the Muses in any country”—thus wrote Sir Zulfiqar Ali Khan in truly oriental style of the subject of this article. The man to whom Mussolini gave an hour and a half's interview and also sent a telegram on his sixtieth birth day (9th January 1938) is no mean individual. By unanimous consent Iqbal is the greatest Muslim poet and thinker of India.

Our philosopher-poet was born in 1878 at Sialkot, Punjab, in a middle-class Muslim family of sufistic trend of thought which influenced him greatly through the writings of Persian mystic poets like Jalaluddin Rumi (1207-1273), the author of the famous *Masnavi*. Iqbal is a distant cousin of Sir Tej Bahadur Sapru. One of Iqbal's ancestors, a Kashmiri Brahman of the Sapru family, embraced Islam about two hundred and thirty years ago. [During the sessions of the Second Round Table Conference, in 1932, Sir Tej Bahadur Sapru flabbergasted the assembly by referring to Sheikh Muhammad Iqbal as his cousin and had to explain his relationship.] Iqbal passed his school days in a local Government school in his home town and studied Arabic and Persian as well as the Urdu poets like Ghalib, Zok, Mir and Hali. His inclination and wide study led him to try his hand at poetry and send his verses for correction to Mirza Khan Dag (1831-1905) of Delhi, who was considered the greatest poet of his day, and who was the tutor of the Nizam of Hyderabad. Dag returned Iqbal's verses with the remark that they needed no correction. The germs of true poetry were in the budding poet.



SIR MUHAMMAD IQBAL.

Courtesy, "Deccan Times."

After having matriculated, Iqbal joined the Scotch Mission College at Sialkot, where he was fortunate in having a famous Arabic and Persian scholar in the person of Syed Mir Hasan for his tutor. Through him his interest in philosophical speculation was increased and Iqbal became an adept in the classical lore of Sanskrit, Arabic and Persian and in the study of Islamic culture. For his B. A. course he joined the Lahore Government College, from where he graduated and found a friend, philosopher and guide in Sir Thomas Arnold, the great Oriental scholar, who had come from the Muslim University of Aligarh. Arnold perceived his bent of mind and ungrudgingly helped him, thus keeping alive the interest created in Iqbal by Syed Mir Hasan.

His entertainment in the Lahore College in 1900 marked the beginning of his poetical career. From that time he was taken to *mushairas* (poetical assemblies) by his college mates. In one of these poetical gatherings Iqbal read his poem on the Himalayas, which was a patriotic piece. This at once proclaimed him to be a national poet. The "Himalayas" was written under the double influence of English and Persian and had something of the lyricism of Shelley.

During the years 1901-1905, Iqbal's poetry shows both English and Persian influences. He wrote several pieces on English models—as *Hamdardi* (Cowper's "Sympathy"), *Piām-i-Subh* (Longfellow's "Message of the Morning"), *Ishk aur Maut* (Tennyson's "Love and Death"), *Rukhsat-ai-Bazm-jahan* (Emerson's "Farewell O World") and *Ek Pahar and Ek Gulheri* (The Squirrel and the Mountain)—show.

After becoming a Master of Arts, Iqbal was appointed Lecturer in History and Philosophy, and subsequently Assistant Professor in English and Philosophy at the Government College, Lahore. His passion for philosophical pursuit took him to England in 1905 where

he met such well-known scholars as McTaggart, the Hegelian, E. G. Browne, the author of the monumental history of Persian literature, R. A. Nicholson, Lecturer in Persian, and W. R. Sorley, Professor of Moral Philosophy in the University of Cambridge. For three years he was in Europe and the fruit of his researches was his thesis on the 'Development of Persian Thought,' which was accepted by the University of Munich for his doctorate. After his return from Germany to England, Iqbal joined the London School of Political Science and at the same time qualified for the Bar. While in London he delivered six lectures on 'Islam' and acted as Professor of Arabic for six months in London University during Professor Arnold's absence.

During his stay in England Iqbal wrote very little poetry, but the little he wrote bears the imprint of Persian romanticism. Love dominates this stage of his poetry. What is love? he asks himself. What is the truth in beauty? What is the relation of beauty and love? What is fulfilment? He bursts in a rhapsody "on seeing a cat in her lap;" he celebrates "the splendour of her beauty;" he writes "messages of love," he weeps on the irony of "separation," and idolises the moon and the stars. True to the traditions of the Oriental poets he does not regard earthly love as real; for him it is the stepping-stone to God whose love alone is true and desirable. Iqbal has a glimpse of the secret and so he sings of the God-intoxicated genius, Swami Ram Tirtha. And then in poems like *Kali* (Bud), *Tanhai* (Solitude), and 'An Evening near the River Neckar' Iqbal seems to have got himself free from the love bound by space and time, and to have reached the realms of divine love. As the ecstasy of love's youthful fire had burnt itself out, Iqbal found the atmosphere of Europe uncongenial to him. The weak points in European civilization forced themselves on his thought and therefore he warned the West of the dangers inherent in its blind

devotion to matter and the enjoyment of the senses in a poem, the last he wrote in Europe, entitled "March 1908."

"O Ye that in western lands reside, learn, God's home is
not a business concern,
The gold you think is pure, soon shall impure turn.
A suicide's death awaits your civilization;
A slender bough to rest a nest is no safe position."

This is Iqbal's parting word to the West. In July 1908 he returned home and practised as a lawyer and in leisure wrote poetry. In 1923 a Knighthood was conferred on him and in 1924 he was elected a member of the Punjab Legislative Council. In 1932 he was sent to England as a delegate to the Round Table Conference. He was for some time the President of the Muslim League and was also invited to help setting up a University in Kabul.

Iqbal's is a many-sided personality. If he is prominent in the world of Urdu poetry, he is no less so in philosophy and politics. You cannot separate his poetry from politics as you cannot separate Dante's from Florentine politics. He is the harbinger of a New Age in the life of the Muslims and like Hali before him he sings of the past and reproaches the indolent Muslim and rouses him from his lethargy to action. "Woe to a people that resigns itself to death" is his cry. Once passing through the Straits of Messina on a voyage to England, he happened to cast his eyes on the Sicilian coast. It reminded him of the days when the Arabs held sway in that island. He sheds bitter tears and says—

"Weep to thy heart's content, O blood-weeping eye,
Yonder is visible the grave of Muslim culture.
Once this place was the tent of those dwellers of the desert,
For whose ships the ocean was a playground,
Who raised earthquakes in the courts of mighty emperors,
In whose sabres lay hidden life-scorching flames,

Whose birth tolled the knell of effete ideals,
 With whose fear the strongholds of falsehood trembled,
 Whose electric touch revived life into the world,
 And broke the chains of superstition.
 Once thou wert the cradle of the civilization of this race,
 The fire of whose glance was world-captivating beauty.
 To sing the dirge of thy ruin has fallen to my lot ;
 This torture—yea, self-torture was reserved for me.
 Tell me of thy anguish ; I too am full of pain ;
 I am the dust raised by that caravan which
 Once broke its journey here.
 Paint to me that picture of old,
 Rouse me by telling the tale of bygone days ;
 And I shall carry thy gift to India,
 And make others weep as I weep now." (Sicily).

He is aware of the importance of his office, for he has not said that a poet is the eye of the nation and if a single member of the body ails the eye weeps ? In his "*Shikwa*," or complaint to God, he seems to ask : Why are the Muslim races in the throes of misery ?

"We live by forming ideals,
 We glow with the sunbeams of desire !"

He believes in the purpose of life and its fulfilment.

"Life is preserved by purpose :
 Because of the goal its caravan-bell tinkles.
 Life is latent in seeking,
 Its origin is hidden in desire."

He is conscious of his high destiny and proclaims himself a prophet, not of to-day but of tomorrow :

"I have no need of the ear of to-day,
 I am the voice of the poet of tomorrow."

Iqbal is an ardent believer in life and criticises Plato for holding death rather than life as the ideal. "To die" said Plato, "is the secret of life."

He is an optimist out and out, and knows "the joy of living." He knows that only by self-affirmation, self-expression and self-development can the Muslims once more become strong and free. Like Omar Khayyam, the astronomer-poet of Persia, who wished

"Ah love ! could thou and I with Fate conspire
 To grasp this sorry scheme of things entire,
 Would not we shatter it to bits—and then
 Remould it nearer to the Heart's desire !"

and Bertrand Russell, who said that had he been a god he would have created a better world full of happiness, Iqbal has his Utopia in a better world with the fellowship of the whole of humanity.

But Iqbal is not only a poet of humanity but a patriot to the core. The love of his country and the dazzling vision of its future have found utterance in language of passionate and superb excellence. With the hope of uniting the several elements in India, Iqbal sings of "our India which lives while Greece and Rome and Egypt lie dead." Like his fellow-poet, Pundit Burj Narayan Chakbast's "O ashes of Ind, there is no doubt about your greatness," Iqbal glories in India. And in his *Nia Shiwala* (the New Temple) he sings of universal worship, where

"Our pilgrimage will be higher than all the
 pilgrimages of this world.

We will raise the pinnacles of our temple to
 meet the very edge of the sky,

We will rise every morning to sing sweet hymns,
 We will dispense to all worshippers the wine of love "

for—

"Power and peace is in the song of the devoted ;
 The true end of man on earth is to love each other."

It is the message of a poet, for poets are, in the words of Bailey, those

"..... who feel great truths,
 And tell them : and the truth of truth's love."

Iqbal is the man for "Liberty, Equality and Fraternity"; but he would like to see it put into practice in a harmless, peaceful and gradual way. He is the last man for violence of any sort. He is the apostle of the Prophet's ideal of equality of mankind, for do we not remember his "*Shikwa*" (Complaint to God) wherein he says:—

"In one row stood Mahmood and Ayaz
Neither was he a master nor he a slave."

Mahmood of Ghazni had a slave named Ayaz and whenever the time for prayer approached they stood side by side for prayers. There was no distinction between the master and the slave: all were equal in the eye of God.

Perhaps Iqbal's ideal is that of Alfred Austin:—

"The time will come when men
Will be as free and equal as the waves,
That seem to jostle, but never jar."

For he seems to be in a perplexity with all this talk of the safe-guarding of one's own interests where selfishness is prominent, and where the parts seem to care a straw for the whole!

Iqbal's advice to the ideal Muslim is, come what may, to

"Be a man of honour, and like the bubble,
Keep thy cup inverted even in the midst of the sea."

Poetry is a brain racking subject and Pegasus is not ridden so very easily as the horses at Guindy. Iqbal is not a very voluminous writer, but the quality of his work is always high.

His first book on philosophy was the thesis for his doctorate, "The Development of Metaphysics in Persia," published in 1908. It is an illuminating little treatise, soundly written, and important, for it is still the only book on the history of Persian philosophy. In 1915 was published his long philosophical poem *Asrar-i-Khudi* (Secrets

of Self) in Persian which was translated into English by Professor Nicholson in 1920. It is composed in the metre and modelled on the style of the famous *Masnavi* of Rumi, and deals with the life of the individual Muslim. On its first appearance 'The Secrets of Self' took by storm the younger generation. "Iqbal," wrote one of them "has come amongst us as a Messiah and has stirred the dead with life." Herbert Read, poet and critic, remarked that it is "a poem that crystallises in its beauty the most essential phases of modern philosophy, making a unity of faith out of its multiplicity of ideas, a universal inspiration out of the esoteric logic of the schools." It is a remarkable attempt to present a vigorous philosophy through the vehicle of poetry. Iqbal has also given a short account of his philosophy in the Introduction to the English translation of the poem. The clue to the source of this poem is given by Iqbal in the lines

"Then appeared the Master, formed in the mould of truth,
Who wrote the Koran of Persia."

The 'Master' is none other than his inspirer Jalaluddin Rumi. In 1918 another volume of Persian poetry, *Ramuz-i-Bekhudi* (Mysteries of Selflessness), followed which dealt with the life of the Muslim community; where the trend of thought is the same as in the previous volume.

In response to Goethe's West-Oestlicher Divan, Iqbal sent forth *Pyam-i-Mashrik* (The Message of the East) in Persian consisting of short poems grouped together on the line of Goethe's Divan. The *Pyam* and his *Zabur-i-Ajm* (Psalm of Persia), a long Persian poem in two parts, reiterate the philosophical position of the *Asrar* and *Ramuz*, only working it out with more detail and relating it to other systems of thought with an echo of their themes:—

"Knowest thou life's secret? Neither seek nor take
A heart unwounded by the thorn, Desire.
Live as the mountain, self-secure and strong,

Not as the sticks and straws that dance along,
For fierce is the wind and merciless is the fire."

Iqbal's general complaint against western life and thought is that

"Amassing love, thou hast lost thy heart to-day.
Ah, what a precious boon thou hast given away!"

While the League of Nations comes in for this:

"To the end that wars may cease on this planet, the
suffering
Peoples of the world have founded a new institution.
So far as I can see, it amounts to this: a number of
undertakers have
Formed a company to allot the graves."

Iqbal has chosen the Persian language as his medium, as it is fit to convey his high flown thoughts and has adequate vocabulary and can appeal to a wider public outside India.

In 1924 was published Iqbal's collection of Urdu verse in a volume called *Bangi Dira* (Sound of the Bell), a text-book for the B. A. Examination of the Madras University, and then came in 1932 *Javid Namah* (The Everlasting Letter) which is a Dante's Vision in Urdu, and recently *Musafir* (Traveller), *Bal-i-Jibriel* (Wings of Gabriel) and *Dharb-i-Kalim* (The Rod of Moses).

Iqbal also wrote a book on economics in Urdu during his professorship at Government College, Lahore; but it is not easily available now.

His six English lectures on Islamic thought delivered at the Lawley Hall, Madras, in 1929, have also been brought out as a book under the title "Lectures on Religious Construction in Islam," and in 1934 came his "Reconstruction of Religious Thought in Islam."

In addition to English translations of Iqbal's poetry there are also translations in Arabic, Turkish, and Russian.

The 'Secrets of Self' has been done in Russian. In Germany there is an Iqbal Society to propagate his philosophical teaching and poetry.

Iqbal has brought infinite variety to Urdu poetry, writing on all kinds of subjects—love, religion, philosophy, nationalism, love of nature, pan-Islamism. He has written lyrics, elegies, odes and panegyrics. He has translated several English poems and has also given to Urdu readers a translation of the 'Gayatri' from Sanskrit. His poems on the Himalayas, the New Moon, and the Banks of the Ravi are good examples of his appreciation of beauty in nature. Of his pure nature lyrics the poem beginning "I am bored with the assemblies of the world" is a fine example. There he describes his "sequestered vale," his lake Isle of Innisfree, where he would like to live free from the bustle of the world. The poem is full of beautiful images such as these:

'The flower-laden twigs bend down to touch the water
as some fair one looks into a mirror; when the sun adorns
his bride, the evening, with myrtle, every flower is robed in
golden garb; the rosy hue of sunset is reluctant to leave
the valley as a lover the lane of his beloved'—true oriental
colouring.

Nature is in his poetry a background for human emotions. His 'Plaint of Beauty' is a dainty lyric which expresses his regret that beauty is short-lived:—

"Great God!—thus beauty unto Allah cried—
'Ah! why is immortality denied
To me on earth? Am I not lovely there?'
And lo! an awful voice to her replied:

'The world an empty picture-show was made,
Where changing non-existence is displayed,
A night of nothingness is all its tale;
None there can beauteous be who do not fade.'

The Moon nearby o'erheard what then was said,
And soon throughout the skies the saying spread,
Until at length it reached the Morning Star,
And he to Dawn conveyed the answer dread.

The Dawn to Dew retold it word for word,
And thus an earth-born creature also heard
A matter of high heaven. Next 'twas the Flower
Received it with a tear, at heart sore stirred.

Then dark with grief grew e'en the bud's wee-heart ;
From garden bowers did weeping Spring depart ;
And youth who there had strolled for pleasure's sake,
Sick-souled turned slow away with sorrow's smart."

Often, Iqbal's emotions are woven with philosophical meditations. His "Candle and the Moth" is an allegory about man and his aspirations. The candle is the torch of knowledge and the little moth is man ; and the poet finishes on a truly romantic note of wonder that the moth, a little insect, should aspire for light. Perhaps this is an echo from the *Divan of Shams-i-Tabriz* :—

"Thou [the moth] wilt never endure without the flame,
When thou hast known the rapture of burning ;
If the water of life should come to thee, it
Would not stir thee from the flame."

Iqbal's poetry has imaginative glow, fineness of perception, a language bedecked and bejewelled and a sense of catholicity. It is true that at times we encounter depression and despair ; but despite all these, hope struggles and triumphs. The deep gloom of his country's present position only intensifies his confidence in the sureness and brightness of its future. In him the charms of the ideal ; the sincere worship of the beautiful ; the love of his country ; the dazzling vision of its future—all have found utterance in

language of incomparable beauty. In one of his Urdu poems (a prayer of the poet uttered at dawn to breathe the secret of his newly awakened consciousness) the words are so exquisitely musical that it has become a sort of rosary to his admirers :

"When the world illumining sun
Rushed upon the night like a brigand,
My weeping bedewed the face of the rose,
My tears washed sleep away from the eyes of the narcissus,
My passion waked the grass and made it grow.....
My being was an unfinished statue,
Uncomely, worthless, and good for nothing.
Love chiselled me ; I became a man
And gained knowledge of the nature of the Universe,
I have seen the movement of the sinews of the sky,
And the blood coursing in the veins of the moon."

The East and West have met in Iqbal though Kipling said, 'Never the twain shall meet.' Though severe in his judgments of the West, he is, however, grateful to England :

"An Eastern tasted once the wine in Europe's glass,
No wonder if he broke old vows in reckless glee.
The blood came surging up in his new-born thought,
Predestination's bond slave, he learnt that man is free.
Let not thy soul be vexed with the drunkard's noise
and rout !
O Sagi, tell me fairly who 'twas that broached this jar.
The scent of the rose showed first the way into the garden,
Else how should the nightingale have known that roses
are ?"

His hatred of despotism and love of freedom shine forth in the following verses :—

"Clad in the cotton rags I toil as a slave for hire,
To earn for an idle master his silk attire,
The Governor's ruby seal 'tis my sweat that buys,
His horse is gemmed with tears from my children's eyes."

(Workman's Song).

Thus Iqbal's learning, his character, originality and his mastery over language and versification, coupled with his understanding of life, entitle him to a very high place in Urdu literature.

