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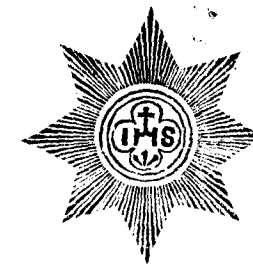
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# ST. JOSEPH'S COLLEGE

## MAGAZINE

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## SOPHIA COLLEGE, BOMBAY

known to all who are interested in University affairs that, when the Sophia College was opened, there was vehement opposition to its affiliation. Re-opening the campaign in the *Bombay Chronicle* (27-10-42) Mr. K. T. Shah wrote: "One Parsi girl has already been converted: another, *said* to be a Muslim, is also converted *or* about to be; a Sikh, ditto; and four or five others on the waiting list . . ." This assertion led to the arousing of communal passions in some sections. In reply to such wide and vague charges which were bound to rouse public prejudice against the College, the Principal of the Sophia College issued the following statement to the Press:—

SIR,

In view of the controversy going on in the Press and the many conflicting, incorrect and unfounded statements made therein, I proffer the following statement of facts:—

One Parsi girl became a Catholic on September 13th. She had fully made up her mind to take this step before she came to College. I urged upon her the advisability of telling her parents before doing so, but she refused on the plea that they would effectively prevent her from carrying out her project. I, therefore, refused to make any arrangements for her baptism; so she made all her arrangements without informing the College authorities.

On the evening of September 13th she told her parents that she had been baptised that morning. On September 15th she visited the Archbishop of Bombay together with her father and sister and a Dasturji. In their presence she promised to study Zoroastrianism and they promised to let her live peacefully at home. The family did not keep their promise, and such was the constant emotional strain to which the girl was subjected at home that she felt unable to go on living there, and came to College on October 2nd. Her relatives came to ask her to return, but as they would give her no guarantee of freedom, she refused to do so.

As regards the "waiting list" mentioned in the Press, it does *not* exist. One Parsi girl has been removed from the College because her parents feared she would follow her friend's example. Otherwise, I know of no other student who has any intention of becoming a Catholic.

I have heard that anonymous letters have been received by parents. To give one example only:—One was informed that her daughter and

## SOPHIA COLLEGE, BOMBAY

her daughter's friend had become Catholics. Both these students are still at college protesting that they have no intention of changing their religion.

As to any propaganda, or moral persuasion, every one of our students could witness to the fact that *none* has taken place. Reference to Christianity must of course be made in the course of studies, but it is against our most sacred and cherished principles to use force or pressure to make anyone change his or her religion.

Religious instruction classes are held for Catholics only and not for Non-Catholics as the primary concern of the College is education and not proselytising.

At the special request of some of the friends of the Institution, I have agreed to inform the parents or guardians of any student of the College who intends to change her religion, as soon as the College authorities are aware of the same.

November 18, 1942.

(Sd.) C. ANDERSSON, R.S.C.J.,  
*Principal.*

So far as Miss Dhalla's case is concerned, the process of conversion had begun and her decision to join the Church had been taken before she joined the Sophia College (June 1941). This is borne out by the statement made by Miss Dhalla, which is as follows:—

I began being attracted to Catholicism in 1938-1939 while studying in the Convent of Jesus and Mary, Simla. When I left school in 1940, I was convinced of the truth of the Catholic Faith and determined to join the Church as soon as I attained my majority. The only thing for me was to wait.

I joined the Sophia College, where I continued to read Catholic literature on my own. I told Rev. Mother of my intention and she suggested that I should tell my parents before taking the step. I refused on the ground that if they came to know, they would naturally do all in their power to prevent me. Knowing also that the College nuns were likely to be blamed, I approached the Archbishop of Bombay, whom I had already met in Simla, and told him that I still wished to become a Catholic, and made arrangements to be received into the Church, entirely independent of the

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College or any other people. His Grace examined me and felt I already knew the fundamentals of the Faith I had picked up in school and through my correspondence with a priest I had met in Simla in 1938.

Immediately on attaining my majority, I became a Catholic.

August 20, 1943.

(Sd.) GOOL DHALLA.

The father of the girl, Mr. Dhalla, also admits in his evidence before the Committee that she had an intention when in Simla to be converted to Christianity, but had subsequently abandoned the idea.

The truth, of course, is that she had not abandoned the idea, but was merely waiting for the time when she would be legally free to embrace the new Faith. No proof has been adduced to connect the College with the conversion, except the fact that the Principal did not inform the parents of the girl as soon as she learnt of the girl's desire to change her religion. The Principal's explanation for this omission is (1) that the girl was not a boarder in the College and that the Principal was *not in loco parentis* to her, and (2) that Miss Dhalla had impressed upon her that, if her parents were informed, severe pressure was bound to be brought to bear on her not to change her religion, and the Principal felt she could not be party to what might be tantamount to coercion of conscience.

Whatever view one might hold about the wisdom or otherwise of the Principal's stand, it cannot surely be maintained that a mere omission to inform is equivalent to proselytising activity. It may be added that, though Miss Dhalla felt constrained after her conversion to leave her home and seek refuge in the College, she was later reconciled to her parents and is now living happily with them and continuing her studies in the Sophia College.

2. The second case of conversion was that of Miss Dhun Kalapesi, who was received into the Church by the Archbishop of Bombay on the 5th September, 1943. The Archbishop in his letter dated 25th November, 1943, addressed to the Registrar of the University (Appendix "D" of the Report), has made it clear that he baptised both the girls in his capacity as head of the Catholic Church in Bombay. The fact, to which pointed attention has been drawn in the Report, that he was the Chairman of the Governing Body of the College, had nothing to do with the matter. However, to prevent any misunderstanding or misinterpretation arising from

## SOPHIA COLLEGE, BOMBAY

his dual capacity, the Archbishop has resigned from the Governing Body of the College and from the Society for Higher Education of Women in India.

It may be usefully remembered that Miss Kalapesi was not connected with the College at the time of her baptism. In October, 1942, that is, nearly a year before her baptism, she had been withdrawn from the College by her father, who feared that she might follow in the footsteps of her friend, Gool Dhalla. For nearly a year, therefore, Miss Kalapesi was beyond any control of the Sophia College nuns. What happened to her in the interval between her withdrawal and conversion has been stated by her before the Chief Presidency Magistrate. This is the substance of her evidence :—

After my parents had taken me away from Sophia College I told them that I intended to become a Catholic. From that moment I was kept at home, virtually a prisoner. I wasn't allowed to leave the house without an attendant. My parents would not allow me to go to Elphinstone College unless I promised not to have any relations with Catholics. As I would not give that promise, I was not allowed to attend that College. They opened all letters that came for me, and letters I wrote were read before being posted. I was not allowed to write to my Catholic friends. My Catholic books were taken away, and also books that were not about religion if they happened to be written by Catholics. I was constantly watched and spied upon.

I put up with this at first. Seeing the trouble which my friend's baptism had caused the nuns, I did not want to give a handle for further attacks on them. I learned from what happened in her case that even though the nuns had nothing to do with it, enemies of the College would use it to attack the College. For six months I studied Zoroastrianism and Avesta language under a Parsi priest who came at first every other day and later two or three times a week. At last I decided to run away from home; but my parents learnt of this from a letter which they intercepted, and hurried me off to Poona. When they found that I had also Catholic friends there, they brought me back to Bombay. But before I left Poona I managed to write to my friends telling them that I should now be so well guarded that I should not be able to get away unless they helped me.

The Catholic friends to whom she appealed for help and who took action in the matter are neither members of the Sophia College nor of

## SOPHIA COLLEGE, BOMBAY

the Order of the Sacred Heart, nor was this action instigated by the College authorities.

It may be admitted that the process of conversion, i.e., the change in her mind regarding religion, began when she was a pupil of the College. But the question to be determined is whether this change was due to any active proselytising by the College authorities or Staff. On this crucial point there is no evidence in the Report, except a statement by Miss Kalapesi Jr. who alleges that her sister had told her that Mother Keyes and Gool Dhalla taught her about the Catholic religion in the course of practice in staging a play (evidently the play "Quality Street" referred to in Mr. Kalapesi's evidence). On which uncorroborated statement one need only remark that the rehearsal of a non-religious play seems hardly the occasion suitable for a course of instruction in religion, when more suitable opportunities were available to the nuns for the purpose, if they were so minded.

The main influence which seems to have acted on her is first and foremost that of her intimate, Gool Dhalla, and secondly, as she has confessed, the heroic lives of the nuns, specially in the recent storm of persecution. As Miss Kalapesi's public statement has a direct bearing on the case, it is worth while quoting it in full:—

So much space has been taken up, paper shortage notwithstanding, on attacks on Sophia College and lately on myself that I sincerely hope for equal publicity for this statement.

Any lie seems to serve the purposes of those who hate the Sophia College, but still it is not true that I am connected with the Sophia College. My parents removed me from it a year ago. It is absolutely untrue that any kind of pressure was put upon me by any Christian at any time. The nuns of the Sophia College have nothing to be ashamed of if their students are impressed by their heroic lives, especially in the recent storm of persecution.

This letter is not addressed to those to whom freedom and rights are just catchwords. Those who really love such ideals and are prepared to give freedom to others can look impartially into the virtual imprisonment in which I have been kept in the past year, and which was ended only by the declaration of my freedom by the Senior Presidency Magistrate. I fully admit that up to last June the restraint was moral as well as

## SOPHIA COLLEGE, BOMBAY

physical, but it is a disgraceful thing that an attempt to live according to one's beliefs should bring so much suffering and loss to those one reveres.

The College Authorities, last year's convert, I myself and the whole Catholic Community have suffered under a real campaign of misrepresentation. As an Indian, and one who truly loves and cares for India, I fear that this campaign plays right into the hands of her enemies; these can argue now that religious fanaticism (I use those words advisedly) is strong enough not only to threaten a magnificent educational work, but to mould the policy of that body which should be most safely sheltered from fanaticism—the University of Bombay.

23 Wodehouse Road, Bombay 1

September 9th  
(Chronicle 22-9-'43)

(Sd.) DHUN M. KALAPESI.

In this statement Miss Kalapesi denies that any kind of pressure was brought on her by Catholics to change her religion. If there was any pressure, it came from her own family—and it was apparently very heavy pressure—to dissuade her from such a course. From Mr. Kalapesi's own evidence it is clear that she was kept under surveillance and that every effort was made to prevent any communication with the College, her correspondence being tampered with and suppressed. (It may be remembered that Miss Kalapesi is 19 to 20 years old!) At any rate for nearly a year she was beyond the control of the College authorities, and her baptism, therefore, is an act of her individual will, uninfluenced by the College.

A word more is pertinent. That in spite of the heavy pressure and coercion that she was subjected to for well nigh a year she persevered in her resolve and stood firm till the end, is a clear proof that she is not the kind of raw, immature and impressionable girl who may easily fall victim to the wiles of proselytisers.

It will have been noted that the conversion of Miss Kalapesi, as far as the College is concerned, adds nothing to the position as it existed at the time of Miss Dhalla's conversion, when the Inquiry Committee reported that there was no case for disaffiliation. Mr. K. T. Shah, however, chose to take this as fresh evidence for his allegations, and sought to impugn the credibility of the Principal's statement that there was no

## SOPHIA COLLEGE, BOMBAY

"waiting list" (*Chronicle*, 3-9-43). Mr. Shah conveniently ignored the fact that the Principal, in denying the existence of a "waiting list" had said: "As regards the 'waiting list' mentioned in the Press, it does *not* exist. One Parsi girl has been removed from the College because her parents feared she would follow her friend's example..." Mr. Shah's "*prima facie* ground for a reconsideration of the matter" was thus already before the public at the time of Miss Dhalla's conversion; the subsequent developments of the Kalapesi case took place absolutely outside the influence of the nuns and of the Sophia College; and the position as regards the responsibilities of the College authorities has not altered in the least.

The Principal of the College in her letter to the Registrar, dated 24th August 1943, had asked for a full inquiry into the allegations of proselytising activities of the College and had promised every facility for the Committee to carry out their investigation. Yet no such enquiry has been held. It was not held in the first instance when assurances were demanded from the College. It was not held on this second occasion when the Committee confined themselves to the question whether the assurances given were kept in the letter and the spirit. Yet disaffiliation is sought to be imposed on the existence of proselytising activities which have not been investigated, much less proved!

If the mere fact of a conversion happening in an educational institution is sufficient to convict it of proselytising, then no school or college is safe from danger and ruin. This is a very serious business, and, surely, a highly responsible body like the University cannot set about it in this manner.

### I. The Actual Procedure

Let us now proceed to the Inquiry itself and the procedure adopted by the Committee.

The following points may be noted:—

1. There was no Catholic or Christian representative on the Committee. If there was such a representative, he would be able to throw light on certain questions and statements which might otherwise lead to misleading conclusions, as they seem to have done in this case.

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2. It is surprising that Mr. K. T. Shah, who had not been appointed on the Enquiry Committee, was allowed to be present with the members of the Committee at their meeting of 8th October 1943 (Appendix "A" of the Report).

3. The statements made by the witnesses were *ex-parte* statements, which were not on oath, nor subject to cross-examination. They are, therefore, to be taken for what they are worth. The Committee themselves, are aware of this (*vide* p. 2 of the Report).

4. Granting that the inquiry was not, as the Committee say, a judicial one, still it was expected that it would be judicious and fair. Yet we find that the Committee only called persons who might well be called witnesses for the prosecution:—Mr. Dhalla, the father of one convert, and Mr., Mrs., and Miss R. M. Kalapesi, father, mother, and sister of the other convert. They were in the position of aggrieved persons, whose feelings had naturally been stirred against the College, and whose evidence was naturally coloured by their feelings. How and why Miss Piloo Nanavutty was called, what was her *locus standi* in the enquiry, is not at all clear. Miss Nanavutty was one who was on very friendly terms with the nuns of the Sophia College. As late as 4th September 1943, when she wrote to Rev. Mother Andersson for permission to open a Gatha Study Circle for Parsi girls in the College, and to lecture to girls of *all* communities on her own conception of religion, she was of definite opinion, expressed in her letter, that the charges against the College were "misconceptions" and that the responsibility for the conversion did not lie with the College nuns, but primarily with the Parsi priests and laity alike who had grossly neglected the teaching of their own religion to their young. The text of her letter is as follows:—

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WILSON COLLEGE,  
BOMBAY.  
4th, September 1943.

DEAR REVEREND MOTHER,

There are two requests I would beg of you. Perceiving how indignant the Parsis have become at the recent conversions of their girls to Roman Catholicism, I cannot help feeling that the direction the indignation is taking is a trifle misplaced. Whatever misconceptions there may be in the minds of some as to the manner in which these impressionable girls were drawn into the Catholic fold, the fault lies primarily with us. Our

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ignorant and faction-ridden priesthood, and our still more ignorant and superstitious laity, between them have grossly neglected the teaching of the true faith to their young. I would therefore beg of you to permit me to run a Gatha Study Circle for Parsi girls in the Sophia College. Not only would this be a great service to our community, but it would prevent the enemies of the College from making capital out of recent events by starting a boycott campaign against the College.

If you would still further strengthen your position of tolerance and good will towards *all* Indian communities, I would beg of you to permit me to deliver to the students of Sophia College a series of lectures on universal religious categories. Until these categories are sharply defined, and made distinct from the ethical, the æsthetic and the poetic, it is impossible to grasp the tenets of any faith in their entirety. There is a great deal of fuddled thinking on the subject. Moral virtues are set up as religious ideals, while beautiful and vague stirrings of a poetic and æsthetic nature are considered true exaltations of the spirit. It is therefore essential, in my opinion, that these categories be first grasped in all their stark simplicity so that individual judgment may not be misled, nor the full development of the religious consciousness retarded.

I hope very much that you, and the Governing Body of the College, will give careful consideration to these proposals. I shall eagerly await your reply.

With very best wishes,

Yours sincerely,  
(Sd.) PILOO NANAVUTTY.

But her feelings of friendship and good will to the College seem to have undergone a sudden change after the permission asked for had been refused. So much so, that she gave adverse evidence consisting of her version of what had transpired in the course of a *private conversation* between her and Mother Andersson. As for Mr. B. F. Bharucha, he was evidently not invited by the Committee. It is a mystery how he came in to give evidence. He was not in any way connected with the College or the students therein. In his capacity of a writer of profuse letters to the Press on all possible subjects he had taken upon himself to interview the nuns and give his version in a newspaper. But that surely did not entitle him to be heard by the Committee. There were other

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persons, Catholics and non-Catholics, who had made enquiry and even investigations into the affair, who would have liked to tender evidence, but were never given a chance. If the enquiry was a public enquiry, notice of it should have been given in the Press and public evidence called for. No such procedure was followed, yet outsiders like Miss Nanavutty and Mr. Bharucha were heard and their evidence given undue importance.

It is a strange thing that, while persons who had a grievance or a grouse against the College were called in, the Committee invited neither Miss Dhalla nor Miss Kalapesi, the two converts whose evidence one would have thought would be the first to be called as likely to throw a flood of light on the main question—that of proselytising. Had they been called, the Committee would not only have received firsthand information as to the how and why of their conversion, but would also have been satisfied about their supposed immaturity and impressionability, on which the whole argument of proselytising is built.

Then again one would have expected the Committee to call for the evidence of the staff and students of the College, whether present or past, who are members of all communities, regarding the proselytising methods used by the nuns. But nothing of the sort was done.

Nor were the authorities of the College asked to tender evidence to rebut any charge or allegation made. And even the Governing Body of the College who are responsible for the College, were not heard before a recommendation was made to disaffiliate the College!

We feel that the procedure adopted by the Committee can hardly commend itself to fair-minded persons, and is such as vitiates the whole of the enquiry and its conclusions.

## II. The Report

The Committee mainly concerned themselves with the question whether the assurances given by the Principal of the College to the University on 10th February, 1943, were kept in the letter and in the spirit.

What were these assurances?

SOPHIA COLLEGE, BOMBAY

The Registrar,  
University of Bombay,  
Bombay.

10th February, 1943.

DEAR SIR,

In accordance with the suggestions made by the members of the Inquiry Commission appointed by the Syndicate, I give the following assurances :

- (1) That no member of the teaching staff will carry on any proselytising activities, nor permit any outsider to carry on such activities, in respect of any student of the College, nor use, nor permit to be used, moral persuasion for the same purpose.
- (2) That if any member of the teaching staff should come to know, or become aware of the intention of any student of the College to become a convert to Christianity, such member will inform the parents or guardian of that student of such intention through the Principal.
- (3) That no member of the staff will make, nor permit to be made, any attempt to deprecate any religion, nor make, nor permit to be made, invidious comparisons between different religions.

I wish to put it on record that these assurances are for the future and that in giving them I do not thereby admit that any proselytising activities have been carried on at the Sophia College for Women in the past.

On our side, I should wish for an assurance from the University of what was agreed upon when I met the members of the Inquiry Commission, namely, that the members of the teaching staff shall have full freedom to explain the Catholic position when the matter requires it for the full and enlightened study of any subject.

Yours truly,  
(Sd.) C. ANDERSSON,  
Principal.

It is remarkable that while the assurances given by the Principal are printed in Appendix D of the Report the explicit understanding that "the University will have no objection to members of the teaching staff explaining the Catholic position when the matter requires it for the full

SOPHIA COLLEGE, BOMBAY

and enlightened study of any subject" has not been printed there. And yet it has a close bearing on the facts of the case and on the conclusions derived therefrom.

Let us look closely into the conclusions of the Committee on which the recommendation for disaffiliation is based.

(1) *That the College authorities, under the guise of conducting a 'reading circle,' explain to non-Catholic students the tenets of the Roman Catholic religion.*

The evidence for this is that Dante's "Divina Commedia" was the subject of a cultural study circle. As this poem contains many references to Catholic history and theology, occasional explanations were given for the elucidation of the text.

Of course, a sinister meaning may be read and a sinister motive ascribed—as the Committee unfortunately do—to the choice of the particular book. Yet this assumption is proved to be groundless by the fact that a choice was given to the girls between Dante, the greatest poet of Italy, and one of the greatest poets of the world, and Goethe, the greatest poet of Germany. Now, no cultured person can say that Goethe is an exponent of Catholicism. On the contrary, in his religious outlook he is considered to lean towards pantheism, and in his philosophic disquisitions to idealism or transcendentalism, which is opposed to Catholic philosophy. If Dante was chosen rather than Goethe, the choice, as explained by the Principal, was freely made by the majority of the girls themselves and by no means forced upon them by the nuns of the College. It may be noted in this connexion that authors like Bernard Shaw, G. K. Chesterton, William Blake and Rabindranath Tagore were previously read in this circle, a clear proof that the choice has always been dictated by cultural, not religious, interests.

Mother Andersson has declared frankly that Dante was read from the literary point of view, but that she explained the Catholic position when the subject matter demanded it. But this was permitted by the University.

A University which banned Dante because its reading might undermine the faith of its pupils, would be the laughing stock of the world.

(2) *That non-Catholics are allowed or encouraged to ask questions relating to the Catholic religion so as to give the Principal and the members of the teaching staff belonging to the Order an opportunity to explain the principles of the Catholic religion.*

## SOPHIA COLLEGE, BOMBAY

There is no evidence adduced in the report or its appendices to substantiate this charge. Given the chance, we could produce evidence that no undue influence is brought to bear on non-Catholic students in matters of religion.

(3) *That the Principal of the College has failed to realise her responsibility as the Head of an Institution affiliated to the University of Bombay, to the parents of the students, inasmuch as she says that she would be prepared even after the assurances were given, to help a non-Catholic student to become a Christian contrary to the parents' wishes, so long as she observed the assurance No. 2 in the letter, by informing the parents of the desire of the student to be converted to Christianity.*

The question of helping a student was raised, as Mother Andersson says in her explanatory letter, dated 2nd December, 1943, attached to the Report, specifically with reference to a girl who was turned out of the house for wishing to become a Christian. She felt she was bound to help her if she came to her for assistance. That is a matter of common charity which is irrespective of any religious motive. It is not fair to the Principal or the College to give a generic meaning which the context does not bear and on that basis condemn the College.

Looked at from the practical point of view, once the parents were informed of the girl's intention to embrace Christianity, the parents would naturally withdraw the student from the College and the further hypothesis of help would not arise. If, however, the parents kept the girl in the College, it would show that they did not mind the prospective change of religion, in which case the hypothesis of a conversion against the parents' wishes does not arise.

One can hardly imagine that it is proposed to disaffiliate a College on a supposition which is purely hypothetical.

(4) *It was clear from Mother Andersson's attitude that she gave the assurance only as a last resort, and only out of fear that the affiliation of the College might be otherwise withdrawn.*

This may be true, as no one would be glad to give the kind of assurances that were demanded by the University. But it is no less true that, having given them, the Principal has stated she was prepared to keep them in the spirit and in the letter, and has acted accordingly.

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(5) *We may add that in spite of the long period over which Catholic educational institutions have been providing education to non-Catholics in this Province, the only known cases of conversion of students which have occurred are within the period of two to three years since the Sophia College was started. This fact itself is significant.*

We believe the Committee are misinformed in this matter, and cases of conversion have occurred in the past in Colleges both in this Province and elsewhere in India, but neither this University nor any other has ever thought it proper to take notice of these occurrences, the matter evidently being thought the concern of individual conscience and not of the University. The Committee also seem to imply that the mere fact of conversion is sufficient proof of "proselytising activities," which begs the question and interferes with an objective view of the facts.

(6) *The University has always observed strict neutrality with regard to all religions and religious questions, and should not allow an institution affiliated to it for educational purposes to carry on activities which run counter to this principle.*

We would submit that religious neutrality of the University merely implies that the University does not favour one religion as against another, and does not extend to the use of its authority to discourage a change of religion on the part of University students, by penalising the Colleges wherever such change of religion occurs. Freedom of conscience being guaranteed to them by law, any such action on the part of the University would amount to a breach of religious neutrality.

It is inconceivable—yet it is true—that the Committee propose to disaffiliate the College not on any facts showing that the assurances have been broken, but on mere supposition of what may happen under certain contingencies which are practically impossible, or on mere suspicion of motives.

It is hoped that the University will go into the matter thoroughly and weigh all the evidence dispassionately, before a decision is taken, giving due weight to the unchallengeable fact that girls of all communities continue to be students in the College, whether as boarders or day-scholars, in spite of the campaign that has been waged against the College in the Press and on the platform. This shows that non-Catholic parents, who are in a position to know the real facts, are evidently satisfied that the allegations against the College are without foundation.

(Sd.) D. FERREIRA,  
Chairman, Governing Body of Sophia College.

# The Beveridge Report and India

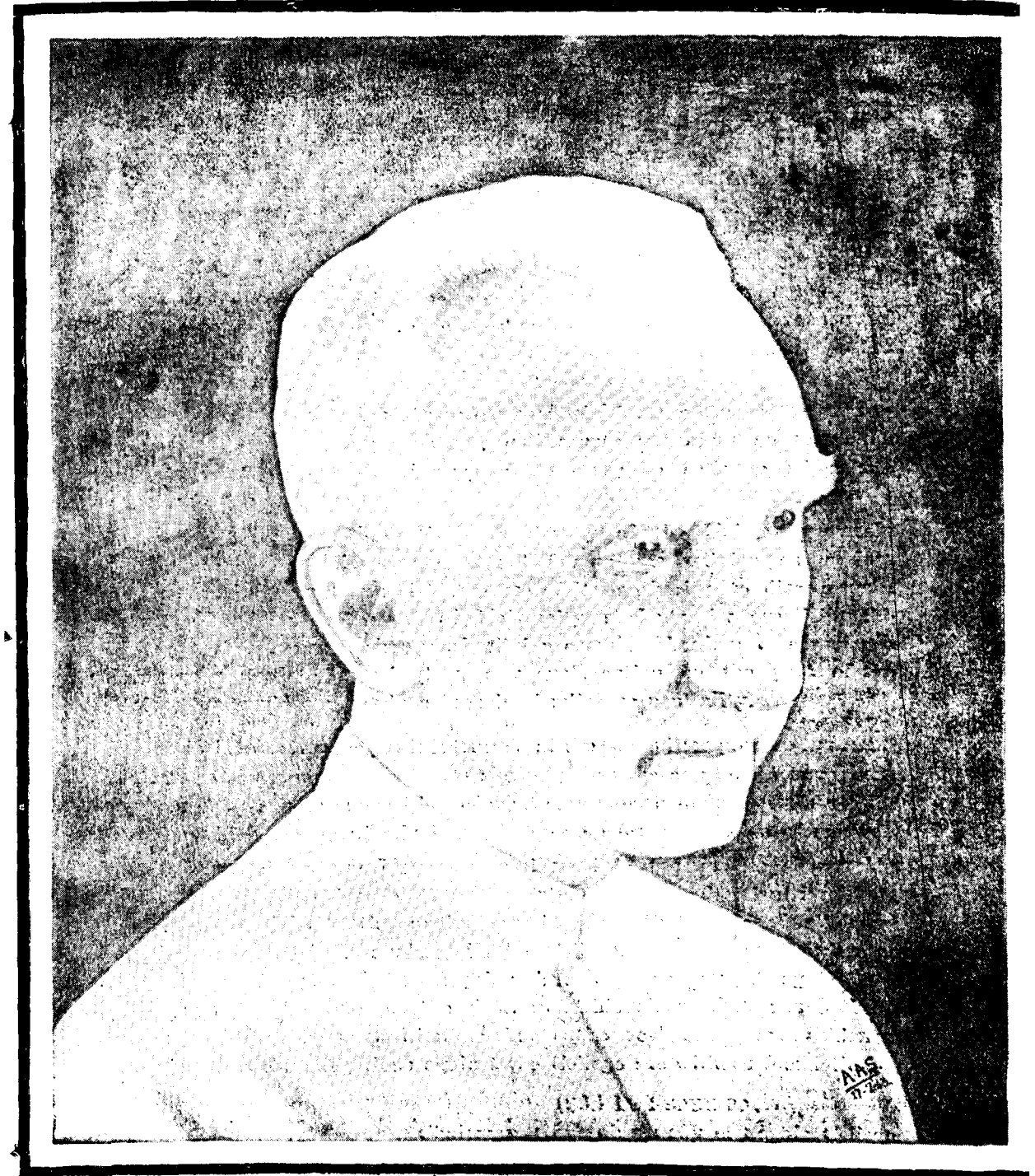
by K. A. S.