MD. MUTHAHAR,
Class III (History)

What is the difference between a Judge and a Law ?

The Judge is a speaking Law, while the Law is a silent Judge.

• • • • •
Which is the lightest place in Ireland ?

Cork.

• • • • •
How many sides has a circle ?

Two—the inner and the outer.

• • • • •

The Changes brought about by the Conquest of the Air in Modern Life*

FLYING has puzzled man even from the earliest times, as few things have. But in ancient times it was more an attribute of the angels than a thing to be attempted by man; and so, the first ascent into the air was made by the Montgolfiers in a balloon only in 1783. In spite of the spectacular interest it possessed, the balloon was cumbersome and unmanageable and was of little practical use. The real founders of aviation are, therefore, the Wright brothers, who constructed the first 'heavier-than-air' plane in 1905. The scepticism with which the news of this achievement was received was short-lived and aviation has ever since progressed by leaps and bounds. In 1905 Bleriot flew across the English Channel; in 1910 Chaves flew over the Alps and in 1927 Lindbergh crossed the Atlantic. Air races were held frequently, air mails and air services were established and now all the great countries of the world are linked by a network of air-ways. Aviation is not only wide-spread—it is also popular. The winners of the air races are as much honoured as the winners of the Olympian games. Famous aviators like Lindbergh and Bleriot are even now acclaimed as national heroes. When Col. Lindbergh landed in Paris after his trans-Atlantic flight, he was greeted by the Frenchmen as if he were a Danton or a Napoleon. Undoubtedly, aviation has caught the imagination of man and it is so popular and wide-spread that it cannot but exert a great power for good or for evil. To human progress it has sometimes been a great help but more often a great hindrance. It has revolutionized science and transport, politics and warfare, and on the whole, with the possible exception of the radio, no other invention has

* The Lord Elphinstone Prize Essay.

exerted such a profound and far-reaching influence on man and his civilisation.

Of all the changes brought about by aviation, the most profound but least perceptible is a psychological one. In the last century, scepticism reigned supreme not only in the realms of religion but in those of science. Even great poets and philosophers received every scientific invention with laughter and ridicule. There was scarcely anyone who was not afraid that a swiftly-moving engine would be flung off the rails and did not believe that Stephenson was a homicidal maniac. Great doctors and preachers bitterly opposed vaccination. Sir Walter Scott pooh-poohed the idea of gas-lighting. Byron was sarcastic about all inventions. Butler was satirical about all machines. But, in the end, the patience of the inventors triumphed over the virulence of the conservatives and the success of the vaccine, the steam-engine and the gas lamp was assured. Scepticism received a great shock; it staggered under the blow, but did not succumb to it. For even at the beginning of this century, many people denied that wireless telegraphy was possible; but Marconi succeeded in inventing the radio. Men and women refused to believe that flying was possible; but the Wrights succeeded in constructing the aeroplane. That was the last straw—scepticism broke under the weight of this new triumph of science. People began to be less conservative; inventors began to be received if not with honour, at least with tolerance; and slowly, scepticism gave place to credulity. When scientists declared in 1920 that television was possible, nobody had the courage to disbelieve it. For, public opinion is like a pendulum,—it goes from one extreme to the other. And, in fact, people are beginning to err on the other side; for, while they are too sceptical about the miracles of religion, they are too credulous about the marvels of science. Those who did not believe that men could fly in the air, believe now that he can fly to the moon and the stars; and those, who did not believe that an engine

could be driven by steam power, imagine that it can be driven by atomic energy. Or, as Bernard Shaw puts it, "Journalists are too poorly paid to know much about anything, but even their ravings about science are devoured by the credulous public. People are sure to be taken in by anything that bears the name of Science. They have no belief in the Resurrection or in the miracles of the Saints but they are ready to believe that all diseases can be cured by radium and that they can live for ever by drinking buttermilk." Great modern thinkers testify to this change and are convinced that the "era of science has begun, attended by scientific superstition." Undoubtedly, scepticism, in the realm of science at least, has become a thing of the past. Our outlook on what is new and strange has considerably altered, and the psychological effect that the construction of the aeroplane had in bringing about this change has been no small one.

The changes brought about by aviation in transport and communication are easier to perceive and are of greater utility to humanity than this change in public opinion. Man can travel at a greater speed with more of comfort and less of risk than ever before. The car or the ship, the train or even the tornado cannot travel faster than the air-liner, and this swiftness of locomotion has enabled us to overcome the limitations of space and time. Great distances can be traversed in short intervals of time. The Atlantic can be, and has been, crossed in a day, the Pacific in two days and even a journey round the world takes no more than a fortnight. For all terrestrial purposes, space can be said to have been annihilated; time has, undoubtedly, been saved to a great extent; and even if the conquest of the air had brought about no other change, mankind would yet be grateful to the pioneers of aviation for this alone. But this speed has not been achieved at the price of safety, and though, many people still imagine that since man is able to travel at a break-neck speed, he will certainly

break his neck, the aeroplane is really no less safe than any other means of transport. As a matter of fact, in recent times, the casualties in the air or while landing have been fewer than the accidents in the streets of London or New York. And even the plane-crashes that occur occasionally are due to the enthusiasm of the amateurs and the desire to create new records of the experienced; but even these are no more numerous than the car-smashes that occur in motor-racing. Even now ingenious devices have been constructed to minimise the dangers of flying, and, already, the weather forecast, the helium tank and the Mayo composite air-craft have made flying in the air as safe as sailing in the sea. Aviation has been made not only dangerless but also delightful. A long railway journey is nerve-racking and a long sea journey is monotonous, but a journey by the air has neither the discomfort of the one nor the tedium of the other. The air-liners are filled with every comfort and the *de-luxe* liners are fitted with every luxury that human happiness requires. The traveller by the air feels neither the eternal clatter of the train nor the sickening roll of the sea. The journey is throughout smooth and beautiful; the view is magnificent and the scenery splendid. In point of speed, safety or comfort the aeroplane is unrivalled and is superior to the car, the train and the ship. But the aeroplane is incapable of carrying great loads without grave risk. So it cannot entirely supersede other means of transport; and trade and commerce will still be carried on by sea or land and only rarely by the air. But, for carrying light loads, the aeroplane is ideal and this has been shown by the great success of the air mails and the air services. In the near future the air may be the chief, if not the only, highway for long distance mails and long distance passenger traffic and for the carriage of most valuable and compact commodities. The Ocean-ways are likely to be only the ways for slow travel and for staple and bulky trade. This swift means of transport and com-

munication has brought even distant lands into close contact and the huge network of airways that is spread over the world is a strong tie that binds together the nations of the world. Mankind consists no longer of a group of isolated and unconnected nations. It is one huge family and the members of the family may be amicable and love one another, they may be quarrelsome and hate one another, but they cannot hope to be indifferent to one another. The events that occur in one place influence the trend of events elsewhere; and the misery or prosperity of one nation has a great effect on the well-being of another. Mankind has become united, though the union is neither a harmonious nor a voluntary one. Anyhow, progress is no longer confined to individuals or States: it has become the concern of the whole of humanity.

Aviation has also brought about some minor changes: surveying is no longer a job that taxes human patience and endurance. From the air, the world looks like a huge map spread below and so, the task of the surveyor is simplified. In fact, such speed has been attained in surveying that all the land that was surveyed formerly in Australia in ten years can now be surveyed in ten days. In times of war, the aeroplane is useful in reconnoitring and in determining the strength and position of the enemy. In times of peace, it is invaluable in policing and especially in preventing smuggling. It has also been of great importance in other fields. One of the major problems that Canada has to solve is the frequent outbreak of fires in her vast forests. But, now, a fire can be detected, reached and extinguished in no time. In India aviation is in its infancy and an aeroplane is still a thing to be gaped at, but even here the influence of the conquest of the air has been great. For India suffers frequently from floods and famines; and rescue work in the case of the one and relief work in the case of the other have been greatly facilitated by the use of the aeroplane. Food can be carried to distressed areas in a

short time and the sufferings of the people can be made less acute. In countries like Jamaica where there are no facilities for quick travel, medical relief is obtained nowadays in a day or two by the air while it used to take months before; and this ambulance work has been one of the most useful things made possible by the conquest of the air. The uses in advertisement are well-known. The research into locust-fighting from the air has also proved of great use. Mankind has also to be thankful to the terror of aerial bombardment for the change that it has brought about in architecture. For, tall buildings offer the best targets during an air raid and so are soon destroyed; consequently, in countries where Mars is worshipped ardently and even fanatically, they are becoming less and less common. A sky-scraper possesses neither the magnificence of a castle nor the loveliness of a cottage; and there will be few to mourn the disappearance of that huge and ugly building, which looks more like a colossal temple of some monstrous creature than a human habitation. Aviation has also increased our scientific knowledge. Perhaps next to man, the worst thing about our planet is its climate. It is as fickle, as treacherous and as terrible as man himself and has not so far been studied or explained satisfactorily. But with the coming of the aeroplane, the exploration of the stratosphere and the study of our climate have greatly advanced and it is even possible that in the near future, man may soar above the region of the clouds and the winds, the squalls and the storms, and fly in the perfect serenity of the upper atmosphere. It is also well-known that the aeroplane was the means of confirming the existence of cosmic rays and this has revolutionised our conception of the atom and has modified our views about stellar structure.

The benefits that aviation has bestowed on mankind have indeed been numerous; we appreciate them and we enjoy them, but are not satisfied with them. Utility is

not an end in itself and unless it is supplemented by beauty as well, it will never catch the imagination of mankind. The human heart hankers after the romantic and the beautiful. The steam-engine has no doubt been invaluable but very few ever went into raptures over it, for a railway journey is dull and prosaic and is endured rather than enjoyed. Aviation has, on the other hand, met with universal popularity; the East admires it and the West is crazy about it. And the secret of its success lies not in its utility but in its charm. The very history of aviation reads like a great romance. To fly—what sweet magic is contained in that phrase! how profoundly it has moved man throughout the ages! It was the dream of the ancients, the desire of the Victorians and the achievement of the moderns. While the dream was sweet and the desire was great, the achievement has been heroic. With all the ardour of a first love and the zeal of an enthusiast, men have laboured to materialize the age-old dream of mankind and have spared neither effort nor time nor money. "To dare, still to dare and ever to dare—progress is at this price." And men have dared and even died for the progress of aviation, and though the price was great, the victory was theirs, and the epic struggle for the mastery of a new element was over. Formerly, man could travel faster than the horse or the hare, he could swim like the fishes of the sea but now he can fly like the fowls of the air. And this new achievement of his has brought about a great change in modern life, for it has given him confidence in his powers and courage in facing the future. In the history of mankind, great acts have ever been the inspiration of greater achievements. The conquest of the air has inspired man to greater conquests and has encouraged him in the exploration of the unknown. He has landed on the inaccessible Shiva's plateau in California. He has conquered the Everest. He has flown over the Poles. He has soared into the stratosphere. Great achievements! But they are only the prelude to still

greater ones! Also an air-ride is a thing of beauty and a thing of joy; for, from the air we perceive neither the squalor of the slums nor the ugliness of the cities. The land assumes a new beauty and looks like a landscape in fairyland. In fact, the first use to which the gift of flying was put was in giving people the thrill and the pleasure of joy-rides. Surely, aviation is not merely useful or harmful—it is beautiful. It has opened new realms of beauty; and it has opened new avenues of exploration and new fields of research, where the eternal spirit of adventure in man can seek new thrills, new delights and new adventures. And when the benefits it has conferred have been forgotten, and the scars it has inflicted have been healed, mankind will still remember with a thrill of pride and pleasure the exploits of the Wrights and the Bleriot, the Byrds and the Amundsens, the Mollisons and Lilienthals; and while the rest of the changes will soon be forgotten, this legacy of heroic deeds will live as long as man himself.

In public opinion aviation has brought about a change; in our means of transport it has effected an improvement; but in politics it has worked a revolution. Petty nations have grown to be mighty powers and powerful races have been reduced to servitude. Air-minded nations have leapt to the fore-front, while old-fashioned ones have lost their power, prominence and even liberty. For, the greatness of a nation now depends less on the strength of the army and the might of the navy than on the efficiency of the air force. And this is best illustrated by the power of Russia and Japan, and the plight of China and Abyssinia. Routed in the war with the Japanese and ruined by the war with the Germans, Russia was perhaps the weakest and the poorest nation in Europe after the War. But now, she stands on a par with the greatest powers of the world. France is her ally, Britain is her friend and in spite of their talk, neither Germany nor Italy dare provoke her. For, her air fleet is the strongest and the most efficient in the

world. It is the hope of the Socialists and the terror of Fascists. In fact, the brave defence of Madrid and of Shanghai is as much due to the aid of Soviet planes as to the heroism of the defenders. The rise of Japan has been no less spectacular and if she is now the strongest power in Asia and one of the strongest in the world, it is largely due to the might of her air fleet. And, in fact, it would have been impossible without the aid of her bombers to annex Manchukuo or conquer North China. The defeat of China and Abyssinia was brought about by bombing the cities and terrorising the civilians and, while the small air force of the Chinese enabled them to put up a brave resistance to the Japanese invasion, the Abyssinians, who knew no more about aerial bombardment than about atomic bombardment, went down before the Italians like reeds before the wind. No nation can now be said to be great if its air force is weak, and even the British Empire cannot be stable, unless the Royal Air Force is strengthened and modernized. For Britannia may rule the waves but her supremacy on the seas will avail her little with bombs exploding on the deck, torpedoes hitting the sides and mines blowing the ship itself to pieces! If Britain is to maintain her present position as the strongest and richest nation in the world, she has to be not only the mistress of the seas but also the empress of the air. This the British learnt to their cost in the Great War and so in the present rearmament programme, anti-air raid measures and the strengthening of the Air Force have assumed greater importance than the mechanisation of the army and the navy. This terror of air-raids is not restricted to any one nation—it is universal. Fear rules the world—"fear of the ally who may at any time turn traitor, fear of the enemy who may grow too strong, but, above all, fear of the bombing plane and the terrors of modern warfare." No nation is secure which is not protected against air-raids and the best protection is attack.

So this fear compels the nations of the world to arm and arm for the armageddon, when the inevitable clash between conflicting interests and ideologies will take place. But, if we are to believe the reports of the strength of the various nations, the clash, when it does occur, will be on a scale that staggers the imagination; and will only end when the combatants are too exhausted to fight. But the world is not yet prepared for such a war and the statesmen and the politicians frantically try to avert it. Like a Damocles' sword the terror of war hangs over their heads, and they try to escape from it, by not angering each other and by closing their eyes to the misdeeds of others. When a nation violates the rights and liberties of another, and throws law and justice to the winds, nobody dare interfere—for it might lead to a world war! There is no one to enforce the law of justice or even to pay heed to it. So the acts of aggression multiply, the indifference of the onlookers increases and the law-breakers go scot-free. The primeval law of the jungle reigns supreme and everywhere there is the cry of "Victory to the strong! and woe to the vanquished!" A miserable state of affairs indeed! And the tragedy of it is that it could have been averted but for the obsession of war that has led to this foolish, halting and suicidal policy of the leaders of the nations. Italy has conquered Abyssinia, the Fascists have almost conquered Spain, and Japan is conquering China, but the rest of the nations look on with pathetic indifference or, like children playing at a game of make-believe, pretend that they are doing the utmost in their power when they are doing nothing at all! They tried to enforce sanctions against Italy, but they had not the courage to enforce oil sanctions, which alone could have any effect. They are trying a non-intervention scheme but they dare not enforce the withdrawal of volunteers or even prevent the influx of more volunteers. They attended the Brussels Conference recently and found Japan guilty of aggression, but they did

not even talk of taking any steps against her! Thrice this act of wanton aggression has been committed and thrice the world looked on without trying to prevent it or punish it. And H. G. Wells' famous simile leaps to the mind—"Like penguins on a south sea island which stare stupidly at the slaughter of those beside them without even attempting to escape, they (the nations) look on with philosophical indifference at the fate of other nations, oblivious of the fact that their turn too will come soon and that Nemesis will overtake them." The conquest of the air is responsible for this sad state of the world, for it has made war a terrible thing and the nations are so afraid of it that they dare not prevent it. Little did the Wright brothers imagine that their little invention would have such far-reaching effects! To them it was merely a triumph of engineering skill, but now it has become the terror of mankind, the problem of politicians and the cause of world chaos.

All these changes that aviation has effected are as nothing before the changes it has brought about in warfare. There it is more than a transformation, it is a transfiguration. Its effect on the warfare of previous ages is like that of gunpowder on mediaeval chivalry. Formerly, each nation was represented by its army, and two or more of these fought on a battlefield and, more often than not, the victory was decisive. The casualties were no doubt high, but there was not much destruction of property or danger to civilians, except in rare cases. But now, all this has become a thing of the past and is of no greater use than the Roman phalanx or Mongol cavalry. Now, the battle is not with the army of the enemy but with every man, woman and child of the enemy's population. The battlefield is not one place but the whole of the enemy's country. The result of the engagement is never decisive and it is but rarely that the war is soon over. The main aim of each combatant is to terrorise the enemy into submission, or, in the picturesque words of Premier Konoye, "beat her to her

knees until she cries for mercy." Crops are burnt. Food is destroyed. Water-supplies are poisoned. Disease germs are showered down. Railways are bombed. Power stations are paralysed. Factories are razed to the ground. And most horrible of all, the war on the civilians and the unprotected is carried on without mercy and without intermission. The bombing planes circle overhead like avenging angels and the deadliest explosives that human ingenuity can invent are hurled down. As each hits the ground, there is a deafening crash and then a dazzling spurt of flame and, when the smoke lifts from the ground, what a scene meets the eye—the city in flames, heaps of the dead and the dying scattered over the ground, the air rent by the screams of the terrified and the shrieks of the wounded, and the rest running to and fro like frightened rabbits! The machine gun rattles mercilessly above and the men and women drop down like leaves in autumn. And when a plane is hit, it crashes to the ground setting ablaze a hundred houses and, even in its destruction, (like Samson) it crushes to death more of the unfortunates. Cyanogen and mustard gas are showered down to cause wounds and burns that make life a nightmare of torture, or else to bring about swift and merciful death. "It is not war—it is massacre."