POST-WAR reconstruction is very much in the air, particularly as the war has entered the stage which marks the beginning of the end, and we have had quite a spate of blue prints for the post-war world. Strange as it may seem, economic reconstruction seems to command a greater attention now than it did in the last war when politics swayed men's minds with the inevitable result of the League of Nations and the Fourteen Points. Thus we hear of the White Plan or the U. S. proposal for a United and Associated Nations Stabilisation Fund and of Keynes' proposals for an International Clearing Union, with their respective international unit of currency: Unitas and Bancor; the question of International Food is on the agenda, the U. N. R. R. A. and International Free Trade. Aside from these international schemes, there are intranational schemes i.e., each country cutting out its own post-war policy. Of these the most famous is the British Plan which has been propounded by Sir William Beveridge and accepted in great part by the British Government. The Beveridge Report otherwise called the Plan for Social Security, is well worth the study were it only because it attempts to combine the ideologies of Capitalism with those of Socialism or Communism or Totalitarianism. It is radical enough for the socialists, moderate enough for the conservatives, complimentary enough, in its references to the soviet security system, for the communists.<sup>1</sup>

The craving for security in this insecure world of ours has been the dominating note of all the peoples throughout recent history and every country has tried, however inadequately, to meet this thirst. Germany, Poland, Bulgaria, Roumania, Italy, U. S. A., U. S. S. R., New Zealand<sup>2</sup> have all tried their hand at social services and in England itself various schemes have been adopted at various times. In these countries benefits and assistance were given only to the needy and to the extent necessary to enable the needy to keep body and soul together. What makes Beveridge's plan something very peculiar and quite different from all other plans in other countries or for that matter in England itself before this

<sup>1</sup> Though Beveridge himself says that "it is neither socialist nor capitalist. It is simply common sense."

<sup>2</sup> "The only thing my scheme is like at all is the New Zealand plan" Sir William.



THE LATE VERY REV. FR. WLODIMIR LEDOCHOWSKI, S. J.,  
General of the Society of Jesus.

Pencil Sketch by: N. Sebastian, IV U.C.

# ADVANCE OF SCIENCE /



Bal

T. M. Balasubramaniam, II U. C.

## THE BEVERIDGE REPORT AND INDIA

war, is that it is universal, all-embracing, comprehensive, and unified withal. The Report itself is a "longish" book crammed with details but for our present purpose we shall consider just the essentials of the report evaluate its merits and demerits and finally examine its application to India.

The constitution of a committee of civil servants representing each the Home Office, the Ministry of Labour, of Pensions, of Health, the Treasury etc., and the appointment of Sir William Beveridge as its chairman was announced in the House of commons in June, 1941. The Report, was dated 20 November, 1942 and on February 16, 1943 Sir John Anderson announced to the House of commons that the Government accepted the Report in principle but did not adopt all the proposals in detail.

**Aim:** The miseries and evils of this world such as the fear of poverty, unemployment, sickness, old age and death without adequate provision for his posterity have been and are the lot of a wage-earner practically all the world over. Sir William proposes in his historic Report to remedy these evils, if not completely, at least to a tolerable extent, for, do what we will, the poor we shall have always with us. The aim of the plan is to abolish poverty and afford social security as laid down in the Atlantic Charter<sup>1</sup> and secure two of Roosevelt's Four Freedoms i.e., Freedom from fear and Freedom from want, at any rate within the country. "The aim of the plan for social security is to abolish want by ensuring that every citizen willing to serve according to his powers has at all times an income sufficient to meet his responsibilities<sup>2</sup>. It is an attack on the five giant evils, upon physical Want, Disease, Ignorance, Squalor, and Idleness<sup>3</sup>. Sir William proposes a tremendous programme to guarantee freedom from want to every man, woman, and child from birth to death by a single system of State Social Insurance. It is, in his own words, partly a British Revolution but mainly a natural development from the past.

**General Features:** The Report is based on the principles that there shall be a comprehensive social insurance scheme administered by a unified organisation paying adequate benefits at flat rates in return for flat rate contributions in accordance with the varying needs of the different sections of the people. It provides in great detail a comprehensive plan

<sup>1</sup> Sir William said that his plan "is the first step though one step only to turning the Atlantic Charter from words into deeds.

<sup>2</sup> Summary of the Gov. of India p. 55.

<sup>3</sup> Ibid. p. 59.

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for social security by way of social insurance, national assistance and voluntary insurance administered by the state i.e., by a unified system like a single Ministry of Social Security. The operative words are "social security", "comprehensive" "unified" and "Insurance".

Social security means assurance of a certain income. It is a security that society furnishes through regular organisation against the risk of poverty and complementary to the security that each of those members can provide for himself by his own efforts. "Comprehensive": "It is a plan all-embracing in scope of persons and of needs"<sup>1</sup> It is comprehensive in the sense that it covers everybody in the land from the cradle to the coffin, irrespective of age, sex, income or social standing; in the sense that it covers all their needs and provides against all the major causes of poverty. The major causes of poverty against which security is given in the shape of special benefits are unemployment, disability, loss of livelihood, retirement or old age, marriage needs, widowhood, burial, childhood and physical disease or incapacity. It is of the very essence of the plan that the various benefits should be sufficient to meet fully particular demands for which they are provided. A uniform flat rate is the best feature of the plan "Unified" in the sense that it is a coordinated plan under which there will be a single contribution and a single Ministry of Social Security under a Cabinet Minister with local branches so that everybody in search of benefit will know exactly where to go. It implies considerable changes in the existing system. It means e.g. that the approved societies and companies, local or national and industrial and public services are to be swallowed up though Friendly Societies and Trade Unions are to be retained but on a new basis. There is one exception, however, that Health and Rehabilitation services are to remain as at present subject to the Health Departments. "Insurance": The Report sets out boldly to cover the whole field with insurance which means the virtual abolition of the Means Test, (i.e. benefits will be available without inquiry into private means), since all payments will be benefits received as of right by the insured persons.

**Method:** There are three methods of Insurance: Social Insurance for basic needs, National Assistance (Replacing Public Assistance) for special cases and Voluntary Insurance for addition to the basic provision i.e. to enable them to make provision for a higher standard. "Social Insurance should not leave either to National Assistance or to Voluntary Insurance

<sup>1</sup> Summary of the Govt. of India P. 7.

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any risk so general or so uniform that Social Insurance can be justified". Social Insurance means the providing of cash payments conditional upon compulsory contributions previously made by or on behalf of the insured persons irrespective of the resources of the individual at the time of the claim. The scheme is described as a scheme of insurance since it preserves the contributory principle. It is described as social insurance to mark important distinctions from voluntary insurance and to imply that it is compulsory and that men stand together with their fellows. *National Assistance* for special cases means "the giving of cash benefits upon proved need at the time of the claim, irrespective of previous contributions, but adjusted by consideration of individual circumstances and paid from the national exchequer" (paid subject to a means test out of general taxation). It leaves for Voluntary Insurance only such extra income as people may wish to secure over and above the subsistence benefits provided by social insurance. Of the eight species of benefits provided, six are provided by social insurance: unemployment disability, training, retirement, marriage (maternity, widowhood and divorce) and funeral benefits. The remaining two—children's allowances and Health and Rehabilitation services—cannot well be classified either as social insurance benefits or as National assistance benefits. The first is payable wholly by the National Exchequer, but without the means test characteristic of National Assistance, and for Health benefits less than a quarter of the estimated cost is to come from the Social Insurance Fund and more than three quarters from public funds. The unique feature of the Plan is its preference for the Social Insurance, which is to be maintained by contributions from the insured persons, from their employers (if any) and from the state, the rates for employees, employers or independent workers and for the state being roughly in the proportion of 4:3:1.5 increasing to 5. The actual weekly contributions proposed for employees aged 21 and over are: for men 4s. 3d. from the employee, 3s. 3d. from the employer; for women 3s. 6d. from the employee, 2s. 6d. from the employer with reductions for younger people. For other people gainfully occupied and aged 21 and over: men 4s. 3d., women 3s. 9d. (with reductions for younger people). For others e.g. persons of private means aged 21 and over: men 3s. 9d., women 3s. (with reductions for younger people.) The Report says bluntly: "The insured persons should not feel that income for idleness however caused, can come from a bottomless purse."

**Particular Benefits:** It will just suffice to give the chief particular items, for there is such a maze of details, estimates and arguments that

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one easily loses sight of the wood for the trees. Sir William distinguishes 6 classes for whom benefits are to be conferred: (1) Employees i.e. persons whose normal occupation is employment under contract of service; (2) Others gainfully occupied, including employers, traders and independent workers of all kinds; (3) Housewives i. e. married women of working age; (4) Others of working age not gainfully occupied; (5) Below working age and (6) Retired above working age. The Report—a charter of womanhood—makes provisions for maternity benefits of 36 s. a week for 13 weeks so that the housewives formerly engaged in paid work might give up working during confinement period. This is in addition to the maternity grant of £ 4 available for all married women. Children's allowances—for every child up to the age of 15 (or 16 if in full-time education)—extended as a birth right, will be paid out of the state funds without insurance contribution at 8 s. a head per week beginning with the second child when the parent is earning and the first child when the parent is not. The following in short are the various other benefits for adults:

| <i>Unemployment Disability and Training Benefit.</i>  | <i>Weekly Rates.</i> |
|-------------------------------------------------------|----------------------|
| Man & not gainfully occupied wife (joint benefit) ... | 40 s.                |
| Man with gainfully occupied wife not on benefit ...   | 24 s.                |
| Single man or woman aged 21 & over ...                | 24 s.                |
| Single man or woman aged 18—20 ...                    | 20 s.                |
| Boys or girls aged 16—17 ...                          | 15 s.                |
| Married woman gainfully occupied & on benefit ...     | 16 s.                |

The Report also proposes to make available for those of them who will take up some new occupation a training benefit at the same rate as unemployment benefit for a maximum period of 26 weeks without means test but subject to attendance at a training centre. As regards retirement pensions the Report suggests introduction of contributory pensions not at full subsistence level from the outset but rising gradually. The transition period suggested is one of 20 years from 1945 taken as the first year of the new plan to 1965 as the first year in which contributory pensions will become payable as of right irrespective of means at the full provisional rate of 40 s. joint for man and wife or 24 s. single per week.<sup>1</sup> The pensionable age is 65 for men and 60 for women. Sir William encourages those who feel able to do so

<sup>1</sup> "It is dangerous to be lavish to old age until adequate provision has been assured for all other vital needs" Sir W. Beveridge.

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to go on working after that age by granting an increase of pension in respect of each year that they postpone retiring and claiming it (subject of course to contribution conditions) the increase being 2 s. on joint pension and 1 s. on single pension. There are besides 2 grants of money: one on marriage for every woman gainfully occupied at the rate of £ 1 for every 40 contributions made by her before marriage with a maximum of £ 10 and the other a funeral grant (subject to contribution conditions) made in respect of every death and varying from £ 20 to £ 6 according to the age of the deceased. A widow draws a pension at the rate of 36 s. for 13 weeks after which she is expected to work unless she has children in her care in which case she will draw a Guardian Benefit of 24 s. a week. The Report sets up a complete national health service, open and free to all whatever their income. It is gratifying to note that the Report assumes for the success of the plan that mass unemployment will not be allowed to occur again and that the same individual will not suffer prolonged unemployment year after year. That is, the rate of unemployment for *all* employees must not exceed, on the average, about 8½ per cent and that unemployment of any individual for more than 26 weeks continuously should, in normal times, be rare.

**Finance:** The determination of the amount of money required for a subsistence income is not an easy task. For, first it is necessary to decide what goods are necessary for subsistence and then to calculate their cost in money. The figures given in the Report are calculated on pre-war prices. The Report somewhat optimistically assumes that the prices will settle at about 25% higher than in 1938. The Social Security Budget is estimated at £ 697 millions in 1945 rising to £ 858 millions in 1965. This is not all new expenditure, for the cost of the present commitments will amount to £ 432 millions in 1945. Thus more than £ 300 millions will have to be raised to meet the State's commitments when the scheme comes into operation fully. Can these be found and that in peace time? The "Economist" (February 13, 1943) after stating that the British "Can afford it if they want to afford it" concludes that "for the moment, of the Beveridge Plan, all that can be said is that its cost can and *should* be met". It is estimated that even the Social Insurance Fund will remain solvent only as long as the total number drawing unemployment benefit does not exceed 1½ millions. Thus, much of the success of the plan depends on the abolition of mass unemployment and on fiscal adequacy. But this is to anticipate.

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**Criticism:** The Report, considered as a whole and in its particulars, presents undoubted merits together with serious drawbacks both in what it does and in what it fails to do.

One can admire Sir William's lucid and accurate style without being convinced that the method, according to which he has arranged the various parts of his Report is the most logical possible and the best calculated to make his plan clear to the public. The Report has promised the working man what he had dreamt of but hardly dared to hope for and it estimated an initial cost not so astronomical as to antagonize the chancellor of the Exchequer or unduly alarm the industrialists. It urges a fundamental reconstruction of social welfare policy in Great Britain. For the first time it lays stress not merely on social *welfare* but on social *security*. It seeks to ensure a basic minimum income to everyone in need, irrespective of the cause of the need, with adequate benefits for unemployment, sickness, accidents, widowhood and retirement through age. The plan is British and set in its national context and judged in its national implications surely paves the way for the orderly progress of society. It is certainly a remarkable achievement on the part of Sir William to have expounded such a comprehensive and unified scheme within a year of investigation. That all this could be done in a country which not many years ago was a staunch believer in *Laissez Faire* doctrine assuredly marks an era of revolution in ideas and is a tribute to democracy. What is striking in the plan is its very inspiration: the craving for security. Family endowment on a contributory basis has much to commend it.

None the less, it is not entirely devoid of faults, sins of commission and of omission. The Report is the first step in post-war policies but a step that does not go far. Social security once guaranteed to the general body of citizens is not without danger, for there grows the 'taedium vitae,'<sup>1</sup> lack of interest in life which betrays impoverishment and decay; it saps individual initiative, begets loss of grit. C. E. M. Joad says<sup>2</sup> "if you give a man £2 a week whether he works or not you will take away the incentive to work, and freedom from want will in fact become freedom to idle". It is no easy task for a government to regulate incentives to work in peace time. Mr. Hilaire Belloc's 'Servile State' has taken shape in so far as it is nothing but servility of the citizens to

<sup>1</sup> The New Review (Calcutta).

<sup>2</sup> Quoted in Indian Finance April 24, 1943.

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the state by making them depend on the state throughout their entire life and even after death by granting them funeral benefits. It smacks of totalitarianism to make of man a "dependent citizen" and to grant the state plenitude of activities such that moral collapse is bound to follow. "Many people are pleased with the thought that it will foster the growth of population. If you give the state the power to foster the growth of population you also give it the power to check that growth."<sup>1</sup> With truth could the Frenchman repeat what he already said in 1933 when he wrote of England: The development of social service in England was leading or would lead to 'la sterilization politique des classes ouvrières anglaises' by making them pensioners and so dependent on the existing political and economic order. The fact that it is unified under a single ministry and supersedes and in some cases swallows up the existing voluntary associations is proof enough that it savours of totalitarianism. Whereas, the principle should be: Let not a group do what an individual can do, let not a bigger group do what a smaller group can do and let not the state arrogate to itself functions which can be efficiently discharged by societies within it. On principle we should not favour state-paid children's allowances for that looks like a practical admission of the view that children belong to the state. The idea of "something for nothing" creates a bad social mentality.

The universality of the scheme has been impugned by several. Why compel those to receive benefits who do not want or need them? Why provide old age and retirement pensions for those who do not need them or for those who make their own provision? The answer given by Sir William that the rich, who will have to be left out if it was not universal, are likely to pay in more than they receive is not satisfactory enough. Why enforce payment of contributions on people who are not earning wages or salaries? Is it just that employees who suffer no loss of wages during ordinary sickness (e.g. the staffs of the Civil Service, Railways and Local Government) should receive the same benefits as those who earn wages from day to day? The poor remain poor and the rich, it seems to us, are even better off under the scheme.

The uniform rate of contribution within each of the contributing classes can be called in question as it makes no distinction between the rich and the poor. A better method would be that contributions and

<sup>1</sup> S. Sagar in the Weekly Review, London.

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benefits should be graded in some relation to actual earnings. The "Economist" (Dec. 5, 1942) though friendly to the plan says that it is not an insurance plan..... it is a tax plan and as such has regressive features. The poor are required to pay more in taxation relative to their incomes than many who are better off. Sir William talks indeed of a redistribution of income, but if there is any redistribution it is very largely a redistribution as between wage earners themselves. Says the 'New Statesman' (Feb. 27th 1943): "If we say that in all  $\frac{3}{4}$ ths of the burden is likely to fall on the insured persons, excluding the rich, we shall certainly not be exaggerating." It looks as though the intention of the plan were to make the employed pay for the unemployed and those of the wage earners who have small families or none pay for those who have large families. Far from putting an end to the real state of affairs in which some abound in superfluous wealth while others lack the necessary means of livelihood, Sir William is not even transferring purchasing power from the rich to the poor. "It could be the aim of the government to discourage reliance on the state for such things as births, families and deaths. This could be done by arranging the goods of the nation in such a way that as many families as possible could stand on their own ground and order their own affairs." Conrad in the Weekly Review (London).

There is no explicit reference in the Report to the need for a minimum wage and the Statutory minimum wage implied in the Report is not the full basic family wage necessary for every adult working man. If a committee as strong as that which was behind the Beveridge Report had devoted as much attention to the solution of these difficulties as was given to the complexities of social insurance it would have done much more to further the cause of social justice. In fact far more fundamental than any scheme for the amelioration of want through the social services is the payment of a living wage throughout industry. If the government ignores the living wage and offers the Beveridge Report in its stead then we are further on our way towards the slave state.

What about the important vested interests in the voluntary insurance world? It is inevitable that if you extend the scope of state compulsory insurance you are liable to kill the goose that has laid golden eggs, for companies have quite legitimately made a good thing in the past out of the promotion of voluntary insurance<sup>1</sup> and it will require considerable

<sup>1</sup> The Dublin Review Jan. 1943.

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imagination on the part of voluntary agencies to adapt themselves to changed circumstances.

Even the debaters in Parliament did not make sure that there will be anybody or anything to pay. Indeed it is doubtful whether Britain's national income in the post-war years will be sufficient without any drastic reconstruction of the economic scheme. Everyman will be a creditor of the Government. It may in fact be "the straw that breaks the camel's back".

The plan's great weakness is that in it insurance against unemployment appears to take precedence over the provision of employment. The "Economist" (Jan 16, 1943) rightly says: "This plan for social security by efficient insurance or a similar plan can and must be introduced. But it is agreed that work is more important than unemployment insurance, that health is more important than sickness benefit, that accident prevention and rehabilitation are more important than disability pensions, that independence is more important than doles. The problem of countering the results of poverty is secondary to the problem of countering the causes of poverty."

If universal security means still more proletarianism, compulsory security, still more improvidence, adequate security still more idleness one must guard against comprehensive social security. Work for the out of work, a family living wage, the national minimum wage, property for the propertyless—these must be the main objectives of any social and economic planning<sup>1</sup> particularly for England. Taken all in all, we cannot give our whole hearted support were it only because that an all-in, state-run social service of this kind is a long step towards making the state the universal provider and the citizen a helpless cypher in a servile society, because it insists that children are "a national investment" and therefore to be reared at the expense of the nation, and because so generous a scale of benefits cannot but tend to encourage thriftlessness and idleness. As a comprehensive and final basis of social security it has very little indeed to recommend it even for Britain.

The enthusiasm over the Report has rapidly deteriorated into puzzlement, apathy and forgetfulness. Quite recently the British Medical Association has rejected Sir William's proposals on health service.

<sup>1</sup> Studies, an Irish Quarterly Review, March 1943.

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**And India:** Much less can it be recommended for India, for, in order that it might succeed a plan must have the country behind it with all its organs, central and local, urban and rural. The Achilles' heel of planning is the human factor—a responsive population. A scheme must be adapted to a country's special condition and its dominant social trends. Here in India we have first to combat the mass inertia and lack of social consciousness and social will. Insurance is in its infancy in some districts, in others not born yet, while in others not even conceived. Besides we have no large wage earning class whose amelioration is a crying need of the time. India is by and large an agricultural country where we have thousands of small holders, and property is more or less well distributed, perhaps even too much distributed. The majority of our people are therefore property owners (except where the anachronistic Zamindarism and Feudalism prevail) and not wage earners and as such are in a position to provide for themselves and their families by their own efforts. For this reason, if for no other, there should be little question of adopting the Beveridge plan here in detail or indeed even in principle, nor do we need to be secure against poverty by compulsory state insurance. Our land holders have such small uneconomic holdings that to ask of them for weekly or monthly contributions would be like asking a dumb man to sing. As the Tamil proverb goes, only if there is anything in the pot can you get something in the ladle.

These reasons coupled with those for which we argued that even in England such a plan was not to be wholly accepted, viz., state tyranny, dependence and servility of citizens etc., are sufficient to prove that such a security plan can find no place in our Indian Economy. No doubt, some plan for social security is an absolute desideratum, but it should be a plan as far removed from the Beveridge Plan as possible, a plan that should aim at the education of the masses to think on social lines, a plan that should include within it sound moral principles, a plan, in fine, that makes at once for progress, well being and happiness of the teeming millions of India.

## Wonderful Nature

by M. V. Rajendaran, IV U. C.

**I**N your experience have you not heard in your house (especially on hot summer days) the 'tuck', 'tuck' of the scorpion's tail, striking against the tile of the roof, when the poor creature is caught by a clever lizard? Have you not listened with pity to the mournful 'whine' of a dying frog in the fangs of a snake amidst tall green grasses as you passed by a stream? These may not astonish you. But you will dilate your eyes with wonder if I say that a frog once swallowed up a big snake and that I myself have fed a black scorpion for forty days with living lizards. How carefully the black monster would approach his blinking prey; and, on a sudden, jump, fall on the lizard with open "arms" catch it by the throat and strangle it to death, chopping off its head with its powerful "fingers". The entire body, excepting the head, was made use of in the process of feeding the stomach. It was my pleasant duty to search for a house lizard every morning and catch it alive.

You know well that the cobra is the scarecrow of a vast majority of animals, including the rational one. I think there are a dozen varieties of cobras. At least one particular kind, called "the flying snake" in Tamil, is well known for chasing men some hundreds of yards. But even such a one will not dare to stand against the non-poisonous, mild, unassuming, swarthy, lazy, short-tailed sand snake (உழுதவாம்படி). I cannot forget one incident which I was lucky enough to witness. There was a small gap in a fence of brambles. A cobra and a sand snake met each other while passing through the fence. The gap lay between them. It was the story of the unwilling goats on the bridge. I expected the cobra to walk off in royal grandeur with raised hood. In fact, he attempted to display his majesty, but his rival would not let him pass so easily. A sort of duel ensued. For a moment the indolent sand snake stood still while his terrible opponent fumed and fretted, snorting and hissing with rage. Then swift as an electric spark dashed the sand snake. The next moment the head of the cobra found itself in a warm fleshy cavity. Slowly and slowly, bit by bit, the body of the royal snake went in, while he shrivelled and coiled round his antagonist.

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They say that the eggs of the cobra radiate a jasmine fragrance. The current idea among common folk that the cobra and the rat snake (சரணம்) conjugate is false. Rev. Fr. Leigh S.J., has proved this. Two different species of animals cannot mate and reproduce; if the mule is derived from a donkey and a horse, it remains sterile.

Cobras are fond of closely associating with human beings. You must have heard of many interesting episodes of children playing with cobras or cobras sleeping with men. A friend of mine in Vellore was sleeping one December night in his snug little room. At midnight, he felt somewhat disturbed, but tried to wrap himself tightly in his blanket and sleep. To his great consternation, he found some one sleeping beside him! He felt the warmth of an alien body. Jumping from his cot, he switched on the light to find a cobra slowly gliding down! Generally cobras are not so harmful as we think; only you should not disturb them. You can sit on a chair quite calmly and watch a wild cobra gracefully gliding over your legs,—provided you are not nervous—without even a passing thought of your presence. It happened once to a Reverend sister of our local convent, who was stunned by the sudden appearance of the royal snake. Fortunately for her, she was so petrified that she could not move her leg.

As I have said before, the sand snake is quite harmless. People say that if it licks the body with its tongue the skin becomes white and diseased. I have no belief in that; and I have personally undergone the experience.

Mr. Chandy, the Natural Science professor of St. Xavier's College, Palamcottah, proposed one day that he would keep live snakes in his museum if his students could bring them. It was in the year 1936 when I was in the I U. C. Returning from home after Christmas holidays, I took two snakes in biscuit tins. One was a rat snake, fresh from the forest; only its teeth had been pulled out. The other was a sand snake. I left those two tins, tied of course, on the table, along with various exhibits, brought in tins and bottles, by my friends. Professor Chandy was enjoying the cool breeze of the Botany Hall. Perhaps he did not hear my words "Snakes, Sir," for very calmly he said, "Leave them there." Only in the evening when he thrust his hand into one of those boxes, a strange feeling awakened him from his trance. He had narrowly escaped the bite of a snake! He closed the box at once, and did not open the other. Luckily, he had opened the box containing the lazy

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fellow, the sand snake. The next morning, when we were assembled in class, Mr. Chandy related his experience with the snake. I understood what had happened to him. But, to my wonder, I still found the beautiful broad tin box containing the agile, long rat snake just in front of him on the table. He did not know its treasure! He might have expected to find inside it some stuffed specimen for the museum. When he inquired who had brought the snake, I stood up and said, "Sir, please open the box which is in front of you." I myself was asked to open the tin; perhaps he was a little afraid after his experience of the previous day. I drew near and slowly raised the cover. Out dashed the hungry, wild rascal; but his tail was in my hand, and so he could not escape. I was left in charge of the two snakes.

We found it very difficult to feed the pair. Their habits and food differed widely. The young, nimble, active rat snake could not well agree with the indolent idiot. We kept them in the same cage in two different compartments, separated by a door in the middle. Frogs were the staple food of the rat snake; while his neighbour indulged in gulping down large live blood-suckers. One Saturday I could not find any blood-sucker. So, the sandsnake went hungry. And only one frog was available for the ratsnake.

On Monday morning Mr. Chandy looked sad. The rat-snake was missing! Some one had left the central door open, but the cage was well guarded. On close examination we found a small ball of flesh and bones rolled up in a corner. It was only the disfigured frog. Mr. Sand-snake was snoring soundly. Our attempts to wake him proved vain. He had grown to an enormous size, almost double in circumference! How? Can you believe, reader, that such a short snake as this, only about two and a half feet long, could devour another almost double its length and at least three fourths its size? But the fact remains that the ratsnake had found its grave in the stomach of the sandsnake.

# Providential Dispensation

by S. Sampath, IV B. Sc. (Hons.)