Formerly man was afraid of a bolt from the blue, but now he is terrified by a bomb from the blue. And the fury of nature is as nothing before the wrath of man. At this murder by modern science and by the million—Torquemada would have been terrified, Caligula would have been frightened and Nero would have been shocked. And there is no end to it; as long as either nation has a plane, a pilot and a bomb, it will go on. When the end does come, it will be like the triumph of the dying over the dead and the victor and the vanquished will be equally exhausted. Mankind has already the nightmare of modern warfare and it is but the prelude to greater horrors to come. Even the Spanish Civil War is but a trial of strength between the disciples of

Marx and Mussolini. But it is sufficiently terrible to enable us to realize the grim significance of war to children and the poor. The tragedy of the Basques brings home to us with a poignant touch the misery of children when their fathers and mothers are fighting on the front or, as Lloyd George calls it "the terrible spectacle of children being massacred in their homes because of the loyalty of their fathers to freedom." The plight of the poor is no less pathetic. Their quarters are crowded and congested and they are the worst sufferers during an air-raid. In fact, all the German air-raids on London did not cause as much destruction of life as a single Japanese raid on the slums of Shanghai. "They live a dog's life and in the end are shot like dogs." And Christ's words ring in our ears: "From him that hath not shall be taken away even that which he hath." The capitalist system robs the labourer and the worker of every penny they earn, and now modern warfare robs them of the only thing they have—their life. The monstrous injustice of it all! and the senseless savagery! and how man wishes that aviation were an impossibility! To obtain it, he has laboured like Hercules, but he has suffered for it like Prometheus. For the gift and glory of flying is indeed a precious possession, but alas! it is like Pandora's gift. It has let loose all the furies of war, and it has made death and destruction possible on such a huge scale that man and his civilisation stand in danger of being wiped out of existence.

"When the gods wish to punish us they answer our prayers." Man prayed for the gift of flying, the gods answered his prayers and how terribly he is punished! Now he stands in danger of losing even the benefits the gift of flying has bestowed on him. For aviation is like Saturn—it devours the good that has sprung from it. All the beneficent changes it has brought about and even the progress of centuries can be wiped out by a single air-raid. The burning of the Cathedrals of Belgium, the bombing of the

Museums of art in Madrid and the destruction of the art treasures of Peking are but a few of the acts of vandalism possible during aerial warfare. Man seems to labour under Cassandra's curse—his knowledge is rarely used for good. He received the glorious gift of flying and is handing over to posterity the terrible legacy of modern warfare. Aviation can be as useful as it is harmful, but man has reaped little of the benefits that can be obtained, though he has utilised all the evil that can ensue. And the worst thing about it is that the future is gloomy and uncertain; and this uncertainty is about the future, not only of individuals and empires but also of humanity itself.

On the whole, of the effect of aviation on modern life we can but say that the good it has done has been great, that the evil it has wrought has been greater and that the good stands in danger of being wiped out by the evil. And this is best illustrated by the legend of Icaros and Daedalus; for it is more than a story, it is an allegory—the allegory of man and the gift of flying. Just as the Greek aviators escaped from the prison of Minos, he has also escaped from the limitations of space and time. Like Icaros he has been scorched by the sun of his own folly. Then the allegory is ambiguous. Will he be destroyed like Icaros? Will he reach his goal like Daedalus? The future is uncertain, but may God preserve us from the fate of Icaros!

V. JAGANNATHAN,
III (Hons.) Chemistry.

Which is the beginning of eternity,
the end of time and space,
the beginning of every end
and the end of every place?
The letter 'e.'

Can this be Love?

Can this be love?—I feel no wild desire
To take you in my arms. Your ruby lips,
To me, no promise hold of bliss divine.
Your voice is sweet and mellow as the lyre;
And yet, most often, half your talk just slips
My memory. I do not call you "Mine!"
"My own!" and gaze with ardent eyes upon
Your photograph. I can recall no hour
I've spent with you, when we have talked of things
More intimate than books.—And yet, each one,
Has left me more and more within your power.
I rise, when in your presence, as on wings
To Heaven, and I feel a calmness such
As children feel at Mother's soothing touch.

S. V. RAMANAIAH,
V Hons. (Physics)

Hidden Authors

Who is the warriors' author?
the youngest author? the oldest author?
the domestic author? the fastest author?
the tallest author? the humorous author?
one who is associated with hounds?
one who reminds you of fiery things?
one to whom many people have knelt?

Shakespeare, Child, Adams, Holmes, Swift, Long-
fellow, Whittier, Hunt, Burns, Pope.

K. R. VENKOBA RAO,
I Class.

How to be Permanently Happy

WE all aim at happiness ; but in reality we are unhappy. Why is it so ? We have become very selfish. We are habituated to think only of ourselves and of those who are near and dear to us. We are day in and day out insuring our lives too heavily and effecting assignments in favour of our better halves. We have forgotten that the best half of our self is our mind.

We have neglected to insure the mind, as we are afraid that the premium would be in the nature of an exaction. We are nervous of the penalties that non-payment of the same may mean. But there is no question of such a policy lapsing, provided we have the will to eliminate waste. We are required by the promoters of this concern to eschew a love for tawdry enjoyment. Let us not purchase a new model motor car, ere the one on hand has been put to its full use. We can discard the use of gold pens and silver inkstands. We need not be dazzled by the glitter of gold buttons. If we are prepared to do these, the Managing Director will honour our application for loan without regard to the paid-up premia. Our morrow will then become as sweet as we can wish for.

Tinnevely, } S. SITAPATI, M.A., B.L.
New Year Day, 1938. } Old Boy

What is the favourite fruit of History ?
The Date.

• • • •

'The Game's the Gowd for a' that'

THE FOURTH (CRICKET) TEST MATCH AT MADRAS

FEBRUARY 5th found Madras buzzing with activity. The stage was brilliantly set for the long-awaited show of the year. All was sunshine and gaiety. Every inch of available space was dearly paid for by the eager crowds pouring Chepauk-ward from the early hours of the morning. And still they came, for Madras went 'cricket-mad.' It seemed that the great awakening in the land had manifested itself in this direction. The atmosphere was surcharged with boyish enthusiasm. Lord Tennyson's team, who were one up, were keen on definitely settling the matter by winning this test. While, the Indian team was expected to repeat its performance of Calcutta by defeating the tourists at Madras.

Vijay Merchant, the young leader of the Indian Team, 'the right man for the right job,' and Lord Tennyson, the poetic grandson of the great poet and the author of 'From Verse to Worse' came out to toss, to the great ovation of the multitude. India was lucky in the turn of the coin and Merchant decided to bat on what was reputed to be (and what truly was) a batsman's paradise. The burly English skipper led his men on to the field and thus the drama began.

India opened with Hindlekar and Bannerjee to the bowling of Gover and Wellard. The illness of Mushtaq Ali prevented adventurous and bright batsmanship at the start, and Bannerjee left after a useful if uninteresting stand. Thunderous cheers greeted the entry of Vinoo Mankad, the new star in the cricket horizon. Short and slim and just twenty-one, it was left to him to save India's honour. Soon, he settled down in his business-like

manner. No risks, no worry. The right stroke for the right ball. Yes, now he blocks Pope, and steers Wellard to the boundary; now he slashes Gover to the on-boundary thrice in an over, so that Tennyson takes off the All-England bowler. It was a treat to watch his determined batsmanship. Once he got into his strides, there was none to stop him. Splendid defence and timely aggression, combined judiciously, gave this young hope of India his first test century and enabled her to score a respectable 263. Amarnath, a fading luminary, made his exit after a school-boy show. The skipper compiled a bright 19 before he allowed his defence to be broken by Pope's faster one. Havewallah determined to hit the English bowling and made wild and mighty swipes at almost every ball, to sky the ball judiciously, before he was caught. His was a good, if lucky, 44. The 'tail' of India did nothing and Mankad remained unbeaten with a splendid 113 not out, on which he can look back with pride.

The soft rain overnight had made the pitch turnable and was of some advantage to the Indian XI, the next day. Edrich and Parks, both dependable and noted, opened the English innings to the bowling of Amar Singh and Bannerjee. Edrich hooked the fast bowler to the ropes but now! he makes a ghastly stroke against the pacy bowler at the critical opening stage and Merchant takes a marvellous well-judged catch at mid-off. Then Hardstaff came in and soon began to make himself felt. But the wiles of Amar cannot be so easily judged. Mankad takes Parks splendidly at short leg, the death-or-glory position. His masterly display of stylish stroke-play on the same ground a fortnight ago had so impressed the fans that he was expected to retrieve the 'rot'. The fielding was keen and the bowling allowed no liberties to be taken with it. Amar Singh was bowling splendidly. Keeping an excellent length, and with a well-set field, he had the batsmen in trouble. Hardstaff played him with trepidation, till finally he played on to

Amar Singh. It was rather lucky. The short ball popped up and in pushing it off he was bowled. English hopes of a recovery were shattered and Amar Singh and Mankad ran through the side for the small total of 94 runs. Bowling 25 overs, of which 5 were maidens, Amar Singh had 5 wickets for 38 runs. Langridge was unbeaten with 23.

The weather being cloudy and the wicket assisting the fielding side, Vijay Merchant enforced the follow-on, relying on Amar Singh and Mankad to do the damage. India's fortune was such that Merchant called upon Amarnath to begin the bowling at the other end, this end being in Amar Singh's charge. Amarnath, so far undistinguished but for a missed catch at long leg, quickly proved his worth by bowling Edrich with a vicious inswinger in the fifth ball of the over. Edrich had his 'duck' and the Englishmen were on losing ground. Amar Singh got both Hardstaff and Parks out l. b. w. Langridge and Worthington delayed the end by putting on a good 61 runs in partnership. Amar Singh prevailed over Langridge and Mankad had Worthington caught at gully by Amir Elahi—a nice catch. Wellard, the tall Somerset hitter, began to wield the long handle. He lifted Amar Singh over the ropes twice and Mankad once. Amar Singh rested for two or three overs, probably to think out his little trap or scheme and then came at the pavilion end. His first ball Wellard tried to lift for a six, but now Amar had his turn and English hopes were quickly shattered. The end was not long in coming and the English Team were all out for 163. Thus India gained the proud distinction of an innings victory over the English exponents. Well boys! That's splendid! Not content with his batting performance, Mankad bowled left hand spinners and kept on the tune, when the English were facing the music.

Our sincere congratulations to the captain and his men. Hats off to Vijay Merchant and his men for their splendid

display which enabled India to turn the corner in the cricket world. It was a delightful spectacle to watch the Indian team playing like one man. The True Spirit of sportsmanship is manifested in the display of good game and not in a mere victory over the other side. For let us not forget that

“ When that great Scorer comes to write against their
name,

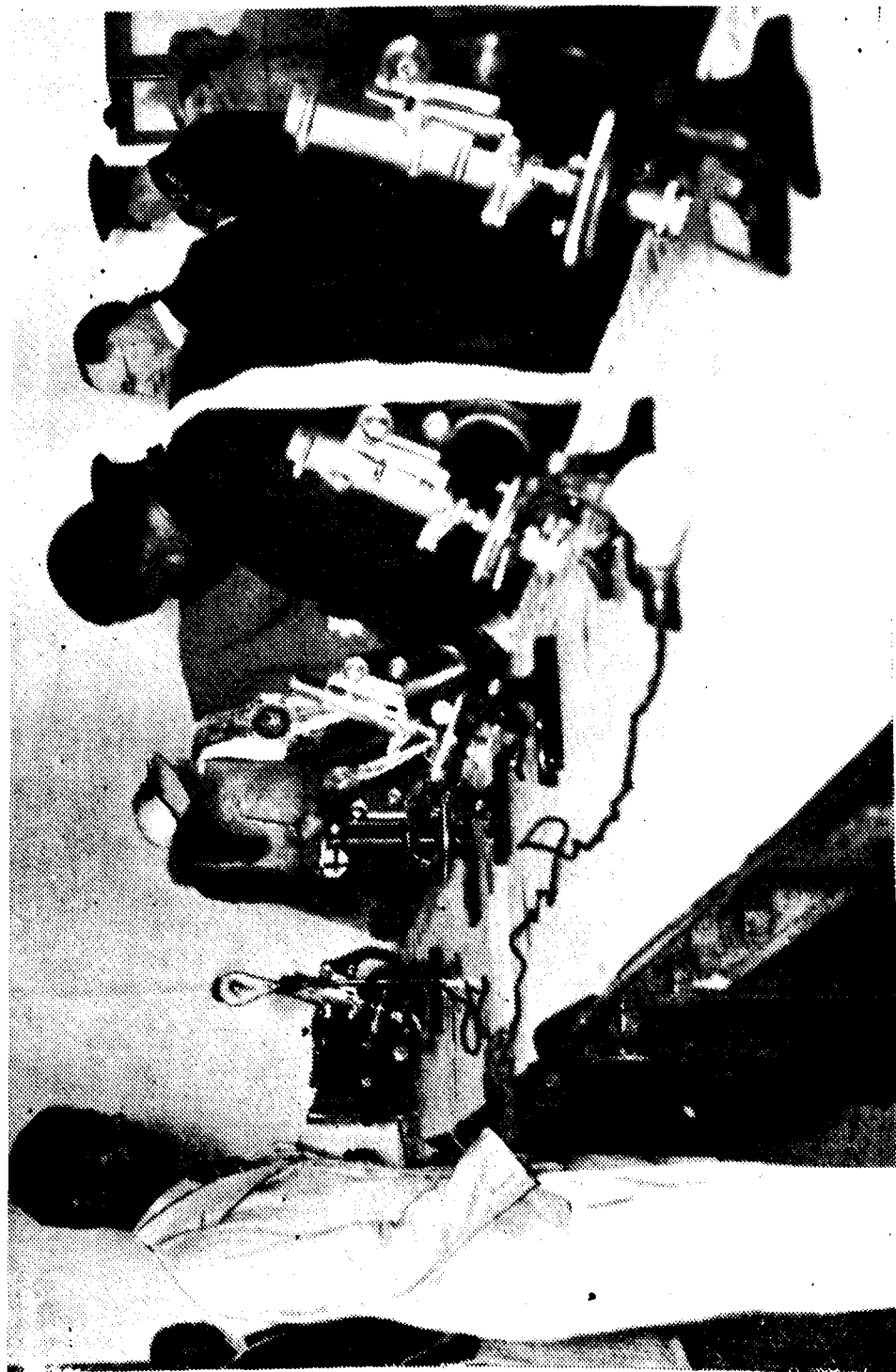
He will not write whether they won or lost,
But how they played the game.”

B. M. PARTHASARATHY,
IV. (Hons.) Sanskrit

An Alphabet of Qualities

An individual should be
Amiable, Benevolent, Charitable,
Daring, Economical, Forgiving,
Generous, Honest, Industrious,
Judicious, Kind, Loving,
Modest, Neat, Obedient, Pleasant,
Quiet, Reflecting, Sensible,
Tender, Urbane, Virtuous, Wise,
'Xemplary, Youthful and Zealous.

K. KRISHNASWAMY RAO,
Class I.



HIS EXCELLENCY IS KEENLY INTERESTED IN THE EXHIBITS.
Courtesy, "Madras Mail."

The Natural Science Exhibition

THE Natural Science Exhibition of our College came on with the Opening Ceremony of the New Natural Science Buildings by His Excellency the Governor of Madras on the first of February. It was a day of rejoicing for everyone of us. Certainly the Natural Science Department can be proud of the fact that its annual exhibition was witnessed by a record number of visitors in its well-equipped new building.

Elaborate arrangements had already been made to make the exhibition a success. Thanks to the professors who were in charge, and who worked hard for days beforehand, everything went off well.

BOTANY SECTION

The Botany exhibits occupied the ground floor of the southern wing of the building, Zoology and Geology exhibits being kept in the other parts.

The Botany Department deserves all congratulations in that only a few students were chosen to display their exhibits.

In the Intermediate Laboratory were shown the modification of plant organs, seeds and their germination, the germination of paddy at different depths of water, etc. All these may seem useless at first sight, but they play a very important part in our life. The germination of paddy, for instance, invited several interesting questions from the visitors. The exhibitors themselves began racking their brains to find suitable answers for these questions. Gardening is a good hobby as everybody says; and a neat garden can be kept, only if we know something of seeds and their germination.

In the museum were seen fossil plants, etc. Here again there was something important. All of us see every day trees about us. But we wonder how many think of the wonderful phenomenon by which the wood of the trunk turns into a stone.

In the B. Sc. Laboratory several experiments were shown. They were all quite delightful. One item there, 'Parasites and insectivorous plants,' was of some significance, as it reminded us of the African plant which, it is said, can actually kill and eat a whole human being.

ZOOLOGY SECTION

The Zoology Department had several interesting things to offer. Not a visitor passed who did not measure his or her lung capacity, or blood pressure and his or her emotions.

In the first floor some good items were witnessed. Among them genetics interested us much, as it has something to do with our life in this world. We ask ourselves the question: "What will be the child of an Englishman and a Negro woman like? Will it be black or white?" All such questions were answered there. Coral growth was also shown in all its stages. 'Popular mis-conceptions in Zoology' was also a noteworthy feature. We all think that the rat-snake is a very poisonous animal. It is popularly thought that its tail bears a poisonous spine. It is not so. It is entirely devoid of poison. It is not even the male, the mate of the cobra. We got surprised when we learnt this fact there. Again people say that the scorpion and the centipede have their backs ruptured to give rise to young ones. That too is not true. Are not all these things interesting? Several living specimens of snakes were also displayed.

GEOLOGY SECTION

The popular belief is that Geology is a very dry subject. But it gives us a very good idea of the mystery of



Some of the Exhibitors.



Some Products of the Ceramic Industry.

things. First, we were shown the method of grinding rocks and minerals into thin sections, with a view to examining them under the petrographic microscope. Visitors were much impressed by the way even 'hard' rocks were ground down to one-hundredth of an inch.

In the B. Sc. Laboratory were exhibited building stones and economic minerals. It was a pleasant surprise to many that our India is the proud possessor of a vast amount of mineral resources. India leads the world in the output and quality of Mica.

Next came a working model of the Artesian well. It was a very great attraction for many to see water spurting out to great heights through a bore sunk between layers of sand and clay. This was followed by experiments to show the principle involved in the mechanical separation of rock ingredients. Monazite, available in very large quantities in Travancore, is separated from other materials by being passed through the field of an electromagnet which attracts all the magnetic particles.

The map-drawing room in the first floor began with experiments to illustrate the folding of the Earth's crust owing to extreme pressure. The causes for the formation of mountain ranges were also dealt with. Several crystal models, both of wood and of glass were exhibited, as also some minerals occurring in Nature in perfect geometrical form. A piece of sandstone, which was as loose and as flexible as a piece of rope, proved an interesting and strange curio. Its geological name is Itacolumite and it is available only in Jhind in the N. W. Frontier. Tiles made by the Mysindia Tile Works were also exhibited.

Next the manufacture and uses of Radium were depicted in photographs, kindly lent for the occasion by the Barnard Institute of Radiology.

The next room was the Chemical Laboratory. Messrs. Bapalal and Sons had sent a show-case with many precious

and semi-precious gem-stones and beside it, Mr. V. Subramanian, B. Sc. (Hons.), an old student of the department, was keeping the audience spell-bound by explaining the methods of testing gem-stones.

The lady exhibitors came next with a collection of precious stones. Certain minerals showing the phenomenon of Fluorescence were also exhibited. The entire length of the room was occupied by petrographic microscopes, the camera lucida, Shand's recording micro-meter and various other precision instruments. All these attracted huge crowds. His Excellency the Governor was most interested in them. Next in order came a collection of odd stones of fantastic shapes collected by Mr. V. D. Krishnaswami, M. A., another old student and now a research scholar, who correlated them as implements of the Stone Age, used by Palaeolithic Man near about the Red Hills.

Many articles of the Ceramic Industry had been kindly lent by the School of Arts and Crafts. A peculiar kind of disease, recently found in the Nellore district, was demonstrated by means of photographs, radiographs, and maps. The origin of the disease was diagnosed to be due to the presence of Fluorine in water. So, it has been named Fluorosis. These exhibits were kindly lent by the Director, King Institute, Guindy.

The last room was the Honours Laboratory and it contained three of the most interesting exhibits. Visitors nearly always hung on for half an hour in this room, just to see these exhibits once over again. First came the volcano with its glowing crater and smoke issuing from it. Next came the plaster model of the Geyser which turned out to be a very huge success. Columns of hot water and steam came forth with a jerky movement at regular intervals and set the on-lookers wondering as to how this was achieved. It was a very *faithful* representation of 'Old Faithful' a geyser, in Yellowstone Park, N. America.

NATURAL SCIENCE EXHIBITION.



Geology Section.



ANNUAL SPORTS. CLEARING THE FIRST HURDLE
IN THE HURDLES RACE.

Lastly came a Miniature model of the city water supply, kindly lent by the Water Works Engineer of the Madras Corporation. Water comes from the Nagari Hills and empties itself into the Red Hills Lake from where it is brought to Kilpauk, where it is purified and sent to the city.

A piece of actual lava from Vesuvius which was presented by our Principal was also exhibited.

The exhibition did not go off without its droll features. There came a man singing :

"There was a woman in Babylon who called me
.....
M'lady, M'lady, M'lady....."

There was a roar of laughter at the other end. One of the crowd stepped out and said, "Why, I did not mean anything serious." The person treated it as a good joke and walked away leaving the others gaping at him in wonder.

Another gentleman took pains to explain the exhibits in Tamil to some school-children. Others laughed at him for this. He at once flew into a rage and began to pace up and down like a boxer preparing for a fight. In spite of a few instances like these, the best good humour prevailed all the three days.

We offer our grateful thanks to the Principal for the great interest he showed in the Exhibition. The credit for the success of the Exhibition is mainly due to the exhibitors and members of the staff who had worked with tireless zeal for weeks together, spending over twelve hours a day in the Laboratories and making every arrangement for the success of the Exhibition.

A. D. GOVINDARAGHAVAN
and
R. NARAYANAN,
III B. Sc.

The Writer Written

GIRI was as jumpy as a cockroach that had sighted a lizard. He knit his brows into fret-work patterns; he munched off bits of paper, much as an epicurean goat would nibble at juicy foliage; and ever and anon he sighed and shook his head with gloomy despair and fell back in his chair.

He tore up the first sheet of paper on which he had scrawled a few words, and started to blacken another. This too he soon destroyed.

No, Giri was not in love. He was not in the throes of composing his first love-letter. But he was in the even more racking agony of a writer who wants to write but finds for the nonce he can't!

This was the last day on which to hand in his contribution for the College Magazine—and Giri, who had never missed to contribute to it, had about as much notion of what to write about as I have about the connubial customs of the Carribean Islanders. And Giri had a reputation to keep!

Suddenly, he sat bolt upright. Well, why not, he thought. His eyes brightened and he whistled involuntarily. Yes, he would do it. Why not? There was nothing so dreadful about it after all. Even Shakespeare was a plagiarist, if one were too particular. Nothing under the sun was new, he mused, and added with a chuckle, except perhaps the Congress ministry.

He went over to his brother's study and fished out a few old, mildewed journals. He selected a short prose piece from a bunch of such pieces. It was written by one 'Mr. A'—for that was presumably the writer's pen-name. Giri's eyes twinkled at that. If ever he was found

out—well, couldn't he be 'Mr. A'? A pen-name like that was nobody's property; it had a communistic air about it.

Giri copied it out neatly without a qualm and passed it on to the Editor. He had no further worry,—for he was sure it was the best bit going into the journal. Still, he felt elated when the Editor told him that it was not only accepted but had created quite a sensation among the professors.

Came the day when the copies of the magazine were distributed. And there was Giri's article, 'The Midsummer Madness—by Mr. A.' Giri reeled, as dazed as a money-lender who discovers that the pledged goods are just gilt. Why 'By Mr. A'? How? He did not remember having given that pen-name—or had he by oversight? He scanned the article feverishly and came to the end of the page. There was an Editorial note: "The above article is a reprint from The.....magazine. Mr. A is one of our professors who, while studying in England, contributed this piece to The.....magazine. As one of our best students—Mr. Giri—seemed to like this to the point of fascination, it has been reprinted, so that others also might share Mr. Giri's appreciation. Mr. A. incidentally, thanks Mr. Giri for the compliment paid to him.—Ed."

K. R. SESHADRI,
II University Class

Jhansi ki Rani Jhansi ki Rani Hai

(A STORY OF THE INDIAN MUTINY)

"Boom" sounded the distant cannon.

"Mother," said the boy, "what is that?"

"They are Feringhees, dear, cannonading the fortress of our Queen. Hark! There it is again," replied the widow, his mother.

They were living in a lonely hut on the slope of a hill west of Jhansi. Even from the hut could be seen the huge granite walls of the fort above which on a white turret gleaming under the sun floated the standard of the Rani of Jhansi.

She was one of those who "mutinied" along with the Sepoys. Hence the walls of her fortress were battered. The plains around her walls were swarming with English soldiers and sepoys who remained "loyal." Such was the plight to which brave princes and princesses were reduced by a haughty Governor-General.

Hear the roar of British batteries battering her granite walls. Hear the thunder of her cannon night and day. Behold an Eastern Queen on the walls, in male attire, her hands black with gun-powder! Behold the fair women of Jhansi helping in the firing of the cannon!

Hands are short and the Queen is expecting relief, every day. She is confident she can wear out the "English swine" outside the walls.

And behold at the same time Sir Hugh Rose in the plains scratching his head, for his guns these three days have made no impression on the walls of Jhansi.

On the noon of 31st March 1858 the Rani ascended her Rocket Tower with her field glass and gazed eastwards.

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A vague smile played over her face. There was a slight movement on the eastern hills like a flock of sheep moving.

"If that be him, they are doubly lost, these English"—she muttered to herself and descended.

II

Some one knocked at the door of the hut. "Who is that?" asked the widow remaining within.

"Quick mother, open the door."

"Who are you?"

"A servant of the Queen."

The widow with her son holding her arm slowly opened the door. The stranger quickly stepped in and shut the door.

"Who are you, Sir?" again asked the widow.

"Must I tell you?—Yes—I am Tantia Topi, the Queen's servant."

The widow blinked with astonishment, "You—the great Tantia?"

"Yes, I am Tantia, the Queen's servant. We are come here to save the Queen. She must be informed of our arrival before sunset. You are the most fortunate of women. You have to serve the Queen in two ways."

"I will do all I can."

"We want a bonfire. We have searched everywhere. Nothing is available. We want your hut. Mother, give up your hut now and when the Queen is victorious, she will give you a palace."

"I will, gladly. What is my hut when our Queen is being attacked by foreigners?"

"Mother, you are very kind. One thing more I have to ask."

"What is that?"

"We, the sepoys, number only 5000. We are going to attack the Feringhees to-morrow. And we want the Queen also to come out of the fort and attack the English in the rear. The enemies are surrounding the city except at the north gate. No sepoy can go through their line. You are a woman and the Feringhees are good enough not to attack a woman. You must go to the Queen and deliver the news, and help her to gain a victory."

"Oh yes, I am ready to go. But I cannot remember so much military news."

"Then I will write a letter to the Queen."

"Yes, do so."

A letter was swiftly written to the Queen. The old woman hid it in her breast. Tantia Topi said he would take care of her son. When she started, he said to her, "Mother, the watch-word at the gate of the palace is: 'The Rani of Jhansi is the Rani of Jhansi.' On your way on this hill you may meet our sepoys. If they ask you for the pass-word tell them: 'One chappatti is white, the other is charred.'"

After memorising the two sentences and learning her exact route, the good woman started on her grave mission. "Now it is all right," said Tantia, after seeing her away. He took out a whistle and blew three short blasts on it. The back door opened and four sepoys entered the hut.

"What is the time now?" he asked.

"About half past four."

"Then we can light the bonfire."

"Where is the bonfire? That is the—"

"This is the bonfire."

"Which?"

"This hut."

The four sepoys smiled with astonishment.

"You, Maharaj, are truly great. Nobody would have thought of this."

At five o'clock in the evening a huge bonfire was blazing on the hill west of Jhansi, the appearance of which was greeted with shouts of joy from the city. "There is the signal. Tantia is come!"

The guns thundered more rapidly.

Sir Hugh scratched his head more vehemently. He was in a trap!

III

The old woman slowly walked on towards the fort. Till now she had not come across any soldier. Fifty yards ahead, a battery of guns was firing at the walls. "What he said is wrong," thought she—"the northern side is occupied." The English had moved since the morning. The simple woman thought for a moment, turned south and walked fast and ran into a picket of native infantry belonging to the English. She did not know this, and so mistook them for sepoys.

"Who goes there?" duly cried out the watch.

"A servant of the Queen."

This was not a decisive answer; for the "Queen" meant both the Rani and Queen Victoria.

"The watch-word!" rang out the voice of the native officer.

The woman thought over the two watch-words Tantia had taught her. She said that which he told was for the sepoys—"One chappatti is white, the other is charred."

"A spy! A spy!" shouted many.

She saw that she was wrong. So she quickly said the other watch-word, "The Rani of Jhansi is the Rani of Jhansi."

This was enough. There was a volley of oaths—"Rascally rebel rakes!" Half a dozen soldiers pounced upon the poor woman and dragged her away.

There were mocks and gibes. "Eh! What was it? The Rani of Jhansi is—not the Rani any more, my good woman,"

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said one of them and struck her on the head with the butt end of his rifle. The soldiers yelled with delight.

"Search her," commanded the Subhedar. "Wait, Sir," said she sternly, "I will give it to you." The soldiers stood back before her commanding words. Without a tremor of her hand, she slowly took out the letter out of her breast.

The eyes of the Subhedar sparkled. He held out his hand.

She raised her head, folded her lips contemptuously, turned round quickly, crumpled the letter and put it into her mouth! All the soldiers sprang upon her with oaths and curses. A sword was inserted between her teeth, and her mouth was wrenched open. The letter was extracted. But alas! it was now all pulp mixed with blood! The letter was lost and with it the Subhedar's dream of promotion of which he was sure just a minute ago—at least a lieutenancy!

It was evident the Subhedar was furious. Before night the old woman was shot dead "for spying for rebels."

IV

At sunset Tantia Topi moved his men down the hills to the banks of the river Betwa. On the opposite shore was the Second Brigade of the British. They spent the whole night warily watching one another.

The British soldier under tent is the the most unbearable of companions. The sepoy is brilliant only then.

"I say," began one sepoy accosting a British soldier on the opposite bank, "some of us will see Yama tomorrow by this time."

"Brother," said another, "the Feringhees don't have Yama. Our Colonel used to swear by the Devil."

"Our Colonel! Ha! ha! I would like to stand before the fat Red Whisker once more. Poor man! How he waxed eloquent when he addressed us at Cawnpore!

"My Babalogue (children), behave like gentlemen! The crown will get angry."

"Ha! ha! good speech!"

"The crown is very slow indeed in getting angry."

* * * *

Early in the morning, about half past four, Tantia broke cocoanuts before the gods and prayed. At about five the whole army began to advance. The first line of the British retreated. The sepoys shouted with delight. It was a rapid advance along the whole line.

"At this rate we can reach the fort before dawn," said one of his lieutenants to Tantia.

But Tantia was looking steadily towards the fort. "Why has the Queen not yet come out? If the English are caught at the rear now, we can rout them—Or has she not received the message? Did the old woman reach the fort safely?—"

The sepoys steadily advanced. The British historian says: "The English retired in good order," which in reality meant there was a great rout. The sepoys who were till now victorious had to face the north battery. Their centre was attacked by the English cavalry. Cannon shot, grape and bullet rained in their centre. The sepoys halted. They had not enough guns. The line wavered.

"Steady, my brothers. The Rani of Jhansi—"

"Is the Rani of Jhansi" shouted the whole line.

Still the Rani did not sally forth. Tantia was anxiously gazing at the fort. And the most unexpected thing happened.

The gunners on the fort by this time wakened by the roar of cannon and the crack of muskets, mounted the walls and bastions, mistook the battle raging below as the enemy attacking their fort, and worked their guns furiously. Volley after volley was poured down on friend and foe alike.

The sepoy leader was bewildered at this. Hindrance came from where he had expected help. At this moment the English infantry which had marched to the right and to the left began to attack his men on the flanks.

"What are we to do?" he asked his mates.

"Retire."

"We will be utterly destroyed."

"We will guard your rear."

"There is no powder."

"We will hold them at bay somehow."

"You are too brave to be sacrificed thus," sobbed he; "perhaps we will never again meet." He embraced all of them and parted.

The bulk of the army retreated with Tantia. There remained fifty to cover his rear. They set fire to the jungle before them and pretended to load their guns. The English reconnoitred. They were afraid to approach the guns. But after half an hour, when the fire subsided, they saw there were only fifty men. They advanced bravely. Every one of the sepoys fell fighting beside his gun.

The British historian says: "The English took twenty-eight guns that day." But how did they get them?

On June 17, 1858, a battle was raging before Gwalior. A woman on horseback was leading the sepoys. A bullet struck her right hand. She took the reins by the left. Immediately afterwards, a soldier of the 8th Hussars daggered her from behind. She stood erect, reeled and fell down.

Such was the end of the Rani of Jhansi, the greatest and saddest of women, whom Sir Hugh, the English General himself considered as "the best and bravest military leader of the rebels."

On the 18th April 1859 Tantia Topi was standing on a platform—a noose hanging in front of his face.

He was allowed to see his family. He kissed his adopted son, the child of the old woman.

"Where is my mother?" the boy asked. Tantia hesitated.

"My boy, she has gone to see the Rani of Jhansi."

"Who is the Rani of Jhansi?"

"Even you ask like that?" said he with tears in his eyes. "The Rani of Jhansi is the Rani of Jhansi."

T. R. JAYARAMAN,
III Hons. (Math.)

What is it that we often return, but never borrow?

Thanks.

Which is the most expensive of all suits, but lasts the longest?

A Law-suit.

Why is T like an island?

It stands in the middle of *water*.

The Botany Complex

GOPU had just joined the Botany B. Sc. Class. Whatever Gopu began, he took to it with religious fervour. He was very enthusiastic. He babbled nothing but botany all the live-long day and the best part of the night. Being his unfortunate room-mate, I had to put up with it.

The slightest sign of vegetation anywhere would start him off on his favourite topic. A flowering plant on the Marina was enough for a full hour's lecture on plants in general and flowering plants in particular. All his botany lectures were absolutely wasted on me. They gradually began to get on my nerves. It was all right for a week or two, but I could not play the role of a passive listener for a whole month. I suffered silently.

Gopu showed no signs of abating. All this time he used more or less general terms, but now he began to introduce a lot of technical words, which of course made the situation worse. Not a day passed without an exhaustive account of protoxylems and their functions, vascular bundles and how they got mixed up with the plant tissue, sieve-tubes and their uses, and various other tongue-twisting terms I do not remember very well.

I was gradually wasting away. There seemed to be no way out for me. I might have changed my room, but Gopu was a sensitive fellow and I did not want to hurt him. He was doing it all in good faith, the poor chap! He thought I wanted to learn all about plants.

The situation became intolerable. The fellow was positively reeking of botany. It was now a regular mania with him. I could not go out with him for fear he would stop near the first potted plant we encountered. If he had just admired the plant silently, I would not have minded at

all. But he was never silent. It was not the actual plant that mattered. It was the arrangement of the leaves, the leaf-scars, the roots, etc., which absorbed all his attention.

Sooner or later, we find some way out of the tightest corner. Deliverance came to me in a rather strange way. It happened thus. Gopu and I had been invited to a small party given in honour of a relative of ours who had just returned from England after covering himself with glory in Christ's College, Cambridge. Naturally we both went together.

The party had come to a pleasant close. When our cousin suggested that we might see some of the curios he had brought from abroad, we fell in with the idea and went inside. As he was very busy with his lessons, Gopu had spared me that day and I was happy on this account. But it was not for long.

I saw it before Gopu did and my heart almost stopped beating! There in one corner stood a beautiful potted plant replete with glorious flowers. Like a bloodhound unleashed Gopu went for it.

He was in raptures over the plant and held the company spell-bound with his talk. His description I only vaguely remember, but the denouement I will remember all my life! Finally he stopped and with a dazzling smile at my host asked:

"Will you please let me have a bit of this plant Mr.—? I want to make a closer study of it. I would very much like to examine some sections of it under the microscope."

The effect of the request was devastating. Our host's features relaxed into a very broad grin. Amidst chuckles he said:

"By all means, Mr. Gopalan, but I am afraid you will only find paper inside and bad paper at that, because you see it is an artificial plant!"

Need I elaborate?

The next few minutes were painful. Gopu, the great botanist with his profound theories, to mistake an artificial plant for a real one! Tragedy, stark tragedy! But I am glad it happened. Gopu never more talked botany. I heard him one night murmuring in his sleep:

"Economics is so much better!"