THE afternoon had been intensely hot and the evening on the sea-shore was a much-needed relief. Four of us, friends, were gathered on the sparkling sands, within reach of the spray. Ramu was one of the company—a capital reeler of yarns, remember.

The talk somehow turned on deaths, sudden deaths. Ramu was silent for some time and we knew something was coming; for with him always the calm precedes the storm. At a convenient moment he began:

“Rao Bahadur Sadasiva Iyer, District and Sessions Judge, Dharmapuri”—he started in that sudden manner so peculiar to him—“suffered from a bad head-ache in the evening, and went to bed early. He held a pillow tightly over his temples, closed his eyes and tried to sleep. No; the attempt was useless. Two imps had got loose from hell, as it were, and were hammering away, using the temples as anvils, until it seemed to him sparks flew out of them. The clock struck the midnight hour. The agony seemed interminable. He got out of bed, went near the window and looked outside through the glass. With a half-suppressed ejaculation of dismay, he drew back. The moon was behind a cloud, and in the semi-darkness, he had seen something black, lifeless, horrible, swinging on the gallows! There was a sudden gush of wind and the shutters flew by. There was a pale light upon the lawn outside. Nothing was to be seen now. An owl hooted horribly somewhere, and silence once again fell upon the night air.

“Sadasiva Iyer hurled himself into a chair. Sweat broke out on his forehead in glistening beads. He felt a chill coming over him. The fortnight past had been a bitter trial and this night was its culmination. Precisely fifteen days back he had pronounced judgment, and spelt out the doom of a young person. On the morrow, at sunrise, the extreme penalty of the law was to be inflicted.

“It was a police case concerning the removal of fish-plates on the railway-track. A timely discovery exploded the evil design; and the young man was hauled up to stand his trial as the principal adventurer, because he had been found in bed with an injured head on the day following the incident.

## PROVIDENTIAL DISPENSATION

“In a moment of callousness, the Judge had chosen to ignore the protestations of innocence on the part of the young man. A ladder had slipped and the injury was sustained at home, he said. His mother, aged and nearly blind, was the sole person to attest the truth of his statement. But Rao Bahadur Sadasiva Iyer was fondly expecting an elevation and therefore could not afford to attract the attention of the Government, in a case like the present, by sending the police to the wall.

“But then his heart was not made of iron. The agonising shrieks of the old woman, when she heard her son's fate thus decreed, clung to the judge's heart. The face of the young man haunted him—with its vehement passion, while maintaining guiltlessness, succeeded by unspeakable agony and tragic humiliation, born out of official disbelief in his innocence.

“A few hours more; and one life would have flitted away crying to God against the man who took upon himself to judge. Sadasiva Iyer felt his hands were wet. He looked at them. They seemed red with blood. He fainted away in his chair.

“The vigilant cock uttered his call. Sadasiva Iyer slightly stirred. The clock began chiming. One, two, three, four. There was a rustle near the doorway. The judge woke up and turned. He rubbed his eyes and looked. His wits were confused. There was a dull, gnawing pain in his head. Some one advanced and took the seat before him. It was the prisoner due to be hanged at sunrise. He began to talk. He called the gods to bear witness to his innocence. His conscience was unclouded, but his heart was full of sadness. Ere he departed he wanted the man, who had judged him worthy of death, to believe that he was without stain.

“The pain that was oppressing Sadasiva Iyer suddenly seemed to diminish. The emasculated youth sat before him, a picture of serenity. As he poured forth his tale of pity, an unknown softness entered Sadasiva Iyer's heart. He burst into tears. ‘I wish the earth would open beneath my feet and consume me and my shame and sorrow. My agony has been overwhelming. Have mercy upon me and pray to the gods for my forgiveness.’

“‘My mission is fulfilled’ declared the visitor, ‘and I shall go with peace upon my soul, though not without a great sorrow for my mother.’ He arose and swiftly walked out of the room.

## PROVIDENTIAL DISPENSATION

"This was relief for Sadasiva Iyer. The prisoner was safe now. He might use the darkness to escape. He need not die. So the stricken man lifted up his heart in thankfulness and went to bed."

The sonorous tone of the narrator ceased here. It seemed we had been listening to a reading from some grim book. Ramu, the supreme psychologist, remained quiet for a time and then began in a voice, subdued and soft, that spoke of coming tragedies.

"On the second morning after this nocturnal incident" he said, "a mysterious thing happened. Sadasiva Iyer, who was absorbed in his newspaper, suddenly dropped it, uttered a cry of horror and fell back in the chair. When the doctors arrived, life had become extinct.

"One of the usual cases of heart-failure, they were sure." Here Ramu's shrill laugh sounded an ironic challenge. With that he sat up, and in the fading twilight, it seemed to us, his eyes shone with the influx of rushing thoughts. His voice became animated.

"The secret of his collapse was this bit of news in the paper, which said: 'The death occurred in the early hours of yesterday morning of a young man in the Central Jail, Dharmapuri, owing to cerebral haemorrhage. It may be recalled that he was sentenced to death in what is known as the Dharmapuri Arson Case, and was due to have been hanged at 6 o'clock. His death, occurring at four o'clock, offers a powerful reflection of the mysterious dispensation of Providence.'

"Four o'clock, good Heavens! Was it not at the stroke of four that the nocturnal interview had commenced? The implications of this thought together with the mental travail he had lately been in, had killed Sadasiva Iyer. The Providential dispensation was in fact wider than the correspondent knew, who so philosophically recorded the death of the prisoner."

Thus Ramu ended bringing us back to our philosophy. For once, it seemed, he had given us something real and compelling. We sank into a silent mental review of the sombre succession of events.

\* \* \* \*

The Sun had sunk behind the green foliage. We cast a glance over the blue expanse before us and rose to go.

## TALES FROM THE PANCHATANTRA

The silence was at length broken by someone remarking on the exceedingly precise knowledge of details Ramu had shown. He turned angrily on us.

"You chaps never know when a fellow is speaking the truth," he cried, but softened down in an instant and said "Anyway, that leads me to the first among three points you will require for a proper appreciation of the incident. You remember Sadasiva Iyer had a full day before him and he used it to make a record in his own hand of the night's experience. My uncle has it now and I have looked into it."

We offered no comment, and Ramu cheerfully went on: "The second is the possibility that he had dreamed it all. But he is emphatic about it in the record. That leaves no quarter for any suspicion that he was under a delusion."

We were too puzzled to speak.

"Enough for the day, I hope. Pleasant dreams and good night!" said Ramu. He had taken a few steps from us, when I called him to halt. "The third point" I cried.

He turned round. A mischievous smile played on his lips. "The third point," he chimed, "is that I made it all up an hour ago."

Before we had quite recovered from our astonishment, Ramu had vanished.

## Tales from the Panchatantra

*Retold by a Naturalist S. M. S.*

### The Crows and the Cobra

 IN the branches of a Neem tree (the *Azadirachta Indica*), two crows (*Corvus splendens*) built their nest and for a long time lived there, laying their eggs and rearing their young ones unmolested by any. One day a cobra (*Naja tripudians*) came along and finding a hole in the trunk of the margosa tree crept into it and made his abode therein. Thereafter, whenever the crows laid eggs, the vile reptile went up the tree and ate them up, the cobra being, according to legend, an ovivorous animal (or is it ovibibent or perhaps ovibibulous or even ovisugent!)

## INDIA AND THE FOOD PROBLEM

The two unfortunate bipeds feeling helpless before such a ruthless foe went and related their woe to their friend, the fox (*Vulpes alopes*). The fox said: "What you cannot achieve by force you can accomplish by stratagem. Go to the enclosed private garden of the King. When at noon the King's daughter goes to the crystal pool to have a dip in the cool water, she will take away her jewels and leave them on the bank. Fly down with a great clatter and taking one of those jewels fly about with it so that all will notice the fact and raise a hue and cry. Then, carrying the precious booty in the sight of everybody to your tree, drop it into the hole wherein dwells your mortal enemy the aforesaid limbless reptile."

The passerine birds having followed the advice of this most crafty quadruped, the servants of the King easily followed the winged thieves and perceiving what took place, began hacking at the hole in the Neem. Whereupon the cobra came out hissing at them, and the servants cut it in two and threw it away.

**Moral:** Cleverness and cunning can often achieve what is apparently impossible.

## India and the Food Problem

by S. David Michael, M.A., L.T.

**ONE** of the most inconceivable horrors of human life is starvation unto death. The story of Macsweenly in Ireland and of Jatin Das in our country, deliberate acts as they were, are still not without the horrid protracted agony associated therewith. But nowhere do we read of the gruesome tale of a human tragedy en masse imposed by hunger as during the potato famine in Ireland. Today, one of the fairest provinces of India, a province that was of yore 'flowing with milk and honey' has had the misfortune to experience a similar catastrophe. Not only in Bengal but all over India there is the Food Problem, though its acuteness is diversely felt.

It is believed that there has been a recurring shortage in the production of rice in India in the past. It is also believed that the Indian population has been steadily increasing during the last three centuries. The following statistics are given to substantiate this.

## INDIA AND THE FOOD PROBLEM

| Indian Population |    |    |    |      |      |
|-------------------|----|----|----|------|------|
| Century           | 17 | 18 | 19 | 1931 | 1941 |
| Popn. in Crores   | 10 | 13 | 15 | 35.5 | 38.8 |

Regarding shortage of rice, the official statistics reveal that we need 2.56 crores of tons of rice, of which we got a supply of .324 crore from Burma, Thailand and Indo-China. The Grow-more-food campaign has increased rice production by .1 crore, leaving a shortage of .224 crore of tons, which means total starvation of 12 lakhs of Indian people. The demand of rice for military purposes to feed the Indian Army from Iran to Italy and the Russian flanks, and stocking for reasonable emergency has reduced the limited supply further. Speculation by way of hoarding and profiteering at the hand of the landed and commercial magnates is one more factor which has made the staple food a luxury in several parts.

The inflationary policy pursued by Britain has abnormally increased the price level of consumption goods. Not because of India's inability to pay her quota for the War but owing to Britain's expenditure in India for supplies and services, met by the Sterling, covered by the issue of rupee notes by the Reserve Bank of India, our currency has got inflated. This issue amounts to Rs. 585 crores since 1939. Production of essential food-stuff has not at all increased—hence high prices. Besides, rise in prices has not been of profit to the masses, as their wages and incomes have not been commensurate with the increased prices.

India hence faces a food problem linked to her currency. Several solutions are suggested both non-inflationary and anti-inflationary. One method is taxation. According to the calculation of the Finance Member, Rs. 20 crores can be expected a year by new taxes as against about Rs. 20 crores a month of note issue! Besides in the words of Lord Wavell, "... the economic resources of India have been strained to their utmost limits and any further burden might well prove the proverbial straw on the camel's back." Attractive War Loans and Savings Deposits are now offered as anti-inflationary measures by the Central Government. These will mean so much money withdrawn from circulation. By March 1944 a target of Rs. 100 crores may be successfully hit by small savings

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to be utilised for post-war reconstruction. But the problem can be solved only by over-hauling the present policy of war-time finance, by Britain paying her bills to India either in gold or consumption goods or by importing or producing all essential food, by stimulating the supply, so that we may increase the purchasing power of the rupee of the poor man.

The Government was too slow to realize the gravity of the food problem. Instead of promulgating from the centre a uniform policy for the whole country, the government followed a policy of 'district control' which was no policy at all. Tanjore rice, Tinnevely jaggery and Ramnad chilly hitherto mutually exchanged for the benefit of all were stopped by the application of emergency powers. One passed from the smoke into the smother. It was the Bengal Famine which was an eye-opener to the New Viceroy, the India Government and the British Parliament. In addition to the importation of food-stuff from other countries, a scheme of all-India rationing and food control is now launched. Better late than never! It is government control of food that has kept its price level considerably low in Britain and the belligerent countries which have successfully averted starvation. A sensible food policy ensuring even distribution must surely prevent any national catastrophe.

Such a solution at its best can be after all a war measure, temporary in nature. Statesmanship must therefore suggest steps to eradicate that problem permanently. As one method, economists demand that we must intensify cultivation. So far as paddy cultivation is concerned, India is a backward country, as the figures below will show:

| Per Acre in lbs |       |       |       |
|-----------------|-------|-------|-------|
|                 | India | China | Japan |
| Paddy           | 988   | 2,433 | 3,070 |
| Wheat           | 811   | 989   | 1,350 |

The Japs produce 3.1 seeds of paddy, where we produce only one! Again more land in India can be brought under the plough. Of the 105.5 crores of acres of land, 11 crores remain waste and 61.4 fallow. If people

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and government co-operate, how quickly these could be harnessed to production!

The exploitation of the Indian fishery will enhance both the quality and quantity of the food of the nation. Almost everybody is familiar with the fish-liver oil, which is an invaluable tonic and food. With the long Indian coast-line and deep seas on three sides which abound in fish, the future of Indian fishery is indeed bright. But our present conditions and methods relating to this industry are primitive. The half-clad, under-fed and over-worked fishermen in the Catamarans, those wretched boats of an ante-diluvian type demonstrate all the difference between cottage industry and the factory system. The example of Japan which has increased 182% her fishing industry between 1900 and 1938 through her 50,000 motor fishing boats, holding today 35% of the world fishing trade can well be remembered.

Our food problem is closely allied to the Indian cattle problem. Cattle form instruments of labour for all and food for many. Too many in number and not adequately cared for, they are some of the most pathetic specimens in the world. Cows, for example, remain often barren, and even when they calve, they do not have enough milk. In a land of infant mortality, even calves die a premature death. To save fodder for the cattle and increase their quality, a good many of them must be cleared off. Whereas per 100 acres, China has 15 and Japan 6, we have 75 in Madras! It is held that 12.5 out of 20 crores of Indian cattle are superfluous.

Above all, the problem can be approached from a psychological point of view. The cry is now raised from several parts of the land that the traditional dietary habits must now be changed for good. Instead of eating rice, which is mere starch, morning, noon and night, the nation as a whole must take to a variety of food. This may be a slow process but a sure solution. Potato is suggested as a substitute for wheat for cultivation and consumption, as its production is double in quantity and as its quality is superior, containing vitamin C. In Gujarat and Sind, the soya bean has become popular and is held as highly nutritious with vitamins A, B and D.

Instead of senselessly attempting to check our population, let us increase our production, resort to intensified cultivation, increase our fishery and poultry, improve our cattle and change our food habit. If people and government act in harmony, the problem of our food must become a thing of the past.

# The Kremenz Pin

by E. C. Sreedharan, Junior B. A. Class.

**W**E were room-mates.—Reghunadh and myself. I had felt a great liking for him from the very first day of our acquaintance. I saw in him some inexplicable attractiveness. In course of time we learnt to love each other and became thick friends.

Reghunadh belonged to a village in Malabar. He was a spare youth of middle height with a pale skin, an intelligent face and a pair of thoughtful black eyes. His handsome face, winning smile, winsome manners and polished behaviour endeared him to all with whom he came into contact. Little wonder he was considered the best boy in the College Hostel. He had taken the second group—Physics, Chemistry and Natural Science. Extremely intelligent, he was equally bright in all subjects. In Physics especially he was well off and easily scored the highest marks in the class. Physics, however, was not his favourite subject. He loved Chemistry. While most of us felt a hearty abhorrence for the nasty subject, it was as if he was transported to Eden when he was with Chemistry with its “Normal solutions” and endless formulæ. Oftentimes he would call me “I say Rajan” and would say “What an interesting subject Chemistry is!” “Is it?” I would dreamily reply and would laugh, willing to treat the matter lightly. He would then look displeased.

“What a fellow you are” he would continue! “Tell me Rajan, don’t you find the problems under “Volumetric Analysis highly interesting?” To put an end to the conversation I would assert “Yes, Reghu, I simply thirst for them.” At once he would open his table drawer and take out his “Chemical Calculations.” His fingertips would scale swiftly over the leaves of the book and would finally come to rest at a certain part of the book. He would then plead “Rajan dear, please could you help me to do this problem under “Oxidation and Reduction?” Compelled by circumstances I would read the problem a dozen times in my mind but would fail to understand the a, b, c of it. Rubbing my sagacious nose I would retreat with the plea “I will think over and tell you” I would scarcely have finished pronouncing this excuse when he would jump from his chair in joy like a mad man and bawl out “Rajan, I have got it at

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last; come, I will tell you. It’s very simple after all” and he would begin explaining, little knowing that I was not in the least interested in the problem.

Reghunadh belonged to a well-to-do family but in him one would fail to trace the slightest shade of vanity. He never cared for costly and beautiful garments. He was, so to say, an emblem of modesty. He had a deep liking for a Kremenz pin; so it appeared to me. I was not certain whether he really loved the pin or whether it was only my imagination. Once or twice I was on the point of asking him about it but I refrained from doing so, quietly laughing at my foolish curiosity. Nevertheless, it was a thing which constantly aroused my interest and I thought there was something underlying his love for this trifle.

Days turned into months. Our friendship ripened. We learnt to love each other so well that there was not a dream of our brains, not a hope of our hearts, which was not confided to each other.

I was mad after “talkies” and we used to frequent the theatres. At first Reghunadh disliked going to see the pictures. He loved a life of quiet and peace buried among his books, thoughts and dreams. In due course I had little difficulty in leading him into the theatre and gradually, he began to love outdoor life.

One day we had decided to go to the theatre. The picture being played then was the famous “Bandhan”. We were dressing to go out when Reghunadh called me. I ran to him. “Rajan” he blurted “please . . . please . . . help me. I cannot find my . . . pin . . .”

“What pin?” I queried feigning ignorance. I saw anxiety and pallor well writ on his naturally pale face.

“My Kremenz pin” he replied. “I suppose you have seen me wearing a beautiful pin on my shirt”.

“Oh! your Kremenz pin” I exclaimed, as if I had recalled it just then and continued “that’s nothing, brother. I thought it was something costly that you had lost.”

He was upset. “Oh Rajan” he moaned. “If you are kind enough, help me or else you can go to the pictures alone today.”

We searched for the pin for a great length of time. At last I said “Reghu, there it is under the bureau”.

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He picked it up as a mother takes up her child which has fallen and he looked at it lovingly with a smile lurking on his lips and a glitter in his eyes. He shed tears of joy and said with gratification "Thank you, Rajan, thank you ever so much".

We set out for the cinema theatre. I was convinced there was some episode connected with the pin. This suspicious curiosity was preying upon my mind and after a hot debate with myself I came to the conclusion that it was high time for me to ask Reghunadh about it.

On our way back I said "Reghu, there's not a secret between us which has not been mutually revealed. We have never failed to be frank with each other. I must confess to being mighty curious about the history of your wonderful pin"

"What history do you mean?" he said laughing to meet my questioning eyes. I insisted persistently on hearing the history. At length Reghu began "It's a long story, Rajan". I requested him to narrate the "long story". Half willing, half reluctant he shaped his mouth to speak. "This pin" he said taking it fondly in his hands as though it were some legacy. "This pin was presented to me by Sohini.

"Pray, who is Sohini?" I interposed. He blushed. I could follow his eyes which were twinkling with a sort of bashful joy.

"She is my grand-uncle's grand-daughter" he made reply. "We were classmates. Moreover, we were neighbours". He looked at me as though to know whether the explanation was enough. I drew a deep breath, deeply interested. "Well Reghu proceed. Don't be shy. It's only your Rajan" I said.

He continued "We were classmates for five years—from the second form onwards. I saw her for the first time in my life when I was promoted to the second form. It was then that her father was transferred to our place and that he settled next door". His face flushed "Sohini was then a girl of eleven summers, one year younger than I. She was considered a budding rose, beauty incarnate, by all the girls in our school. We began to like each other. We used to meet frequently in the evenings. She was an ardent lover of gardens and so was I. I can still fancy how we helped my father in his garden to destroy the weeds and he would ask us to bring him gardening implements. We used to

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vie with each other in pleasing papa by doing him such service. I can never forget the tall cypress tree of which he was inordinately proud for many were the sweet hours I spent with her under that tree. My father was very fond of her and he used to take us in his car to the lovely countryside. Sometimes he asked us to write essays on what we had seen and oh! what fun the competition was! Sohini was a bit weak in Mathematics. I used to give her some coaching, for in those days I was bright in Mathematics.

"That's a self-evident proposition", I interrupted. "By the by, why did you take Chemistry as your optional?"

"I shall tell you" he said. "I was telling you I used to help Sohini in Mathematics. In return she used to try and make science more interesting to me. I hated Science, especially Chemistry, though we had only a little of it to taste in the lower classes. Chemistry was to Sohini as fish is to cats. Every blessed bit of Chemistry was at her finger tips. I used to wonder how it was that she managed to study the properties and methods of preparation of the various elements. Both of us stepped into youth and as we were thrown into daily companionship our deep liking for each other transformed itself into passionate love. Then her likes and dislikes coincided with those of mine. It was this love which wedded me to Chemistry and ever since then it has been to me a store-house of pleasure. This love serves as the foundation for my interest in "Dalton's Atomic Theory" and "Avagadro's Hypothesis."

"Enough of your Chemistry" I growled "What about your pin?" His eyes large and dark as the darkest night glistened. He answered.

"This was the beginning of my love. I devoted myself to win the heart of Sohini. I was not satisfied with knowing that I loved her; I desired to know if I was loved by her. Before long I gathered from her distinctly that my love was not unwelcome and would not be unrewarded by her. This filled me with an ecstasy for which earth and heaven seemed too narrow. But this joy was not destined to last for ever. Our five years' association evaporated into the dead past like five short hours. Both of us passed the Matriculation Examination. I sought admission into this College.

"What about your Sohini?" I wistfully asked.

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"Owing to ill-health she discontinued her studies." He relapsed into silence. I nudged him. As if just awakened from dreamland he rubbed his eyes. Then he resumed. "Parting is always sorrowful and I could not bear the strain of leaving Sohini. On the eve of my leaving the place we met under the cypress tree. As usual we chatted till dusk. When it was somewhat dark we got up to part. We wished good-bye to each other. Then she placed this pin in my hands telling me to treasure the keepsake with pride....."

We reached the hostel gates. The clock chimed ten. We silently crept into bed.

\* \* \* \*

When we met after the Christmas holidays Reghunadh had changed considerably. Some sharp misery had worn him to the bones. His delicate and regular features were wan and colourless, his eyes were hollow with a feverish glare. In short, he was a ghost of his former self. Some great mental anguish had told upon him physically, I guessed.

That night after dinner I asked Reghunadh what that meant. A spasm of pain shot through his heart. He was pale and stern, with misery in his eyes as he uttered "Early love affairs will end in anything but success."

I looked at him puzzled as if to hint that I was not satisfied with his brief answer.

Without much ado he continued. "Just as Hydrogen Fluoride etches glass so also galloping T. B. had corroded her lungs and she passed away on Christmas day."

There was a pause of laboured breath. I did not interrupt. Even when relating such a tragic frustration he could not but talk in terms of Chemistry. I felt he was eccentric. Yet I admired him for his ability to bear sorrow manfully.

"Excuse me, Rajan" he resumed "I could not inform you of this simply because I was not strong enough to do so".

\* \* \* \*

Days withered. The balm of time healed his heart's wound. One night I made bold to ask him "Reghu, what happened to your pin?"

In one short sentence he answered "I buried it under *our* cypress tree."

## My Favourite Author—G. K. C.

by A Chestertonian

**T**HOUGH we love all men in the world our intimate friends are a privileged few. And among these our confident, he whose company we seek most frequently is, very often, only one. My attitude towards authors is the same. I wish all authors well; I am enthusiastic about some; but there is one who occupies a special pedestal in my esteem and affection. This is G. K. Chesterton. You may have your hero; "Each to his choice," I say with Kipling; I do not want to pick a quarrel with you. As for me, G. K. C. is a writer after my own heart, I find in him all the qualities I look for in my favourite author.

If an author would have me for his friend, my first condition is that he should range himself on the side of the angels, speak and defend Truth and champion Virtue. No writer, however elegant his style, however smart his epigrams, or tickling his wit, shall be blessed with my attention, if he is out to preach falsehood and to sneer at morality. One who scoffs at God and religion, at mercy and innocence, be he the most fashionable best-seller, 'he shall not have good words from me'.

Chesterton more than fulfils this requirement. For he is not merely a meek and decorous follower of the True and the Good, but a fearless crusader on their behalf. He made their cause his own, and dedicated his life to establishing their reign among his fellowmen. He depicts virtue in all its native beauty and grandeur and fills us with eager enthusiasm to pursue it. Reasoned justifications and eulogies of hope and loyalty, humility and gratitude, of justice and charity are scattered all over his writings. To observe the laws of morality, he points out, is more exciting and adventurous, calls for nobler character and greater effort, than to transgress them by weakly yielding to our impulses. The zeal and courage he displays in the defence of truth is no less admirable. He hunts out the sceptics who question reason, the psycho-analysts who explain away morality, the deluded devotees of 'Progress', the utopia-builders, divorce-mongers and birth-control enthusiasts, and exposes the confusions and contradictions in their misguided thought. He batters down their flimsy philosophical structures, with his flaming imagination makes a bonfire of them and we find ourselves laughing with him with uproarious laughter as they vanish into thin air.

## MY FAVOURITE AUTHOR—G. K. C.

It is not enough for an author to impart wisdom; for, if he is too solemn and dull, his books are more likely to induce us to torpor than to call forth our admiring appreciation. Few of us are saints enough to stand the patronizing advice of the wisest man if it be dry and solemn. My favourite author should know how to combine "utile dulci"—to season his wisdom with charm of manner. In this Chesterton is almost unrivalled. Though his books deal mostly with abstract philosophical truths, dry and austere in themselves, he makes them live and sparkle by bringing to the discussion his exuberant sense of fun and his colourful and puckish fancy.

One of the most characteristic and attractive qualities in G. K. C's manner is his benevolent and all-pervading humour. Max Beerbohm in one of his essays tells us that his friend Chesterton is so gay at heart that he must be executing a kind of Morris dance while walking in the streets; and recommends the "Chesterton Dance" to all his fellowmen. Whether Beerbohm's readers follow this advice or not the words in Chesterton's books seem to have taken it to heart. They dance and frolic in gay abandon in the spirit of their master. They indulge freely 'in quips and cranks and wanton smiles' and the very lines seem to be gambolling to the rhythm of his joy. We like the company of a happy, kindly man especially if he is eager and capable of communicating his joy to others. If humour is winsome in itself, the unique qualities of G. K. C's humour make it still more lovable.

One reason why Chesterton is extravagant in the use of fun and fooling in his writings is his dread of solemnity and the spirit of pride which usually lurks behind it. "Seriousness" he writes, "is not a virtue; it is a sin. Satan fell by force of gravity." He had made it his mission to teach men truth and to lead them to whatever was good and noble. In endeavouring to do this he carefully avoids posing as a superior person. He does not stand up as a paragon of virtue looking down on others as ignorant and sinful folk who had better learn from him. He had too modest an opinion of himself and too great a respect for his fellowmen to do that. He habitually doffs the preacher's mantle, descends to our level and speaks to us as an equal. The means he chooses to achieve this is levity and laughter. Laughter is a great equalizer and restores man to sanity. For, we are not all sublime, but we are all grotesque; and it is good for man to concentrate on what they have in common. Pride is a solitary sin; humility is a social Virtue. "Man,"

## MY FAVOURITE AUTHOR—G. K. C.

says Chesterton, "is born to be ridiculous as can easily be seen if you look at him soon after he is born. . . . The grotesqueness of drinking lies in the act of filling yourself like a bottle through a hole". With his jokes he disinfects the air of all pride and self-conceit before he utters his moral teaching. His humility makes him hide the wisdom of the sage behind the cap and bells of the jester.