N. ANANTANARAYANAN,
III B. Sc.

Liberty

- (1) Other peoples have built towers reaching to the skies;
Other peoples of the world are proud and rich and wise;
They have done their work and now they lead a happy life;
What are we? Slaves, and nothing more and ever full of strife.
- (2) From morn till night we do our endless task,
We have no time to sit in peace and bask;
We have no voice, for others have the powers;
We are not free to move, though limbs are ours.

B. SIVARAMA SASTRI,
Class I.

A Tryst

WHEN that night, alone I sat dreaming of you, my beloved, I saw the fireflies playing hide and seek amidst the trees; and then I remembered how at our first meeting by the twilight shadows, your sparkling eyes ever flitted behind the jungle reeds as you walked away.

And as I sat there, my beloved, I saw the clouds veil the smiling crescent and slowly gliding away, the silver beams again brightening the night; I remembered then, how oft my heart's gloom had been dispelled, when your veil slid off to light my soul with smiling love beams.

And as I sat there dwelling on yesterday and tomorrow, I felt the thrill of dawn stirring the birds to song and tickling the buds to laughter; and I remembered how thy voice thrilled me to a new life and vigour.

Thus, in all the Universe, I saw you, and you alone, my beloved. The star and cloud, flower and bird, dew and dawn, all told me of you and you alone.

Now, tell me, was I not with thee that night as I am with thee to-day?

P. SANKARAMURTHY,
III Hons. (Zoology)

The Late Professor Pundi Ranganatha Mudaliar

A PORTRAIT of Professor P. Ranganatha Mudaliar was unveiled in the Big English Lecture Hall of the College on the 18th February by Raja P. Parthasarathi Rayanagar of Panagal, with Sir Vepa Ramesam in the Chair. The donor, Rao Bahadur R. Krishna Rao Bhonsle, had given the portrait to the Mudaliars' Association, who presented it to the College as a fitting memorial of the great services rendered by the Professor to the cause of Higher Education in general and to the study of Mathematics in particular.

As Sir Ramesam said, the Professor possessed a brilliant intellect and was such a versatile genius that he could handle any subject—Mathematics, Philosophy, English or History—at any time. It was therefore in the fitness of things that his portrait should adorn the walls of the College in which he had worked with distinction for nearly ten years (1884—1893).

Mr. S. Muthia Mudaliar requested the Raja of Panagal—one of the old students of the Professor—to unveil the Portrait. Though nearly half a century had elapsed since the Professor died, his memory was loved and cherished by many of his old boys, who were full of respect and reverence for their Guru.

In unveiling the portrait, the Raja of Panagal said that the late Professor was one of the great sons of South India, a man of good culture and independence of character. In requesting the College authorities to accept the portrait, Rao Bahadur P. Sambanda Mudaliar said the late Professor was a good Tamil Scholar and had also composed a long poem in Tamil, for which he was honoured with the



P. RANGANATHA MUDALIAR, M.A.
Professor of Mathematics and Natural Philosophy, 1884—1893.

title of Pandit in a gathering of Tamil Pandits. He was also a brilliant conversationalist—in fact there was nothing he touched which he did not adorn. As such his portrait would be an inspiration to future generations of students and professors.

On behalf of the Principal, Rao Bahadur K. Ananda Rao accepted the portrait and said that he had heard very much about the versatile gifts of the late Professor. If South Indians distinguished themselves by doing a great deal of original work in Mathematics, in the midst of their heavy professional duties, it was because they had imbibed a real love for the subject under the inspiring teaching of Professor Ranganatha Mudaliar. The late Dewan Bahadur R. Ramachandra Rao (of the Provincial Civil Service), the late Prof. V. Ramaswami Iyer (who was Deputy Collector for a long time) and Sir Vepa Ramesam (Judge, High Court) were instances in point.

Prof. Ananda Rao said that he had therefore great pleasure in accepting the portrait and was grateful to the donor and the Mudaliars' Association for their valuable gift.

With the usual vote of thanks proposed by Rao Bahadur R. Krishna Rao Bhonsle, the meeting came to a close. The portrait is true to the original and for his skill the artist was presented with a ring on the occasion.

Life

Leaving all thy pangs and disappointments,
Think only of the present living needs.
Fate grants us but a space of years.
Then takes us, and we follow where it leads.

E. T. CHENGALVAROYAN,
III B. Sc. (Math.)

The Fortress of Gingee

GINGEE is a far-famed fortress of great historic importance. Situated as it is within twenty miles of Villupuram, which is my native place, it has had a profound attraction for me and that was why I paid a visit to it recently in the company of a few of my friends.

The story of Gingee reads like a romance. It is familiar to all the Tamilians of South India on account of a popular ballad sung by wandering minstrels, dealing with the fate of the *genius loci*, Desing Raja. According to the ballad, Desing was an independent Chief of Gingee, who was too proud and powerful to pay tribute to any power. Aurangzeb, the Moghul Emperor, had remitted all payments, as a reward for his skill in managing the high-mettled horse, Panchakalyani, which no one else could break. The Nawab of the Carnatic, being jealous of the Raja's independence, invaded his territories. Desing Raja was at first successful in the fight that ensued ; but eventually he was defeated and killed.

His wife, the Rani, committed *Sati* in the true old Hindu fashion ; and the Nawab out of respect for her memory built a town and named it Ranipet after her.

The fort of Gingee has seen several vicissitudes afterwards. It was successively occupied by the French and later by the Mahrattas. To-day, it is practically in ruins ; but on account of its antiquity and the light it throws on mediæval history, the Government have brought it under the provisions of *The Ancient Monuments Act*, and are making an annual grant for its preservation.

And now to our excursion. We started in our car (with the invariable accompaniment of a camera to get some photographs) on the afternoon of the 2nd January. The journey



The White Peacock.



"An hour of rest."

M. V. Natarajan.

was pleasant, though the road was bad in a few places ; and within an hour and a half we reached our destination.

The fort is situated on two adjacent hills, the larger of which is called Rajagiri and the smaller Kistnagiri. We tackled the latter first. The steps leading to the top are very steep and it was with some difficulty that we negotiated them.

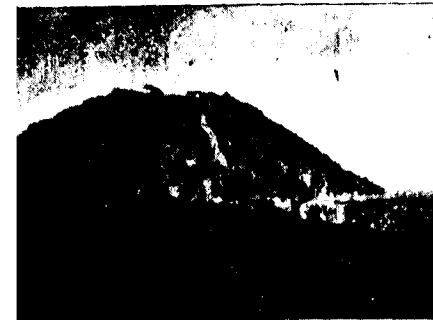
When we came to the summit, we saw two huge structures which were used as granaries in the good old days. Similarly there were two temples but the idols were missing in both of them. Again there were two receptacles, one for storing ghee and another for oil, as we were told. There was besides a splendid Audience-Chamber, magnificent even in its ruins. Thus there was a vast emptiness everywhere, and the ravages of Time were visible all round. Oppressed with this feeling, which was also in consonance with the setting sun and the on-coming darkness, we descended the hill.

We had our meals in the hotel near by and slept soundly in the rooms we had taken up, musing, however, on all that we had seen and heard. Early next morning we set on to the other and larger hill—Rajagiri, on which stands, or rather stood, the citadel, for it is no more used as such. As we passed through the main entrance, the first thing that met our eyes was a ruined mosque. Then came in order stables, granaries and barracks ; but it is a long time since they were put to their appropriate use ! But the most impressive structure was the Kalyana Mahal, an eight-storeyed building, shooting straight up to the sky to the height of nearly a hundred feet and capped with a pyramidal roof. The first six storeys are all of the same pattern, in each of which there is a verandah running round a small square-shaped room. Communication from one storey to another is made by means of small steps. The room on the seventh storey has no verandah round it and the top-

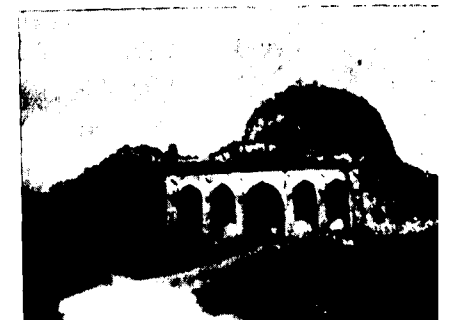
most room is of a smaller size than the others. And though its name struck us as a strange misnomer (as it now lies all in desolation), it must be regarded as a worthy specimen of the Engineering skill of our ancients. Our mind being full of these thoughts, we reached the summit through three walls by one of the nine gateways, or *mantapams* as they are called. But at the very top, this portion of the rock is divided into two by a narrow gap about thirty feet wide and eighty feet deep. The only way into the citadel is across this chasm. There is a wooden bridge built across, on which we walked carefully and got into the interior through a narrow stone gateway facing the bridge. There are two perennial springs of good drinking water on the top of Rajagiri, one outside the gate of the citadel and the other on the very summit of the rock. There are many springs at the foot of the hill also. Again, on the top of the hill, there are two granaries, a storehouse for military provisions, a flagstaff with steps leading to it and an Audience-hall near by. There lay beside a big cannon whose mouth was about 6 inches in diameter. They say that the hall was used as a treasury in olden days. Here also there are two temples without idols. Everything put us in mind of the strategic importance of the locality as a place of safety in times of danger in the troubled days. After this leisurely surveying of the citadel, which occupied nearly two hours, we came down the hill and saw the big idol of Hanumar near by.

At a short distance from here, there is small hill on which is a ruined well, generally known as the prisoners' well. This is surmounted by a low circular brick wall. It has a natural hollow passing through it like a well and the upper edges are smoothed with a little masonry-work in order to make it impossible for the condemned prisoners to climb up the well and escape. These unfortunates were pushed down and allowed to die of sheer starvation—a horrible form of punishment indeed! The main motive every-

VIEWS OF FORT GINGEE.



"The Kistnagiri."



"The Rajagiri."



"Kalyana Mahal."



Audience Chamber on the Kistnagiri.

M. V. Natarajan

where seems to be to make the fort as impregnable as possible to the attacks of enemies! After seeing these and other things, we reached our hotel for dinner.

"Whenever a Hindu visits Gingee, he should visit also Singavaram, a religious place, which is about five miles away from Gingee." According to this time-honoured custom, we motored to Singavaram. The chief attraction there is a Vishnu temple on a small hill. Here the great deity is seen in a reclining posture, like that in the temple of Srirangam, near Trichy. After worshipping the God there, we retraced our steps home and reached Villupuram at 12 noon.

In conclusion, we must say that we enjoyed our excursion to our hearts' content. The company was jovial and contributed in no small measure to our happiness. The fort and its surroundings remind us of our old military glory! We are also transported in imagination to a period which is some two centuries distant from us: and the mind is busy forming a contrast between then and now! This in itself is a part of liberal education and this we had in plenty in our brief trip to Gingee.

M. V. NATARAJAN,
I. U. C. (Gr. i)

An Evening Reverie.

The Moon serenely smiles with grace;
With flutes of silence trip the fays;
And Peace herself is dwelling here;
No icy hands of Death I fear.
On Poesy's viewless wings supreme,
May be the drowsy wings of dream,
With lightning speed to none else known
I wish I fly and fade alone.

K. CHANDRASEKHARAN,
III (Hons) Math.

My Impressions of the Silver Jubilee Session of the Indian Science Congress

AS an earnest student of Science, I had all along a desire to attend the Silver Jubilee Session of the Indian Science Congress; and this desire was enhanced a great deal more, as Lord Rutherford was to preside over its deliberations! But Man proposes and God disposes! The sudden death of that great scientist acted as a damper on my intentions and at one time I gave up the plan altogether. Still, the fact that other scientists of international repute like Sir James Jeans, Lord Aston, Sir Arthur Eddington, Dr. Megnad Saha and others were to address the delegates had its own effect, and in the end I decided to be present at the momentous gathering at Calcutta.

We started from here on the 30th December in a very crowded compartment. As such, we felt very uncomfortable, but the second day was better. Some of my companions were research students from Bangalore: and we were all building castles in the air as to what we should do at the greatest city of the Indian Empire as soon as we reached it. New Year Day saw us in the city of our hopes and dreams, though the train was two hours behind the scheduled time!

We spent the whole of that day in sight seeing.

The next day we saw most of the delegates marching enthusiastically in and out of the Presidency College to get their badges, programmes and guides. And we too followed suit. Everyone, I suppose, was getting ready to receive the big doses of sometimes interesting, and sometimes abstruse knowledge, and to drink in, through the person-

alities of the many great scientists, the large amount of work that they had done. But, we did not see any of them till the next day.

Here a word must be said about the work of the Reception Committee. They had made excellent arrangements for every convenience of ours. As soon as we alighted from the train, a number of volunteers received us and accompanied us to the women's hostel where we were to reside. Men and women volunteers were equally helpful in giving us any information we asked for. On the day of the opening session, there was no member who was not properly received and given a seat. For all the parties and excursions, they had arranged for buses. On the whole their work was done so well that there was not a single complaint, except perhaps at the popular lectures.

For the opening session a huge pandal was erected in the Science College grounds, as even the large Senate Hall was insufficient for all the delegates. The number that attended was about 1500. As His Excellency the Viceroy had to open the session, all the members had to be in their places a full half hour before the function. We were indeed waiting in full expectancy, waiting for the Viceroy to open the Congress which was held jointly with the British Association. The atmosphere in this learned gathering was something we had not experienced till then. A feeling of awe and respect for the work of the men before us, a feeling of wonder at their extreme simplicity and earnestness, and admiration for their perseverance and capacity to overcome all obstacles in their search for truth, were pervading the whole assembly, particularly the student part thereof. Persons of whom we have heard a great deal, whose books are our valuable daily companions, were in our midst, speaking in their own voices. The music of the U.T.C. Corps stopped, and the whole gathering was seated. Speaking in clear tones, His Excellency welcomed the Overseas and Indian delegates in a most gracious and

fitting manner. Then followed the address by the President of the Reception Committee. Sir J. Jeans then delivered his General Presidential address. He traced the life and work of Lord Rutherford and the history of science in general, and said:

"Those of us who were honoured by his friendship know that his greatness as a scientist was matched by his greatness as a man. His achievements are so great that at a gathering of physicists, they provide the back-ground of almost every word that is spoken. He may be called the Newton of Atomic Physics"

He then told us how, through the tragic death of Lord Rutherford, he came to India as the President, and how he felt his utter inadequacy to act as substitute for the really great man we all hoped to have in our midst. He then paid a tribute to the work of the Indian scientists and said:

"Nor has India stood idly by as a mere spectator of this most thrilling period in the history of science. These twenty-five years have not only seen your association increase from infinitesimal beginnings to its present international importance; they have also seen the phenomenal growth of India as a scientific nation. In 1911 there were no Indian-born fellows of the Royal Society; to-day there are four. In 1911 the Royal Society published no papers by Indians, in 1936 we published ten.

Thus we can form some slight idea of the richness of India's contribution to science as a whole. Thinking on this great contribution, we of the British Association congratulate you of the sister Association most whole-heartedly, not only on the completion of your twenty-five years of existence, but even more on the wealth of harvest you have gathered in that twenty-five years."

After his address Sir J. Jeans read portions from the presidential address of Lord Rutherford. There, the latter, after extending his heart-felt congratulations to the Indian

Science Congress, gave us an idea of the scope for scientific research in India.

The opening session over, the actual proceedings of the Congress began from the next day. All the members were divided into several groups, each attending the proceedings of the section he (or she) was interested in. There were separate sections for Mathematics and Physics, Chemistry, Geology, Geography and Geodesy, Botany, Zoology, Entomology, Anthropology, Agriculture, Medical Research, Veterinary Research, Physiology and Psychology—thirteen in all.

Every section spent six hours daily to the reading and discussion of papers, so that we were fully occupied for the whole day. The evening was spent in sight seeing or at a party; but we came back at 6-30 for an hour's popular lecture, which perhaps was the best item of all.

I attended the meetings of the Mathematics and Physics section. We were, I suppose, the most fortunate in having a large number of overseas delegates, who gave us illuminating lectures on the topics which each one had pursued in research. Sir James Jeans, Lord Aston, Sir Arthur Eddington, and many others talked to us on topics connected with Atomic and Molecular Structure, Electricity and Magnetism. While some of them were easy to follow, the others were rather difficult. This is because even when we study a single subject like Physics, it has so many branches in it that a knowledge of one branch of the subject does not mean the same in every other branch of it. Altogether about 100 original papers were sent, but only about 20 could be read owing to lack of time, while all the others were taken as read. Many came forward with enthusiasm, to submit papers because they had an opportunity of reading them in this particular gathering. But they nobly gave up their chance, though perhaps they were disappointed in their hearts.

Next, let me say something about the popular lectures. The best were those of Aston, Jeans and Dr. Crew. Sir A. Eddington also spoke well. The one that I liked most was that of Sir James Jeans. We have all read his book on popular astro-physics called "The Universe around us," where he has dealt in detail with Nebulae. But here, when we heard his lecture on the same subject, his personality and his voice had their own effect in producing a completely new picture in our minds. The lecture was held in the Senate Hall which can hold about 2000 people. There are verandahs on three sides of it, with entrances, all round at intervals. So many people were eager to attend the lecture that the hall was full, an hour before the appointed time and people were still flowing in, in spite of the fact that only members with the Science Congress tickets or badges were allowed. Some were clever enough to have the tickets for themselves and give the badges to their friends who also got in. Half an hour before the appointed time, all the doors were closed to prevent the crowd entering the hall. But the people could not contain themselves. There was no loud-speaker in the compound, as there was for the other popular lectures given after this. The doors were continuously banged by the students who, to their great disappointment, did not get an opportunity to hear Jeans. Once, the bolts of one of the doors were not fixed properly, so that it was forced open and a hundred and odd people entered before it could be closed again. So great was the excitement of the people outside, that, lest they should rush in, even the lecturer of the evening could not enter by the usual entrance. He had to come round through the entrance meant for ladies!

He spoke to us on Nebulae, illustrating the whole lecture with beautiful slides. He told us of the different types of nebulae, which are vast masses of gas at extraordinarily high temperatures and which slowly, during the period of millions of years, condense, forming a large number of

young stars. They are mostly of the shape of a solid wheel, i.e., one without spokes, in which stars are formed in clusters. Each of these wheel systems is called a galactic system. Ours is also one such system, the transverse section of which we see as the Milky Way right across the sky. The sun is one of the stars in the plane of this wheel system. The distance of the faintest galactic system visible in photographs is 240 million light years and that of the nearest is 770,000 light years. A light year is the distance that light will travel in one year at the rate of 186,000 miles per second. We can now imagine, or perhaps cannot imagine, these vast spaces, and the creations of God in them. He ended up his lecture by coming to man, his position, his deeds and his pride on the earth, giving us a vivid picture of how we do not form even a speck in this vastness of the Universe.