It is this same humility that led him to make himself the butt of numberless jokes. He invites us, as it were, to laugh at him, at his great bulk, his forgetfulness, his idle and clumsy ways. Alluding to his remarkable size, he writes "If all the animals whom Bernard Shaw did not eat during his life were to attend his funeral. I am ready to follow them in the shape of an elephant." While people of little minds are anxious to cut a fine figure before the world, to appear exceptional and accomplished this great man delights in being taken for an ordinary person. "This fellow's wise enough to play the fool", Shakespeare would have said of him. The capacity to provide fun at one's own expense is the test of a genuine humorist and an agreeable companion. By frequently laughing at himself G. K. C. shows himself a fine humorist and the prince of good companions.

High spirits and a naturally happy disposition were not the only springs of Chesterton's humour. Its deeper sources were his consciousness that God is in His heaven and that through his Providence all's well with the world. His firm faith in the ultimate victory of Truth and Virtue imparts to his controversial style a triumphant ring, gives to his wit a coruscating radiance and arms his swift epigrams with a delicious sting. His own extraordinary gaiety is proof of what he often teaches in his books that what kills joy and freedom among men is irreligion, and that wherever faith in God is strong, there the people are carefree and happy.

Though G. K. C. deserves to be read were it only for the high quality of his humour, the purpose of his books is not merely to amuse his readers. The rare combination in him of levity of manner with moral earnestness sets him above the fashionable set of mere humorists whose only aim is to provoke laughter. He says, "I never in my life said anything merely because I thought it funny." Which does not mean that if he had anything to say he did not prefer to say it in a funny way. Thus, while all his philosophical discussions sparkle with

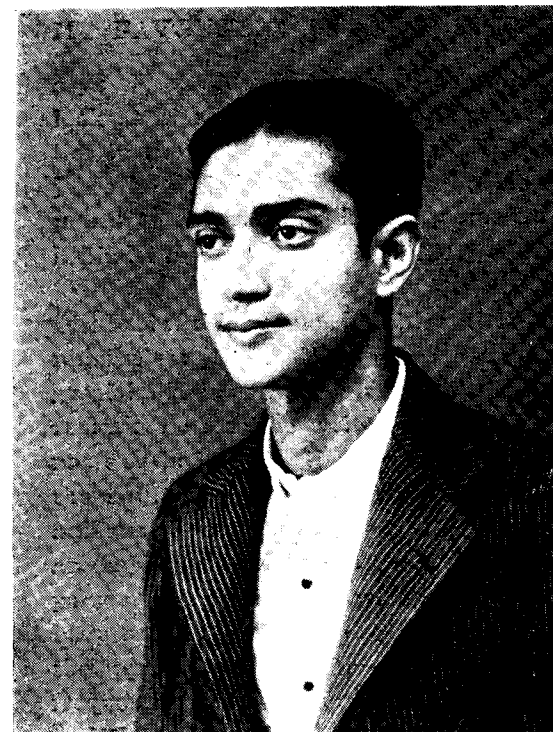
## MY FAVOURITE AUTHOR—G. K. C.

fun, all his jokes are enriched with a core of moral teaching. Whole-hearted devotion to a noble cause and a boyish zest for fun are in him not only not antagonistic to each other but actually complementary. Love and laughter, he tells us at the conclusion of his "Napoleon of Notting Hill", do not destroy each other, they are two lobes of one brain; they are not enemies but twin companions who have been kept apart too long a time. In the genius of G. K. C. they meet and go forth hand in hand to conquer the world.

No man, however high his merits is without shortcomings. But the faults of G. K. C., suprising as this may seem, make him still more lovable. For one thing, they make him appear more akin to ourselves and thus win him our sympathy and friendship.

One of the recurring complaints against Chesterton is that his style is often careless and diffuse, that his puns and paradoxes are so frequent as to be tiresome, and the brilliance of his imagery so dazzling as to almost blind the reader. However much he may admire Chesterton, a fair critic cannot but admit these faults in his hero.

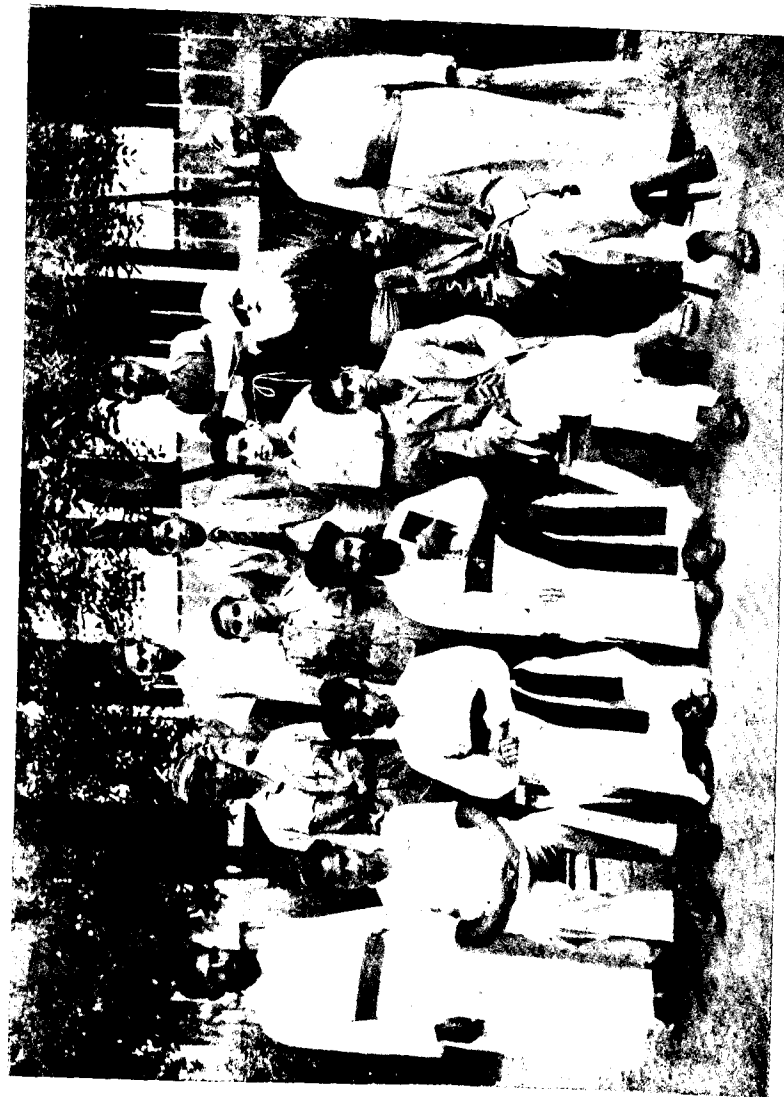
But the source of these faults have to be examined, if we are to form a just estimate of our author. The first point to be noted in his defence is that he never sets himself up as a 'literary' man. His purpose in writing is not to gather around him an applauding crowd; his aim is to win adherents to the noble ideals he sets forth in his books. With his admirable sense of proportion he holds the view that the first thing that matters in an author is what he has to say and that the manner in which he says it is only secondary. "If a man comes into Hyde Park to preach, it is permissible to hoot him; but it is discourteous to applaud him as a performing bear. And an artist is only a performing bear compared with the meanest man who has something to say." Chesterton considers the message he has to proclaim to the world so urgent and valuable that he is inclined, at times, to neglect perfection of style. As regards his lavish use of flamboyant imagery and his perhaps too obtrusive playfulness, they come naturally to him, they are a part of his mental make-up. He gives full play to them because he realizes that what people seek from books is not so much instruction as pleasure and that they cannot be induced to listen to any serious discussion unless some amusement is offered at the same time. In this 'Age of Humour', he says, the "hullo" of a buffoon is about the only call that can bring an



M. I. JOSEPH, I U.C.  
Best Actor, Boarders' Day.



P. TETTIRAVUSWAMI, I U.C.  
Winner of Second Prize for Acting,  
Boarders' Day.



JEBAMALAI JEYAMALAI  
 Acted on "The World Sodality Day" and C. T. A. Anniversary  
 30th January '44.

### MY FAVOURITE AUTHOR—G. K. C.

audience together. Thus the faults of G. K. C. arise from the very greatness of his genius, from his right sense of values, his eagerness to make others share his convictions and from his inimitably attractive personality.

You would make a woeful mistake, however, if you concluded from these petty extravagances that G. K. C. is a poor artist. He has such a keen sense of literary beauty that, with all his carelessness and whimsicalities, he takes rank as one of the foremost authors of the 20th century. He is a born artist. To his eyes common, everyday things yield up their beauty and put on a new glory. He sees symbolized in them the secrets of God and man and thoughts too deep for tears. Problems of truth and morals which to us appear stale for having been discussed a thousand times, live again and blossom at the breath of his genius and show themselves the vital questions they are. Whether he is jousting in controversy with a 'heretic,' or appraising an author, or narrating a story, his pages always breathe an atmosphere of freshness, kindness and irrepressible joy. The numerous novels he wrote almost as a pastime show his deep and accurate insight into human nature, the astonishing fertility and originality of his mind and his ability as a story-teller to interest, to surprise, to amuse and at the same time instruct his readers. His poems too, with their combination of power and buoyancy, combativeness and broad humour, their marked individuality, their enthusiasm for all things good and noble, are read by legions of grateful admirers all the world over.

Rarely have such great powers of thought and imagination been combined in the same man with such courage and humility, amiable geniality, and unerring common sense. More rarely still has the mind of so rich a personality been expressed with such effortless brilliance and unfailing inspiration. Chesterton deserves to be the favourite author of a growing circle of admirers, for to know him is to love him, and to read him is to rise up a wiser, better and happier man, with a heart filled with gratitude to God for giving to the world one of its finest spirits and to literature one of its wisest and best-beloved authors.

# Introduction to Wave Mechanics

by P. Prabhakaran and R. Srinivasan—V B.Sc.(Hons.)

## 1. General Introduction

**A** SUBTLE and almost indefinable fusion of the concepts of the continuous and the discontinuous, the former typified by the undulatory nature of wave motion and the latter by the corpuscular structure of mechanical particles, is the greatest achievement and triumph of contemporary Physics. The physicists of the nineteenth century had assumed that the universe was constituted of the two fundamental entities, matter and energy. Classical science was built on the two great conservation laws of matter and energy. With the dawn of the twentieth century, thanks to the brilliant theoretical researches of Max Planck, there emerged into the light of day a bold and startlingly new concept as regards the corpuscular structure of radiant energy. It stands to reason, therefore, that matter with which is associated a corpuscular structure shall have a wave aspect as well, partly because as the philosophical mind of the greeks argued, "Nature loves Symmetry." That it is not visionary philosophy but solid and undeniable reason that inspires this new theory of "Wave Mechanics" can be seen from the difficulties that confronted the scientific world in the twenties of the present century. For instance, in spite of the phenomenal success that attended the Bohr-Sommerfeld theory of atomic structure, it was at a loss to adduce any scientific reason for the supposition that magnitudes can assume only integral values of the universal constant 'h'. In the anomalous Zeeman Effect the quantum rule is subject to an exception and half integers like  $\frac{1}{2}$ ,  $\frac{3}{2}$ ,  $\frac{5}{2}$ , etc. had to be allowed in addition to integers. In the theory of the rotation-vibration spectra, the energy associated with quantum number  $m_v$  is not  $m_v h\nu_0$ , but  $(m_v + \frac{1}{2}) h\nu$ . These modifications which perforce had to be adopted for the successful explanation of experimental observations could not be justified by the older theories.

## 2. De Broglie's concept of Matter Waves

It was when the scientific world was faced with such crises that De Broglie in the year 1924 put forward in his doctorate thesis the

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new conception of matter waves. It is worthwhile to recall the line of reasoning that inspired the great scientist to formulate his new theory. In his own words: "On the one hand the Quantum Theory of Light cannot be considered satisfactory since it defines the energy of a light corpuscle by the equation  $W=h\nu$ , containing the frequency  $\nu$ . Now a purely corpuscular theory contains nothing that enable us to define a frequency; for this reason alone, therefore, we are compelled in the case of light to introduce the idea of a corpuscle and that of periodicity simultaneously. On the other hand determinations of the stable states of electrons in the atom introduces integers; and upto this point the only phenomena involving integers in Physics were those of interference and normal modes of vibration. This fact suggested to me the idea that electrons too could not be regarded simply as electrons, but that periodicity should be assigned to them also."

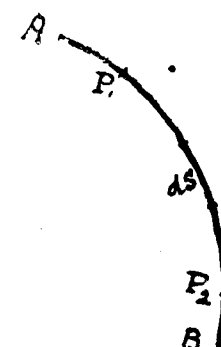
The close parallelism between mechanics and optics in their respective laws governing motion, momentum, mass and energy was a direct index to De Broglie in the evolution of his new concept. The Maupertuis principle of least action in mechanics and Fermat's principle in Optics were very suggestive in that they pointed out the similarity between the two branches.

### Law of Maupertuis

Let  $AB$  represent the path of a particle of mass  $m$ , all resistances being neglected. Over a small element  $\delta s$  of the path let the average velocity be  $u$ . If  $E$  is the total energy at any instant, of which  $T$  is of the kinetic form, potential energy being  $V$ ,  $T = E - V = \frac{1}{2}mu^2$ .

$\therefore u = \sqrt{2(E - V)/m}$ .  
The momentum  $p$  of the particle  $= mu = \sqrt{2m(E - V)}$ .  
The action  $A$  between two points  $P_1$  and  $P_2$  is defined as the line integral of the momentum over the path between the two points.