I am sorry I am unable to describe these facts as he did. If I could, I do not know how far I would have realised that I am not even a speck of dust in the Universe. The lecture was in complete darkness except for the light of the magic lantern which just threw the lecturer into sight. He stood calmly as in a picture, with his arm on the stand, and delivered his most interesting lecture without a single pause or doubt; so that the whole audience was in rapt attention, experiencing real pleasure in listening to the mysteries of the firmament being expounded in the simplest manner possible.

Before concluding, let me glance at one or two of the noteworthy features in the educational life of Calcutta. St. Xavier's College, which is a missionary institution, possesses a 9 inches refracting and a 10 inches reflecting telescope, ranking among the largest in India and also other astronomical instruments of great value. The University College of Science and Technology which owes its origin to the munificence of Sir Taraknath Palit,

Sir Rash Behary Ghose and others, is very well equipped for research work in Mathematics, Physics, Chemistry and Botany.

Two other research institutions deserve mention. One of them is the Royal Asiatic Society of Bengal, founded in 1784 by Sir William Jones, which fostered the formation of the Indian Science Congress, which held its first session in the Society's rooms in 1914. It is responsible for the management of the work of the Congress when not in session. This Society has been throughout its long career, the principal source of inspiration in the organisation and advancement of scientific research of every description in this country. It is therefore particularly appropriate that Calcutta was chosen for the celebration of this Silver Jubilee session of the Science Congress after 25 years of successful work. The other institution is the Association for the Cultivation of Science, started by the selfless efforts of Dr. Sircar in 1876; it has attracted both private munificence and Government aid and enables students from all parts of India to do research work. Sir C. V. Raman, as Professor of Physics of the Calcutta University, did most of his work in this institution, and the room and apparatus where the well-known Raman Effect was discovered are still held in great reverence. It also publishes the "Indian Journal of Physics" which now occupies an international status and is the recognized organ for the publication of research work done by Physicists in all parts of India. On the whole, I was struck with the eagerness of the rich to be bountiful and to make good use of their money, by helping intelligent but poor students in the search for truth, by encouraging the practical applications of this knowledge to the welfare of the people, by the development of large indigenous industries, like the famous Bengal chemical and Pharmaceutical Works started by Sir P. C. Ray. Let us compare their situation with ours in South India. South India is in no way behind the other

parts of the country in producing great intellects. There was Ramanujan whose works have not yet been completely understood. There are Sir C. V. Raman, Dr. Chandrasekharan and many others whose value, perhaps we have not yet recognized. Dr. Chandrasekharan left us for America, simply because the Madras University did not fully realize the value of such a man in its laboratories. Now Sir C. V. Raman is also resigning his post in Bangalore and perhaps going to Europe where he will be welcomed. Cannot the University of Madras or even the united efforts of the magnates of our Presidency create a post for him here? It is true that "in spite of political, national and racial prejudices, devotees of knowledge and truth all over the world can and should collaborate and become the harbingers of the new era that is to be." But, as Lord Rutherford has pointed out, there are vast fields in India where research ought to be done if more efficiency is required. And India needs it most, now, at this period of enormous unemployment. It would be well therefore if veterans like Sir C. V. Raman are retained here to direct such work as will reveal the best uses of what Mother India has given us.

Let me conclude this brief article by quoting from the speech of Mr. Mukherjee, the Chairman of the Reception Committee:—

Let India and her scholars play their part in this noble re-making of man's destiny. Rich with traditions and thoughts and endowed with strength and vitality, India claims the right of being treated as a companion with equal rights in the world's march towards a higher and nobler civilisation. Let this international meeting mark a definite stage in this collaboration on a world-wide scale, based on justice and fair-play, leading towards the ultimate triumph of truth and of righteousness, of freedom and of peace.

K. R. KAMALA BAI, B. SC. (Hons.)
(Old Student)

The Problem of Federation in India

THE All India Federation, as envisaged in the Government of India Act of 1935, is something intolerable to the Indian National Congress. They wish to resist it with all their might; while, the members of the Liberal Party, like Sastri and Sapru, the Nationalists, like Malaviya and Aney, and the leaders of the Muslim League, the Hindu Mahasabha and other parties in the country are prepared to work it, as a temporary makeshift, if some of its most objectionable features are removed. Such is also the view of Lord Lothian who appeals to the people and the Congress to accept the principle of Federation, though the scheme has some drawbacks.

The seven Congress Provinces have passed Resolutions (in some form or other) in their Legislatures rejecting the Federation and urging for a scheme 'to be evolved in consultation with the responsible provincial governments and the national leaders.'

British statesmen have all along been emphasising the importance of a Federal Constitution for India. And it must be admitted by any student of Comparative Government that All India Unity is bound to be a Federal one. For, though India is a vast continent with 350 millions of people in it, with diverse castes, creeds, and languages, it satisfies two important conditions. The first is that it has a well-marked geographical unity; and the second is that there is a desire for all its inhabitants for 'union but not unity.'

What are the defects of the proposed Federation?

With reference to the powers of Government (of the Federating Units), it is much better (as Sir Samuel Hoare admitted) to have only one list of legislative subjects

allocated to the Provinces, the residual subjects being assigned to the Centre. Indian conditions demand that there should be a strong Central Government in order to carry out the Reforms in the social and economic spheres, which the country so direly and urgently needs. But in the Act of 1935, there are really three lists—the Federal list, the Provincial list and the Concurrent list.' This attempt to draw exhaustive lists (with reference to the activities of the Government) is bound to give rise to complication and to increased legislation.

Another defect of the Act is that the power of the Federal Legislature to make laws for the Provinces is different from its power to do the same for the States. The Ruler of a State can specify in the Instrument of Accession the subjects with regard to which (and the extent to which) the Federal legislature may make laws for his State. Thus there will be variation between Provinces and States, and from State to State in the number of Federal subjects. A Federation whose legislative competence is not uniformly applicable to all its units is certainly abnormal.

The Federal Legislature will be composed of two Houses, namely, the Federal Assembly consisting of 250 representatives of British India and not more than 125 representatives of the Indian States; and the Council of State consisting of 156 representatives of British India and not more than 104 representatives of the Indian States.

The British Indian seats in both the Houses will be distributed on a communal basis. Separate representation will be allowed to Hindus, Muslims, Sikhs, Depressed classes, Indian Christians, Anglo-Indians and Europeans. Commerce, Labour, Industry, Women and Land-holders will have special reserved seats.

The Council of State will be elected on a restricted property franchise and will therefore represent the richer,

landed, industrial and commercial classes. The distribution of seats here is unequal and is based on various considerations, such as the population of the provinces and the relative importance and rank of the Federated States, as indicated by dynastic salute and other factors. An attempt is made to assign an equal number of seats to the States of equal rank, irrespective of their population; the representatives are to be the nominees of the Princes and not to be elected by the States' people. The Council of State is to be endowed with important legislative and financial powers, with the result that it will prove to be a strong check on the popular feelings that the Lower House may represent.

Moreover, it is an elementary principle of popular government that the Lower House should be elected directly by the mass of the people whom it is meant to represent. As the Provincial Assemblies will elect members for the Federal Assembly, this principle of direct election is not observed. Further, the representatives of the States, being nominees of the Princes, will form as it were 'a revised edition of the present nominated block of officials and non-officials in the central legislature.'

So, even in the Assembly, there is not much likelihood of any great sympathy with popular aspirations.

As regards its powers, in the first place, Defence and External Affairs, which are politically the two most important departments, will remain outside the sphere of control of the Federal Legislature, which will neither legislate on any matter relating to these departments nor have any voice in the determination of the expenditure incurred on them. For, the Governor-General 'shall himself direct and control the administration of the departments of Defence, External affairs and Ecclesiastical affairs.'

Secondly no bill can become law (even if passed by majorities in both the Houses) unless it has received the assent of the Governor-General.

Thirdly the previous sanction of the Governor-General is necessary for introducing any bill in either House of the Federal Legislature.

Besides, any Federal Act may be disallowed by the King within twelve months from the date of its enactment.

Again, the powers of the Federal Legislature in matters of finance are limited. The annual expenditure will be divided into two parts:

- (a) expenditure charged upon the revenues of the Federation, and
- (b) expenditure proposed to be made from the revenues of the Federation.

The former will be non-votable by the Federal Legislature and will include the salary, allowances and other expenses of the Viceroy, the Ministers, Financial Adviser, Advocate-General, Chief Commissioners, and Judges of the Federal Court; pensions payable to the Judges of High Courts; Debt charges; expenditure on Defence; External affairs and Ecclesiastical affairs; and the expenses incurred in discharging the functions of the Crown in its relations with the Indian States.

The second part, namely, expenditure proposed to be made from the revenues of the Federation, will be votable by the legislature, but the Governor-General has the power to sanction and thus to include in the annual budget any amount reduced or rejected by the Legislature.

Besides, the Federal Legislature will have little control over the Federal Reserve Bank and the Indian Railways. The head of the Federal Executive, *viz.*, the Governor-General, has been invested with wide discretionary powers and special responsibilities. Besides having the power of veto, he can reserve a Bill for the signification of the King's pleasure, promulgate ordinances and make laws independently of the legislature by enacting a 'Governor-General's

Act.' He can summon or dissolve the Legislature or summon a joint session of the two Houses. He can arrest the course of discussion of any measure in the Legislature and assume all powers; in the case of a break-down of the constitutional machinery. He has special responsibilities for maintaining peace and tranquillity in the whole country; for safeguarding the financial stability of the Government; and for protecting the interests of the minorities, and the Services. He has also to protect the rights of any Indian State and the rights and dignity of the Ruler thereof.

There are about 600 States, great and small, forming, on the whole, a little more than two-fifths of the country. The Princes are given a large representation in the Federal Legislature. And their entry into the Federation does not in any way affect their treaty rights with the British Crown or their internal sovereignty. Further, while the States occupying 33% of the seats in the Lower House and 40% of the seats in the Upper House have the same powers as the provinces to legislate for British India, the Federal Legislature as a whole has no power to make laws for the States, except with regard to certain specified subjects accepted by the Rulers. This may mean that the Princes will be able to defeat democratic measures in the Federal Legislature and to maintain their autocratic rule in their States. But it must be said that the Federation brings out the States from their severe autocratic isolation: and it is hoped that their impact with the autonomous Provinces and their elected representatives will make some of the progressive-minded Princes grant responsible government in their dominions. It must also be said in fairness to some of the States at least, that signs of the dawn of democracy are traceable. Ere long the Princes that accede to the Federation should relax their monopolistic grip on their Government and grant their subjects democratic institutions. But this is only a pious hope, and there is no guarantee that it will happen.

Thus the chief defect of the Federation is that it will be a union of unequal units, wherein the many millions of States' subjects will have no voice, either in their own State or in the Federation in which they are Federating units.

But it must be remembered that it is the first time in the annals of our country, that the task of unifying All India through a federal constitution has been undertaken, and as such, it is breaking new ground at every stage. If it is full of anomalies and runs counter to every essential principle of a truly Federal system of Government, it is because it is a unique experiment in the history of the world. India presents a large number of difficult problems, like those of communal differences, protection of minorities, lack of an acknowledged *lingua franca*, the presence of different stages of civilisation in different parts of the country, and the peculiar position of certain federating units, *viz.*, the Indian States. No two Indian States are alike either in their relation between themselves or between them and the Paramount Power.

Further, this is the first time that the Indian Princes, who were left severely alone till now (from the point of view of the British Indian provinces) are proposed to be brought into a close contact with progressive provinces, having popular governments and enjoying a considerable measure of provincial autonomy. This impact is bound to have some desirable repercussions, on some at least of the States. And even the absence of responsible Government in the States does not mean that they are not responsive to the demands of public opinion.

In view of all these considerations the Liberals say, "Accept the Federation and ask for more." But fortunately or unfortunately, the Congress is equally vehement in its decision to combat this Federation on the contention that its foundation is shaky, its structure is bad and its result is bound to be evil.

Will the Federation be still born? Time alone can say.

S. CHANDRASEKHARAN,
V Hons. (History).

"Free Air and Water"

FROM my house (the location of which you need not know) you have to go straight, turn to the right, again to the left, again on the left and then on the right, when you go right into the blind lane where the world famous "—Petrol Bunk" (from which I get petrol for my car) is to be found. On some day between the 1st of January and the 31st of December of some year, I motored down to the bunk—the direction of which has been so explicitly given—to replenish my 12-cylinder car which could go at the phenomenal rate of five miles per gallon, with twenty gallons of petrol, as my car could hold no more.

My eyes were not acclimatized to a certain thing which I found that day near the bunk; a broad signboard with a tall post displayed in block letters the audacious words:—*Free Air and Water*. Try to picture my foolish, fatuitous face on seeing these words; I say 'try' because I am sure you cannot succeed. Were air and water ever sold? If yes, I could give myself some sort of an explanation that the bunk proprietor gave air and water gratis to attract customers. I could reconcile myself to cars being sold and taxed; I could reconcile myself to houses being sold and taxed; for the matter of that, I could reconcile myself to anything being sold and taxed but air and water. But, for the nonce, the belief that air and water were either taxed or sold took such a strong hold on me that I began to take in air, to put the matter euphemistically, economically. But the next moment I argued, "If I inhale some air, I exhale the same amount of air. Therefore, the body which taxed the two commodities is in no way the loser by it," and inhaled more freely, to relieve the feeling of congestion that had almost choked me till then. A bewildering succession of thoughts passed through my brain; for, the car took full

sixty minutes to be 'fed'. Sixty minutes! You might not believe it. The 'stomach' of my car was capacious enough, I have told you, to receive twenty gallons of petrol. But the story is not yet fully told. As the pump had gone 'a bit out of order,' as they say, petrol could flow only by dribblets and that was why we had to wait at the bunk for such a long time.

All of a sudden, I had an idea. Why should I not ask my companion or better still the chauffeur and understand what it meant? But then what about my education? What about my dignity? If I asked my friend he would take me for a consummate ninny. If I asked my chauffeur I would be lowering myself considerably in his eyes. Possibly, I could not expect any enlightenment from the car which, needless to say, is an inanimate thing. Therefore, I thought I had better dwell in my ignorance than make a fool of myself! Well, the only thing left was to rack my brain more and more. The hotels sold water at three pies a cup; this thought brightened my face, for it seemed to promise a successful termination of my meditations. But,—and this 'but' threw cold water on my hopes. The hotels sold water; not as it is provided by the benign Maker, but artificially cooled by human skill; a cup of which in my opinion did deserve three pies. And so, this similarity did not go very far. Ah, what a hopeless plight I was in!

Why not continue in my ignorance? Yes—but how long? The more I waited, the more impatient I became; the more I pondered, the more I was troubled.

The full sixty minutes were over and the car had started with an asthmatic groan and I was all the more impatient for it. After much cogitation I determined to ask the chauffeur who was more experienced than my friend, and end my troubles. The car had traversed about two furlongs. I pulled myself together and said, "Driver, what for—" but in an instant considerations of prestige got the better of me, and I proceeded "—are you turning to the

left? Go direct ;" which direction, the reader may perhaps be interested to know, led directly into the Bay of Bengal. So in trying to save my pride, I was about to lose myself, my friend, my car and my chauffeur ; but there was no such possibility, as my driver loved his life too dearly to execute his master's orders to the letter. Instead of doing as I had bidden him, he applied the brakes, and gravely turned to me to know what exactly I meant. I felt my dignity give way under me, like quicksands. With a grave, sonorous and commanding voice, which effectively prevented the driver from asking anything, I said "Go home". The whole thing began to disgust and bore me infinitely. "What the deuce do I care whether water is taxed or air is taxed or (if you please) hell is taxed, as long as I have water to drink and air to breathe," I said to myself and kept quiet.

Some four days later, the twenty gallons of petrol being exhausted, I again happened to go to the bunk in my car. The board there raked up the whole trouble and again my mind was in a terrible turmoil about it. But this time the gods had blessed me and I jumped upon the solution of the knotty problem which had been taxing me all along. The 'air' was meant for the tubes and the 'water' for the radiator. The proprietor was quite right in saying "Free Air and Water ;" he was certainly showing great concession in offering air and water free, for, he could with legitimate right expect some money (which he was not doing) for his trouble in storing them and his money spent in buying the contrivances to store them. Success buoyed me up and in a great ecstasy, I cried out to my friend who was sitting complacently by my side biting his nails, "A brain-wave." This sudden articulation of triumph startled my friend and upset him. He set about searching for a 'screw-driver' to tighten the screw that, as he believed, had gone loose in my head. Lest he should apprise the chauffeur of the supposed unstable equilibrium of my brain, I took him into my confidence and gave him the history of the whole affair.

BALDEV DAS,
III Hons. (Math.)



COLLEGE NOTES

Changes in the Staff :—

1. Mr. T. N. Krishnaswami Ayyar has been appointed as Assistant Professor of Physics in place of Mr. G. P. Krishnamurthi, on other duty as Acting Additional Professor.
2. Mr. G. A. Sreenivasan has been reverted to his permanent place as Assistant Professor of Mathematics ; and Mr. S. Isaac who was acting in his place has been transferred to the Government Arts College, Rajahmundry.
3. Mr. G. Sambamurthi, Additional Professor of Chemistry, has been permitted to retire from Service from 16-1-38 and he has been succeeded by Mr. P. A. Narayana Iyer.

THE LATE MR. BURRA SATYANARAYANA

We regret to record the sudden and premature death of Mr. Burra Satyanarayana, (one of our brilliant old boys) on the 7th of February. Born in 1889, he had his education in the Presidency and Law Colleges and practised as a lawyer under Mr. (afterwards Sir) V. Ramesam. He quickly built up a lucrative practice and was well known among the members of his profession. He had a charming personality and this endeared him to all his friends. As a member of the City Council, he was a stalwart advocate of every measure which was intended to benefit the citizens of Madras. He was a valiant fighter for pure administration, and was subservient to none. He was a member of various educational institutions, including the Madras and Andhra Universities. He was a genial and generous host, and was specially noted for his good cheer and *bon homie*. Madras is distinctly the poorer on account of his passing away. To the members of his family, we tender our sincere sympathy in their great affliction.

THE UNION SOCIETY

The second term began with the election of Mr. Ramakrishna Prasad as the Secretary of the Union. Mr. Balachandra Pai became the President.

The Hon. Mr. C. Rajagopalachariar, Premier of Madras, delivered a lecture before a packed house on the work of the Congress Government in this province.

Mr. S. V. Ramaniah and Mr. S. Chandrasekhar were selected to represent our College in the Y. M. I. A. Inter-'Varsity debate held at the Gokhale Hall. The Annamalai 'Varsity, the Madanapalle Theosophical College and all the City Colleges competed. Mr. S. Chandrasekhar was awarded a special prize of half a dozen valuable books by the kindness of Mr. G. A. Natesan, who was one of the Judges.

On Monday, 18th October, the Honourable Dr. T. S. S. Rajan, Minister for Public Health to the Government of Madras, spoke on the "Place of Physical Culture in a Scheme of National Education." He exhorted the students not only to improve their intellect but also to develop their physique.

Mr. C. K. Sitharam and Mr. S. Chandrasekhar were selected to represent our College at the Inter-'Varsity debate conducted by the Annamalai University at Chidambaram. Loyola, Christian, Pachiappa's and other Colleges sent representatives. The subject of the debate was 'Hindi should not be introduced compulsorily in the lower forms'. Mr. S. Chandrasekhar was awarded one of the two 'Best Speakers' trophies.

On 8th November, Mr. Chandrasekharan moved 'that Prohibition should not have been the primary task of the Government of Madras'. Mr. N. S. Varadachari, Parliamentary Secretary to the Minister of Agriculture, who acted as the Observer, narrated his personal experiences at Salem and concluded that Prohibition was bound to be a success.

After a trial debate Mr. P. Viswanathan and S. Chandrasekharan were selected to represent our College at the Inter-'Varsity debate conducted by the Mysore University. Though we lost the first trophy (which was won by the Ernakulam College) we annexed the second trophy.

Mr. Viswanathan and S. Chandrasekharan were selected to represent our College at the All-India Inter-University debate conducted under the auspices of the Golden Jubilee Celebrations of the Allahabad University. The subject was 'A social and political dictator can do more good to India to-day than all the legislatures combined.' Our debaters were handicapped by the cold wave of Northern India and so they could not do as well as one might expect.

During the third term, Mr. George Verghese was returned as the Secretary of the Union without any contest, and Mr. Ramakrishna Prasad became the President.

On 1st February, the new Natural Science Buildings were opened by His Excellency the Governor. An account of the memorable event is found elsewhere in this issue. The President took a prominent part in the function; and all the members of the Union Committee formed the Volunteer Corps and thus rendered valuable help on the occasion.

At an ordinary meeting of the Union, Mr. S. Chandrasekharan moved the proposition 'War is a necessary institution for the progress of mankind'. Mr. S. V. Ramaniah led the opposition, and was ably supported by Miss Gordon and Miss Aisha Begum.

G. I. VERGHESE,
Secretary.

THE ENGLISH HONOURS ASSOCIATION

At an ordinary meeting of the Association held on 24th February, Mrs. Lakshmi Ammal, Professor of English in the Queen Mary's College, spoke on Browning's Philosophy. Mr. M. R. Rajagopala Iyengar was in the chair.

It is hoped that members will be more enthusiastic at least hereafter; for without their co-operation very little work can be done.

G. RAMANATHAN,
Secretary.

THE TAMIL MANAVAR SANGAM

The following meetings were held:—

Date.	Lecturer.	Subject.	President
21-10-'37.	Mr. Sargunar, B. A.	"The Necessity for Tamil Learning"	Vidwan V. Venkatarajulu Reddiar
12-11-'37.	Mrs. Nallamuthu Ramamoorthy, M. A. (Hons.)	"Tamilians and Citizenship"	Sister R. S. Subbulakshmi Ammal, B. A.
15-2-'38.	Vidwan T. P. Meenakshisundaram Pillai, M. A., B. L.	"Manthira Padalam in Kamba Ramayanam"	Vidwan R. Viswanatha Iyer, B. A.
21-2-'38	Mr. Ganapathi Iyer	"Perumpanatruppadai"	Vidwan R. Viswanatha Iyer, B. A.

When Professor K. Swaminathan's "Kattai Vandī" was twice performed in the College Hall, many of our members took an active part in it.

At a meeting of the Working Committee the following resolutions were carried unanimously:—

"The Sangam places on record its grateful thanks to the Presidency College Dramatic Club for having given a munificent subvention of Rs. 200 from the proceeds of the two performances of the Tamil Opera "Kattai Vandī" by Professor K. Swaminathan."

"The above subvention is to be utilised for presenting an oil painting of Mahamahopadhyaya Dakshinathya Kalanithi Dr. V. Swaminatha Iyer to the College in recognition of his long connection with our College as a Tamil Pandit and for the meritorious service he is doing for Tamil Literature."

ARUNACHALAM CHETTIAR,
M. MEYYAPPAN,
Secretaries.

THE ANDHRA ASSOCIATION

The Valedictory Address was delivered by Brahmasri S. Lakshmipathy Sastriar, Telugu Lecturer, Madras University Research Department, in the new Natural Science Buildings on the 24th Feb. Prof. T. Suryanarayana, B.A. (Cantab.), was in the chair.

After tea, and the introductory remarks of the chairman, the lecturer spoke for over an hour on the glories of the Telugu Language.

The Secretary, in proposing a vote of thanks to the speaker, said he was grateful to all the members who had co-operated with him in making the activities of the year successful.

C. V. KRISHNIAH,
Secretary.

THE SANSKRIT ASSOCIATION

We began the term with an interesting discussion on the 'Study of the Naisadhiyacarita' initiated by M. M. Gurunathan, III Hons. Mr. K. Raghavan, B.A. (Hon.), Assistant Professor, presided on the occasion. The function was remarkable in that both Mr. T. S. Balasubrahmanyam, M.A., L.T., and Mr. O. P. Rangaswamy Iyengar, M.A., L.T., our Assistant Professors, joined the discussion and thus contributed to the success of the function. Many important problems regarding Naishada and its maker were thrashed out.

On Friday, 18th February, a paper on 'The Mrcchhkatika in the light of the so-called Bhasa's Carudatta' was read by B. M. Parthasarathy, IV Hons., when S. Subrahmanyam, V Hons., presided. All the other students of the Department and Mr. T. S. Balasubrahmanyam, M. A., L. T., contributed helpfully to the day's discussions. Though no conclusions could be arrived at, because of the absence of definite and positive proofs, the pros and cons of this great problem of Sanskrit Literature were discussed at great length and many points were cleared. It was a question on which 'much may be said on both sides.'

B. M. PARTHASARATHY,
Secretary.

THE PHYSICS ASSOCIATION

A debate was held on Monday, the 13th December, when the proposition "The Invention of Aircraft is detrimental to human welfare" was put forward and carried by a small majority.

The Association arranged a visit to H. M. S. *Emerald*, on Tuesday, 14th December. The visit was both instructive and interesting.

We had the privilege of hearing Sir Arthur Eddington and Dr. F.W. Aston, famous delegates to the Indian Science Congress, who visited the College on Tuesday, the 11th January. Sir Arthur Eddington spoke on his work and Dr. Aston on "Accuracy in Measurements."

During the term the following students read papers :—

P. Doraiswamy on "Radio Interference ":

M. N. Parthasarathy on "Compton Effect ";

and V. Ramanathan on "Ionosphere ".

There were two additional lectures by Mr. D. Padmanabhan, B.Sc., on "How Physics helps the Doctor", accompanied by coloured projections and interesting demonstrations.

THE CHEMISTRY ASSOCIATION

Under the auspices of the Chemistry Association a party was given to Prof. Sambamurti on the eve of his retirement from service.

Mr. Sambamurti was a student of the Maharaja's College, Vizianagram, —from where he graduated in 1902, standing first in the presidency in Chemistry and winning the Jagirdar of Arni Gold Medal. Soon after, he entered service and worked in the Arts and Training Colleges, Rajahmundry, the Govt. Arts College, Coimbatore, and the Presidency College, Madras. He did much to organise the Laboratories in all these places and make them more and more useful. He was also in the various academic bodies of the Madras and Andhra Universities. He was also keen on manufacturing valuable and delicate apparatus in the college workshops at a fraction of the cost of the imported articles. He did also some work on Phototropy and Chemical induction and contributed some papers to the Indian Science Congress. We wish him all happiness in his well earned leisure. The occasion was also availed of to welcome Mr. P. A. Narayana Iyer who has succeeded Prof. Sambamurti,



Farewell to Prof. G. SAMBAMURTI and Welcome to Prof. P. A. NARAYANA IYER with Dr. B. B. DEY in the Chair.

THE BOTANY ASSOCIATION

The third term this year has been very eventful in the history of our Association. If the opening of the new Natural Science Block was important as a College Event, it was momentous as an event in the history of the Natural Science Department. We have shifted into the new building, which we may justly call our own; and it is our hope that this building would inspire us to greater and nobler efforts to justify our claims of being the best Department of science in South India.

In connection with the opening of the new block we held an exhibition which was seen and applauded by a great number of people. Those who were particularly impressed with the show we had put up, congratulated us heartily on the efficient and orderly way in which we had organised the exhibition. Our students fully realised their responsibilities and carried out whatever work was assigned to them with perfect understanding and co-operation; and it is to them all credit is due.

We had two meetings this term and on both the occasions we had people who were known all the world over for their contribution to science.

Dr. Ruggles Gates, Professor of Botany, London University, who had come to India with the Overseas delegation to the Indian Science Congress, honoured the Association by his presence on Thursday, the 13th January. Dr. T. Ekambaram was in the chair. In the brief speech he made, Dr. Ruggles Gates showed what a master of the subject he was and he left everyone thrilled till the end.

The next meeting was on Thursday, the 10th February, when Mrs. L. Kolisko of America, delivered the valedictory address of the Association—speaking on "Plant Growth". The lecture was all the more interesting in that she had a very good collection of Lantern slides which all those present enjoyed very much. Dewan Bahadur S. E. Runganathan, the Vice-Chancellor, who presided on the occasion, urged the research students to carry on their good work till success was assured and not to divert their attentions to anything else—even if it were a question of getting married!

Dr. Ekambaram proposed the vote of thanks and the meeting terminated.

We have had a very enjoyable and successful year throughout and we hope the tradition will be kept up year after year.

A. R. MOHAJIR,
ROHINI SUJEEB,
Secretaries,

THE ZOOLOGY ASSOCIATION

President: Prof. S. G. M. Ramanujam, F.Z.S.

Vice-President: Prof. A. Ramanathan, M.A., L.T.

Hon. Treasurer: Prof. M. Ekambaranathan, M.A., L.T.

Secretaries: { Mrs. S. V. Saraswathi.
P. S. Anantapadmanabhan.

Class Representatives: C. P. Govindan Nair, B.A.
Miss Sumitra.
G. Ramachandran.
K. Srinivasulu.

Union Society: K. Chidambaram, B.Sc.

Magazine: K. E. George, B.A. (*Editor*).
Miss M. Samuel, B.A. (*Associate Editor*).

The Inaugural Address was given by Prof. R. Gopala Iyer of the Madras University on "Fifty Years of Zoological Research in Madras."

The Members of the Society were "At Home" to the New Graduates on 2nd August. The vote of thanks to them was proposed by G. Ramachandran and responded to by Miss G. M. Lukose and S. M. Krishnan.

On the 16th August, G. K. Rathnaswami read a paper on "Honey bees and how to tame them."

On the 25th August, K. Chidambaram spoke on the Viviparity of fishes.

The usual instructional tour began on the 29th September and lasted for nearly a fortnight. Krusadi Islands, Rameswaram, Dhanushkodi and Kodai-kanal were among the places we visited. In spite of the inclemencies of the weather, we were able to make a good collection of specimens.

The Magazine, published recently, is a fairly good production running to sixty-four pages and containing articles by the past and present students of the Department. The subjects dealt with cover a variety of topics and are bound to be useful to our students.

On the first of February we moved into our new habitation and took part in the three days' exhibition which was from all accounts a great success.

We wish the members of the Society every success in the forthcoming examinations as well as in life.

S. V. SARASVATHI,
P. S. ANANTAPADMANABHAN,
Secretaries,

THE GEOLOGY ASSOCIATION

At a meeting held on 15th July, the following office-bearers were elected :

President : Prof. C. K. Krishnaswami Pillai, M.A., M.Sc., D.I.C.

Vice-President : Mr. P. G. Dowie, M.A., L.T.

Secretary and Treasurer } : Mr. R. Narayanan

Honours Representative : Mr. N. Gopalakrishnan

Pass Representatives : Mr. V. Rajagopalan and Mr. D. Srinivasa Rao

Editors of the Magazine : Mr. C. Gopal and Mr. K. Raghava Reddy

Union Society Representative : Mr. P. C. Jayachandran

The reception to new graduates was held on the 6th August and was largely attended. Mr. V. Krishnamoorthy proposed the toast which was responded to by Mr. M. S. Balasundaram, B.Sc. (Hons.) Mr. T. Sankara Singh, M.A., L.T., and Mr. V. D. Krishnaswami also spoke on the occasion. The President in his concluding speech, stressed the formation of good character as an aid to success.

The Inaugural Address was delivered by Dr. M.S. Krishnan, Asst. Superintendent of the Geological Survey, who spoke on "Some Aspects of the Coal Industry." Mr. T. N. Muthuswami Ayyar of the Engineering College, presided.

The Natural Science Exhibition was held on 1st, 2nd and 3rd February 1938, and an account of it appears elsewhere in this issue.

R. NARAYANAN,
Secretary.

THE HISTORY AND ECONOMICS ASSOCIATION

On the 19th January, Dr. Asirvadam, Reader in Political Science and Public Administration, Madras University, spoke on "Modern Trends in Politics," with Prof. J. Franco in the chair.

On January 26th, a meeting was held, when Mr. Ramachandra Dikshitar M.A., Lecturer in Indian History, Madras University, spoke on "Was Asoka a Buddhist?" Mr. Kochunni Pannicker, M.A., Asst. Professor of History, presided.

An ordinary debate was held on February 10th. The subject was "The Federation as envisaged in the Govt. of India Act serves the best interests of our country." Prof. Venkatarama Iyer presided.

The Break-up Social will take place on the 2nd March. Dr. Subbaroyan has been invited to address the members and the Principal has consented to preside on the occasion.

V. M. M. NAIK,
AHMED RAZA,
Secretaries.

THE PRESIDENCY COLLEGE DRAMATIC CLUB

Since the note was published in the last issue of the College Magazine, there were three more performances of the Tamil Comic Opera, *Kattai Vandi*. The first, on 2nd January, was a "repeat" performance at the College Theatre itself. The second, on 14th January, was in response to a request from the All-India Khadi and Swadeshi Exhibition Committee, in the Special Pandal of the Exhibition grounds before a very large and representative gathering. Admission to this was free. The third, on the 4th February, was in aid of H. M. the King-Emperor's Anti-Tuberculosis Fund, at the Muhammadan College Theatre. A sum of Rs. 572 was handed over to the Secretaries of the Local Anti-Tuberculosis Committee.

The chief reason for this insistent demand for this opera was that it was interesting, laughter-producing and full of life, instead of being monotonous and soulless, as Tamil Dramas too often are. Further, all the players acquitted themselves creditably in all the performances, but special mention should be made of Prof. V. Venkataraman, Prof. R. V. Narayanaswami and V. Krishnamurti who played the parts of the Raja, the Rani and the Sanyasi respectively. As the *Madras Mail* remarked, there is also no doubt that the author-producer, Prof. K. Swaminathan, has given to the Tamil stage a great play.

The Club also staged two short plays (Tagore's "Sacrifice" and "The Poetasters of Ispahan") in English at the College Theatre on the 21st January, in aid of the Students' Aid Fund of the College. A sum of Rs. 50 was paid towards the same. The tone of solemnity in the Sacrifice and that of extravagant hilarity in the Poetasters were both very well brought out by the actors.

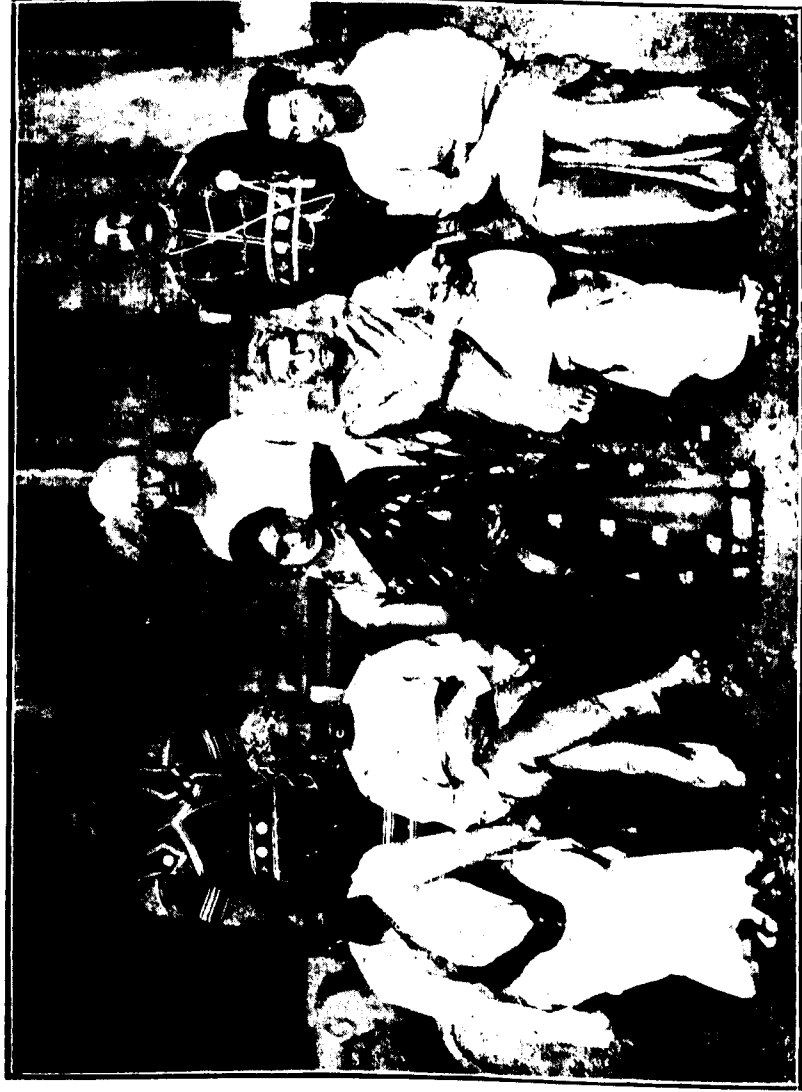
The thanks of the Club are due to all the actors in the Tamil and English Dramas; the Secretaries of the All-India Khadi and Swadeshi Exhibition Committee; and the Provincial Anti-Tuberculosis Committee for a very successful year's record of its activities.



Cricket.

The Loyola College met us again for the third time during this year, in the finals of the Duncan Tournament. We won the match comfortably by five wickets. The Loyola College batted first and compiled 93 runs. We were just able to secure a lead of 11 runs by scoring 104 runs in our first innings. Srinivasan played well for his 26 runs and was unbeaten at the end. In the second innings, the Loyola College did not fare any better and they were all out for 90 runs. We hit up 96 for the loss of five wickets and declared. P.V. Varadan and R.M. Mahadevan remained unbeaten with 35 and 24 respectively. Thus we have the distinction of retaining the Duncan Cup for the thirteenth year in succession.

Having won the Inter-Collegiate Championship, and thus become local champions, we represented the Madras Zone against the St. Aloysius College, Mangalore, in the Inter-Divisional Tournament conducted by the University of Madras. The match was played at Coimbatore on the 21st and 22nd of December 1937. We lost the match by five wickets. Though we were lucky in winning the toss and electing to bat, our batsmen did not turn to advantage this initial piece of luck. Dattatreya Rao, the captain of the opposing team, bowled to such good purpose that we were all out for 99 runs. The St. Aloysius XI passed our total for the loss of only two wickets and looked like heading for a large total. But a fine spell by Shujat Ali, our slow left-arm bowler, set their object at nought and eventually they were all out for 196 runs. Having secured the lead in the first innings in a two-days' fixture, our opponents were in a strong position. Only 4½ hours of play being left, we were faced with the task of wiping off the deficit on the first innings, piling up a respectable score, and then getting our opponents all out. In our endeavour to do this, we had to throw all caution to the winds, and attack the bowling from the first. We proceeded to do this and when our second innings ended we had compiled 155 runs. Swaminathan played very well for his 40 runs; he was a model of patience keeping one end up while the others went all out for the runs. The St. Aloysius College hit up the requisite number of runs for the loss of five wickets, and thus won the match.



TAGORE'S SACRIFICE : THE CAST.



KATTAI VANDI : THE CAST.

Hockey.

We entered for the Stokes Shield Knock-out Tournament held during the third term. In the first round we defeated the Y.M.C.A. College of Physical Education by 4 goals to 3. C. K. Sitaraman, P. S. Narayanaswami and Mohajir were the scorers.

In the semi-final against the Christian College we drew the first game, when C. K. Sitaraman, scored the only goal for us. In the re-play, with two of our best men not turning up, we lost by 3 goals to 1. C. K. Sitaraman scored the only goal for us.

This was the last match of the year. Several students have helped to enhance the prestige of the team. Special mention may be made of C. K. Sitaraman, affectionately called 'C.K.' by his friends. He was the centre-forward for the last five years. He was also Secretary and later Captain of the team. Besides him, A. R. Mohajir, P. V. Varadan and P.V. Murthi also distinguished themselves by their hard work. We wish them all the best of luck.

Football.

The College won against the School of Indian Medicine in the Jabbar Memorial tournament conducted by the Govt. Muhammadan College. In the next round against the Muhammadan College we lost by 2 goals to 3.

Boxing.

Our boxing team started with great possibilities but we did not fulfil our expectations. Our fund was greatly enhanced by the kind consideration of the Principal who expected us to bring home the trophy that has been slipping from our grasp so long.

Our team this year has been under two coaches, Mr. Swami, Bantam weight champion from Singapore, and Mr. K. Muthu, the famous Indian boxer of Madras, who know the finer points of the art and have evinced great interest throughout, though to the great disappointment of all, we lost the Sastry Cup by the negligible margin of a single bout. It was a well contested tournament and the run of the bouts filled us with great hope. The first three fights we had won and of the remaining six bouts we needed but two for a win. The fourth bout of 'Joy' (G. Verghese) seemed a certain winner but the judges thought differently—however another bout went to our credit—and three more fights to go with only one more for a success! 'Dev' (D. Mahadevan), our toughest guy, was there to do the work. With a mighty punch that would have unsettled Jove he floored his man, but luck the coquet, as is her wont, would not see us win. With a sportsman's spirit we bore her pranks. Hats off to the stalwarts!

With an iron determination we have set ourselves to retrieve lost laurels.

Characters of the 'Tough Guys'

1. R. M. Mahadevan, (Captain). Light weight.—9 st. 9 lb.
Most enthusiastic, and indefatigable. His motto "offence is the best defence." Has wonderful stamina, devastating punches and a conqueror's courage. A fine sport and a good leader.
2. G. Chelliah, (Secretary). 8 st. 2 lb.
Nimble feet, fairly hard punch, did not rise to the occasion.
3. G. Verghese. 7 st. 10½ lb.
Neat foot-work, has a sting in his punch. Weak guard, but will improve with experience—Delightful to watch.
4. M. N. Jayaraman. 7 st. 4 lb.
Characteristic 'cobra' style. A great scrapper but lacking wind. Has experienced no reverse.
5. M. V. Sethuraman. 6 st. 6 lb.
A new find. Means work on the stage. His left works havoc and he knows the proper use of his feet. A boxer in the making.
6. D. Arumugham. 7 st. 4½ lb.
New to the stage. Lacking self-confidence. Possesses power in his punch. Should improve on his foot work.
7. K. Gopalkrishnan. 9 st. 1½ lb.
A scientific scrapper—Should improve on his foot-work—has the punch of a bantam weight—His earnestness will be amply rewarded.
8. K. Govindarajulu. 8 st. 3 lb.
Boxes in the Indian style. Has a powerful punch, but does not know how to use it. No footwork. Should change his tactics.
9. G. G. Daniel. 8 st. 12½ lb.
Possesses style—lacking confidence and stamina—Unimpressive
- D. Mahadevan. 9 st. 2 lb.
Our hardest hitter; possesses punch that Farr lacks. Has great stamina which stands him in good stead. Has great confidence but lacks experience.
- D. K. Dey. Knows the art, can use it to advantage, but fights shy of public appearance.
- J. Gandhi. A brave lad, but too short for his weight. Will improve as time goes on.

Tennis.

We are glad to say that we have a very good record in Tennis this year. Our College standard is easily the best among the local colleges.

This term, the Tennis activities opened with our Captain, Narasimha Rao winning the Annamalai University Championship, thus retaining his title for the second year in succession. He beat Sethuraman, our own College player, in three straight sets, the score being 6-1, 6-3, 6-4. As the score indicates, Sethuraman gave the holder little opposition. In the tournament for the Sir C.P. Ramaswami Iyer's Cup conducted by our College, Narasimha Rao lost in the Final to M. Rama Rao of the Law College. As Narasimha Rao was the runner-up in this tournament last year, we hoped he would annex this Cup this year. But on account of Rama Rao's age and experience, Narasimha Rao lost, after a brilliant game in the first set. We also lost the Doubles in the semi-final round.

This year the University trials to select a Madras Team were conducted on our Courts, (it was ten years back that trials were held on our Courts when Mr. N. Krishnaswami, the South India Champion, captained the Madras Team and won the 'Varsity Championship) and our candidates gave a good account of themselves. Narasimha Rao was one of the four selected to represent Madras in the Inter-Varsity Tournament conducted at Allahabad. This is the second time that a Presidency College player is selected for the University and Narasimha Rao may well be proud of his achievement. We have in him a promising champion, and if he keeps up, there is no doubt of his becoming one of the foremost players. He is now in the final year and his leaving the College next year will be a great loss for the College Tennis.

We are very grateful to our President, Mr. T. Suryanarayana, whose kind encouragement is the cause of many improvements and progress in our tennis. We are also thankful to Sethuraman, our energetic Secretary, for having assisted the College untiringly. We also thank our popular Physical Director for his kind help to the Tennis Club. The success of our open tournaments is largely due to his able supervision and it was he who conducted all the 'Varsity trial matches on our courts. The University also cannot forget the pains taken by him and by Prof. C. K. Krishnaswami Pillai in selecting the team.

Results of the Open Tournaments.

- Cricket—Duncan Memorial Cup—Presidency College.
Football—Professors' Cup—Govt. School of Technology.
Hockey—Rajah of Panagal's Cup—Loyola College.
Tennis Singles—Sir C. P. Ramaswamy Iyer's Cup—
Won by Law College (Rama Rao)
Runner-up—Presidency College (V. Narasimha Rao)

Tennis Doubles—Law College (Sri Ram and Hanumantha Rao)

Runners-up—Law College (Rama Rao and Prakasa Rao).

College Tournament.

Level Singles

Winner: V. Narasimha Rao.

Runner-up: S. Desikan.

Level Doubles

Winners: G. Sethuraman and V. Narasimha Rao.

Runners-up: S. Desikan and Madhavan Nair.

Handicap Singles

Winner: V. Narasimha Rao.

Runner-up: K. Venkatesan.

Handicap Doubles

Winners: V. Narasimha Rao and K. Venkatesan.

Runners-up: G. Sethuraman and M. Swaminathan.

Seniors

Football—Mathematics: A. N. Lakshmanan.

Hockey—History: C. K. Sitaraman.

Volley Ball—History: K. Nanjappa.

Athletics—

Long Jump—History: R. M. Mahadevan.

4 × 100 Metres Hurdles—History: R. M. Mahadevan.

4 × 100 Metres—History: R. M. Mahadevan.

4 × 200 Metres—History: R. M. Mahadevan.

Juniors

Football— Class I Group ii: D. Luxmanan

Hockey— Class I Group i: P. V. Varadan.

Volley Ball—Class I & II Group iii: C. V. Krishnayya.

Athletics—

Long Jump, Class I & III Group iii: S. Krishnamachari.

4 × 110 Metres Hurdles—Class I & II Group iii: S. Krishnamachari.

4 × 100 Metres—Class I & II Group iii: S. Krishnamachari.

4 × 200 Metres—Class I & II Group iii: S. Krishnamachari.

Bourne Trophy for Champion Group Senior: won by History.

Jagannathan Trophy for the Champion Group Junior: won by class I & II

Group

Individual Championship: D. Mahadevan.

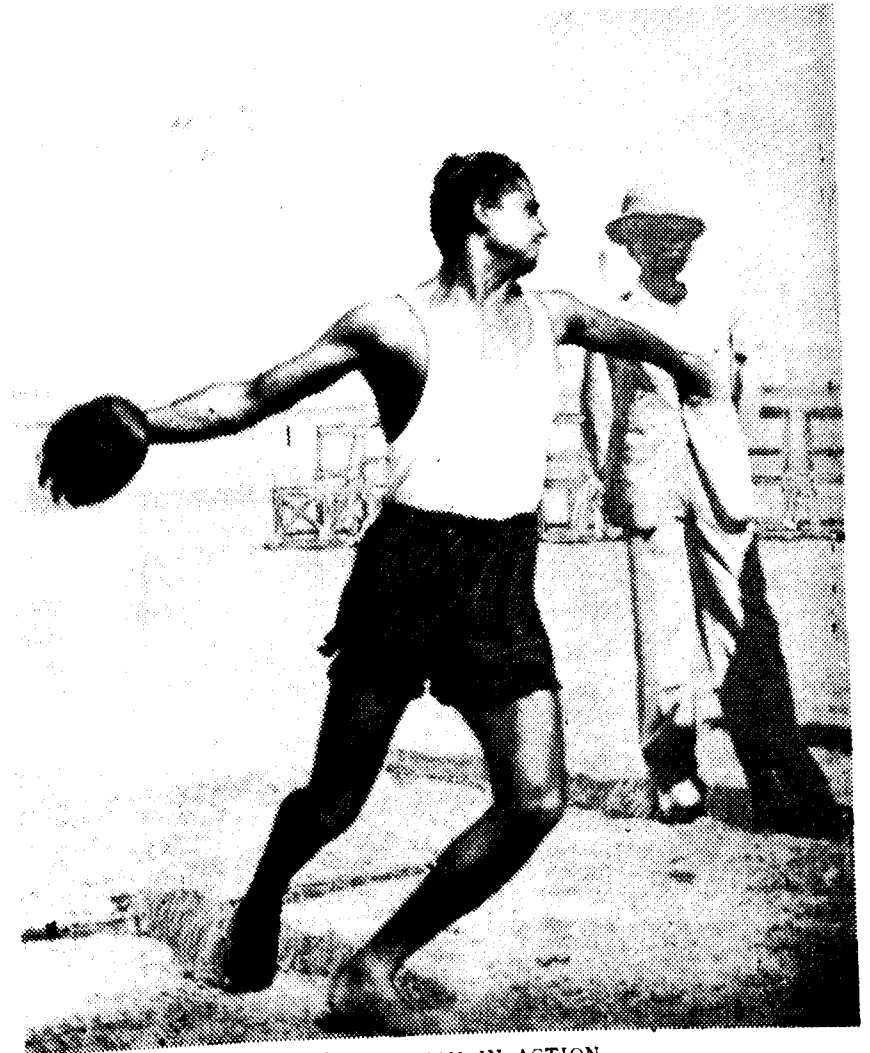
ANNUAL SPORTS

The Annual Sports of the College were held on Wednesday, the 16th February. Though conducted for the first time as a domestic function, it proved to be very successful.



MRS. PAPWORTH PRESENTING THE CHAMPIONSHIP CUP TO
D. MAHADEVAN.

Courtesy, "Hindu."



K. VENKATESAN IN ACTION.

Courtesy, "Hindu."

There were many old students present at the function ; a large number of the College students and all the members of the staff witnessed the sports with great interest. Enthusiasm and keen competition were clearly evident among the competitors.

One fine feature of the evening was that it was held with no volunteers, and the students of the College are to be warmly congratulated on their orderliness and their excellent discipline.

There was no President either; but at the request of the Principal, Mrs. Papworth very kindly distributed the prizes and the delightful evening came to a close with no vote of thanks. As the Principal said, it was indeed a very pleasant change from the formalities of a ceremonial function.

As usual, group championship events were emphasised on the sports-day, while the other individual events were competed for the previous evening. The History and Economics department retained their trophy as the best all round group. They had a set of sportsmen, far above the average standard, and so they swept everything before them, winning all the twenty possible points. In the inter-group tournaments they won Hockey and Volley-ball and left only the foot-ball tournament to be won by the Mathematics group.

In the individual competition D. Mahadevan won the championship. He exhibited extraordinary stamina by competing in as many as thirteen events. He won the Long Jump and the two hurdles races ; was second in High Jump, and Hop, Step and Jump and was third in six other events and compiled 19 points to win the championship.

C. G. Devayya was very close to Mahadevan in points and deserves to be congratulated on his fine performance. He has developed a fine style of running and creditably won all the flat races from the 100 metres to 1600 metres.

The College colours were awarded to the following students during the year in recognition of their merit and the service they had so willingly done :—

Cricket.

Thiagarajan (old Blue), R. M. Mahadevan, P. V. Varadan, R. K. Jayaraman, P. S. Narayanaswami, M. Swaminathan, R. Srinivasan.

Hockey.

A. R. Mohajir, R. D. Ismail, C.K. Sitaraman, P.V. Varadan, P.V. Murthi, P. S. Narayanaswami.

Foot-ball.

Shaukat Ali.

Tennis.

V. Narasimha Rao (old Blue), G. Sethuraman, S. Desikan.

Annual Sports, 16th February 1938.

EVENTS	FIRST	SECOND	THIRD	TIME AND DISTANCE
1 100 Metres	C. G. Devayya.	S. Krishnamachari.	D. Mahadevan.	12½ seconds.
2 200 Metres	C. G. Devayya.	S. Krishnamachari.	D. Mahadevan.	24½ sec.
3 400 Metres	C. G. Devayya.	O. Neelakantan.	D. Mahadevan.	57½ sec.
4 800 Metres	C. G. Devayya.	Sankaranarayanan.	D. Mahadevan.	2 mts. 21.4 sec.
5 1600 Metres	C. G. Devayya.	O. Neelakantan.	Sankaranarayanan.	5 mts. 20 sec.
6 Hop. Step and Jump	S. Krishnamachari.	D. Mahadevan.	B. Ruthnaswami.	38"
7 Long Jump	D. Mahadevan.	S. Krishnamachari.	B. Ruthnaswami.	19' 1"
8 High Jump	S. Krishnamachari.	D. Mahadevan.	R. M. Mahadevan.	5' 4½"
9 Pole Vault	M. Swaminathan.	S. Krishnamachari.	D. Mahadevan.	8' 6"
10 110 Metres High Hurdles.	D. Mahadevan.	R. M. Mahadevan.	O. Neelakantan.	19½ sec.
11 200 Metres Low Hurdles.	D. Mahadevan.	R. M. Mahadevan.	C. G. Devayya.	28½ sec.
12 Shot put	K. Venkatesan.	R. M. Mahadevan.	D. Mahadevan.	30' 1"
13 Throwing the Cricket Ball	Venkataramana Das.	R. M. Mahadevan.	S. Krishnamachari.	201 ft.
14 Discus Throw	K. Venkatesan.	R. M. Mahadevan.	Venkataramana Das.	96 ft.
15 Sack Race	A. N. Luxmanan.	Sundaresan.	Natarajan.	
16 Sack Fight	Shahabuddin.	K. Venkatesan.		
17 Lilliputians Race	James Gandhi.	M. V. Sitaraman.	C. S. Ramamurthy.	13½ sec.
18 Bicycle Race	P. V. Murthy.	Somasundaram.	S. Narayana Rao.	3 mts.
19 1500 Metres, open to the Colleges affiliated to the M. C. A. A.	Ramarathanam Loyola College.	Thambuswami Loyola College.	A. Ganesan, (Government School of Tech.)	4 m. 38 sec.
20 Old Boys' Race	Major Grandhi.	Srinivasulu.	Janakiraman.	
21 4 x 200 Metres Relay (Past vs. Present)	Present.	Past.		
22 Musical Chairs	Rashid.	Shahabuddin.	Subbayya.	
Individual Championship...	D. Mahadevan 19 Pts.	C. G. Devayya 16 Pts.	S. Krishnamachari. 15 Pts.	