$\therefore [A]_{P_1}^{P_2} = \int_{P_1}^{P_2} mu \, ds$ . The principle of least action states that the particle, under any circumstances whatsoever, chooses only that path for which the action is a minimum. Expressing mathematically,  $\delta A = \delta \int_{P_1}^{P_2} mu \, ds = 0$ . Fermat's principle of least time says that in the passage



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of a ray of light from a point  $P_1$  to a point  $P_2$ , the path of a ray will be such as to make the time  $T$  required for the passage a minimum, i. e.  $\delta T = \delta \int_{P_1}^{P_2} \frac{ds}{v} = 0$ , where  $\delta s$  is the distance traversed in the medium with velocity  $v$ . If  $c$  is the velocity in free space,

$$\delta \int_{P_1}^{P_2} \frac{c}{v} \delta s = 0, \text{ i. e. } \delta \int_{P_1}^{P_2} \mu \delta s = 0,$$

where  $\mu$  is the refractive index of the medium in which the velocity of light is  $v$ . The above similarity easily suggests the probability of the behaviour of matter as a wave-like entity under suitable circumstances.

The actual experimental proof for the existence of the wave aspect of corpuscles can be had from the following: A beam of X-rays incident on a crystal surface will be reflected only for certain definite angles of incidence. These angles depend on the wavelength of X-rays used and the spacing of atoms within the crystal. The same is the case with a beam of electrons. They are reflected only for certain definite angles of incidence dependent on their velocity. The conclusion is therefore very forcible that a beam of electrons behaves in some ways like a beam of X-rays. The phenomena of electron diffraction, refraction, etc. further lent weight to this idea.

### Nature of De Broglie Waves

To coordinate the fore-going ideas the following assumptions are made. "Electrons are particles; that is to say, their charge and mass and energy are observable in particle form, not spread about continuously in space. But if we want to calculate the path of a beam of electrons, and whether and how it is reflected from a crystal we must treat the beam as though it were a beam of waves. These waves we call 'De Broglie' Waves." It is to be noted that De Broglie waves by themselves possess no energy and that energy is carried by the electrons. Whatever might vibrate in the wave, it is not a strain in a real medium possessing energy, but simply a mathematical function the physical significance of which will be discussed later. To study the path of a beam of monochromatic wave we use the Wave Theory, whereas to calculate the amount of energy transaction we have recourse to the energy quanta  $h\nu$ . It must be borne in mind that the contradiction between the two theories cannot be said to have been explained completely, because what has been achieved is to develop rules which tell us when light behaves

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as particles and when as waves. This should not be interpreted as a weak point of the theory, because, after all, the wave or corpuscular structures are merely assumptions introduced to explain experimental facts. To be sure, De Broglie Waves have as much reality as light waves and light quanta as electrons.

### Wavelength of De Broglie Waves

We conceive of the electron as possessing a 'pulsation' in space. Let the amplitude at any instant at a point  $x_0, y_0, z_0$ , in the immediate vicinity of the electron be  $\psi$ . Then  $\psi = \psi_0 \sin 2\pi\gamma_0 t_0$ ,  $\psi_0$  being the amplitude at the point, and  $\gamma_0$  the frequency, as seen by an observer at rest with respect to the electron. Suppose the electron is given a velocity  $u$  in the direction of the X-axis. In order to represent the variation of  $\psi$  under this new condition, we have to apply the Lorentz

transformation equation,  $t_0 = \frac{t - \frac{ux}{c^2}}{\sqrt{1 - u^2/c^2}}$ .

$$\therefore \psi = \psi_0 \sin \frac{2\pi\gamma_0 \left(t - \frac{ux}{c^2}\right)}{\sqrt{1 - u^2/c^2}}. \text{ The standard equation of wave motion is}$$

$$y = a \sin \frac{2\pi}{T} \left(t - \frac{x}{v}\right) \text{ where } a \text{ is amplitude and } T \text{ is periodic time.}$$

$$\therefore \text{ Velocity } v = \frac{c^2}{u} \text{ and } \gamma \text{ the frequency} = \frac{1}{T} = \frac{\gamma_0}{\sqrt{1 - u^2/c^2}}.$$

From Einstein's mass-energy relation,  $h\gamma_0 = mc^2$ .

$$\therefore \gamma_0 = m_0 c^2/h.$$

$$\therefore \gamma = \frac{m_0 c^2}{h\sqrt{1 - u^2/c^2}}. \text{ Applying relativistic correction}$$

$$m = \frac{m_0}{(1 - u^2/c^2)^{1/2}} \therefore \gamma = \frac{mc^2}{h}.$$

$$\lambda = \text{Wavelength} = \frac{\text{Velocity}}{\text{Frequency}} = \frac{c^2}{u} \cdot \frac{h}{mc^2} = \frac{h}{mu} = \frac{h}{p}.$$

Thus "a stream of electrons, each of which has mass  $m$  and velocity  $u$ , should, under suitable circumstances, exhibit wave-like characteristics of

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such a kind that the wavelength associated with the moving stream may be obtained by dividing the Planck's constant  $h$  by the momentum  $mu$  or  $p$  of the electron."

From the relations developed above, we find that with an electron in motion there are two velocities associated, one with regard to the mechanical motion of electron, viz.  $u$  and the other with regard to the propagation of the wave pulse, viz.  $v$ . The two are connected by the relation  $v=c^2/u$ .  $v$  is the wave velocity and  $u$  can be shown to be the group velocity i.e.  $u$  is the velocity of a group of waves. Thus we have the significant conclusion that an electron is equivalent to a "wave packet" of matter waves.  $v$  has no physical significance because if  $u < c$ ,  $v > c$ . The wave packet, formed by the superposition of a number of waves, travelling with the velocity of electron, behaves very much like a corpuscle, with the exception that "the packet has a finite and rather indefinite extent in space—that is, it is similar to a particle with fuzzy edges."

*Wave velocity and Group Velocity.* The group velocity  $w$  is given by,

$$\begin{aligned} w &= v - \lambda \frac{dv}{d\lambda} = \lambda^2 \left( \frac{v}{\lambda^2} - \frac{1}{\lambda} \frac{dv}{d\lambda} \right) \\ \therefore w &= -\lambda^2 \frac{d}{d\lambda} \left( \frac{v}{\lambda} \right) = -\lambda^2 \frac{d\gamma}{d\lambda} \\ \therefore \frac{1}{w} &= -\frac{1}{\lambda^2} \frac{d\lambda}{d\gamma} = \frac{d}{d\gamma} \left( \frac{1}{\lambda} \right) \\ \lambda &= \frac{h}{p}; \frac{1}{\lambda} = \frac{p}{h} = \frac{mu}{h} = \frac{1}{h} \sqrt{2m(E-V)} \\ \therefore \frac{1}{w} &= \frac{d}{d\gamma} \frac{[2m(E-V)]^{1/2}}{h} \\ &= \frac{1}{h} \frac{d}{d\gamma} [2m(h\gamma - V)]^{1/2} \\ &= \frac{mh}{h[2m(E-V)]^{1/2}} = \frac{m}{mu} = \frac{1}{u} \end{aligned}$$

**Thus the group velocity  $w$  = Particle Velocity  $u$ .**

## INTRODUCTION TO WAVE MECHANICS

### 3. Schrodinger's fundamental equations

(a) **With respect to Space:—**

The equation of motion of a simple harmonically moving particle is given by  $y = a \sin \omega t$ , where  $\frac{\omega}{2\pi} = \gamma$  = frequency.

$$\therefore y = a \sin 2\pi\gamma t. \text{ Evidently } \frac{d^2y}{dt^2} = -4\pi^2 \gamma^2 y.$$

The differential equation of motion is therefore given by

$$\frac{d^2y}{dt^2} + 4\pi^2 \gamma^2 y = 0.$$

The general equation of motion of a plane polarised wave is

$$\begin{aligned} \frac{d^2y}{dt^2} &= v^2 \frac{d^2y}{dx^2}; \therefore v^2 \frac{d^2y}{dx^2} + 4\pi^2 \gamma^2 y = 0. \\ \therefore \frac{d^2y}{dx^2} + 4\pi^2 \frac{\gamma^2}{v^2} y &= 0; \therefore \frac{d^2y}{dx^2} + 4\pi^2 \bar{\gamma}^2 y = 0. \end{aligned}$$

To evaluate  $\bar{\gamma}$ :—

When an electron enters a field it experiences a change in its velocity. In free space let the total energy of electron be  $E$ . It will be entirely of the kinetic form. Suppose at some point in field, the potential energy is  $V$ .  $\therefore \frac{1}{2} mv^2 = E - V$ .

$$\begin{aligned} \therefore v &= \left\{ \frac{2(E-V)}{m} \right\}^{1/2} \therefore \lambda = \frac{h}{mv} = \frac{h}{\{2m(E-V)\}^{1/2}} = \frac{1}{\bar{\gamma}} \\ \therefore \frac{d^2y}{dx^2} + \frac{8\pi^2 m}{h^2} (E-V) y &= 0. \end{aligned} \quad \dots (1)$$

In the most general form of wave equations the energy density at any point is found to be proportional to the sum of the squares of two quantities. For instance in the electromagnetic wave, energy density is found to be proportional to  $[E^2 + H^2]$  Where  $E$  is the electric vector and  $H$  is the magnetic vector. To describe the state of the De Broglie wave, let us take two scalar functions  $f(x, y, z)$  and  $g(x, y, z)$ . The functions  $f$  and  $g$  must be assumed to be scalar because in a stream of electrons there is no property similar to polarisation of light waves. Hence as long as the spin of the electron is not considered, we shall treat De Broglie waves as scalar waves, with properties analogous to sound

## INTRODUCTION TO WAVE MECHANICS

waves which consist of the periodic variation of the scalar quantity, pressure. Confining ourselves to monochromatic vibrations, the functions  $f$  and  $g$  should satisfy eqn. (1).

$$\therefore \frac{d^2 f}{dx^2} + \frac{8\pi^2 m}{h^2} (E - V) f = 0; \text{ and}$$

$$\frac{d^2 g}{dx^2} + \frac{8\pi^2 m}{h^2} (E - V) g = 0$$

As regards the electromagnetic wave we know that energy density is proportional to  $(E^2 + H^2)$ . In the case of the De Broglie wave we assume that the energy density is equal to  $(f^2 + g^2)$ . If  $(f^2 + g^2)$  is to be a constant,  $f$  and  $g$  should have a phase difference of  $\pi/2$  so that  $f = a \cos 2\pi (\gamma t - z/\lambda)$  and  $g = a \sin 2\pi (\gamma t - z/\lambda)$ . Instead of using two real functions, simplicity argues that a single function, though complex should be used. Let us put  $\psi = f + ig$ , which is the only way of combining  $f$  and  $g$  into a single function.

$$\therefore \frac{d^2 \psi}{dx^2} + \frac{8\pi^2 m}{h^2} (E - V) \psi = 0.$$

Extending to three co-ordinate system,

$$\nabla^2 \psi + \frac{8\pi^2 m}{h^2} (E - V) \psi = 0 \dots \dots \dots (\alpha)$$

The solution to the above equation is evidently  $\psi = f + ig$ .

$$\begin{aligned} \text{i.e. } \psi &= \psi_0 \cos 2\pi (\gamma t - z/\lambda) + i\psi_0 \sin 2\pi (\gamma t - z/\lambda) \\ &= \psi_0 e^{i2\pi \gamma t} \cdot e^{-i2\pi z/\lambda} \\ &= \psi_0 e^{2\pi i \gamma t} \cdot e^{-2\pi i \gamma z} \end{aligned}$$

(b) With respect to time:—

$$\nabla^2 \psi + \frac{8\pi^2 m}{h^2} (E - V) \psi = 0.$$

$$E = h\gamma; \therefore \nabla^2 \psi + \frac{8\pi^2 m}{h^2} (h\gamma - V) \psi = 0.$$

Multiplying throughout by  $\frac{h^2}{8\pi^2 m}$ ,

$$\nabla^2 \psi \frac{h^2}{8\pi^2 m} + h\gamma \psi - V \psi = 0.$$

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$$\therefore -h\gamma \psi = \frac{h^2}{8\pi^2 m} \nabla^2 \psi - V\psi.$$

$$\frac{d\psi}{dt} = 2\pi i \gamma \psi_0 e^{2\pi i \gamma t} e^{-2\pi i \gamma z}.$$

$$= \psi 2\pi i \gamma \therefore \gamma = \frac{d\psi}{dt} \cdot \frac{1}{2\pi i \psi} = -\frac{i}{2\pi \psi} \frac{d\psi}{dt}.$$

$$\therefore \frac{ih}{2\pi} \frac{d\psi}{dt} = \frac{h^2}{8\pi^2 m} \nabla^2 \psi - V\psi \dots \dots \dots (\beta).$$

Among the differential equations of mathematical physics the famous Schrödinger's wave equation containing the time is unique in that it contains the imaginary quantity  $i = \sqrt{-1}$ . But for this  $i$  the equation would resemble the equation for heat flow in a conducting solid body. "The motion of matter waves combines, in fact some of the features of heat flow in a solid with other features resembling the propagation of mechanical disturbance, such as sound waves."

### 4. Physical significance of ' $\psi$ '.

A possible answer to the query what the physical significance of ' $\psi$ ' introduced in the fundamental equations is, has been that it is an auxiliary mathematical quantity employed to facilitate computations relative to experimental results. It has been argued that "observational results are the primary material of physics" and that "the purpose of theories is to correlate these results." True, but it is not in the spirit of mathematical physics to introduce an isolated mathematical function in a differential equation and rest content without enquiring into its physical significance because physics is concerned more with physical realities than with visionary mathematics.

The density interpretation of  $\psi$  based on the optical analogy is due to Schrödinger. In any wave system of amplitude  $A$  the energy per unit volume is  $A^2$ . The number of photons per unit volume is therefore equal to  $\frac{A^2}{h\gamma}$ . So the number of photons per unit volume is proportional to  $A^2$ . If  $\psi$  is the amplitude of the De Broglie wave at any point in space, the electron density at that point should be proportional to  $\psi^2$ . The De Broglie waves are observable only through the property of electron density. For convenience and simplicity it is assumed that electron density is equal to  $\psi^2$ . When  $n_0$  electrons cross unit area let

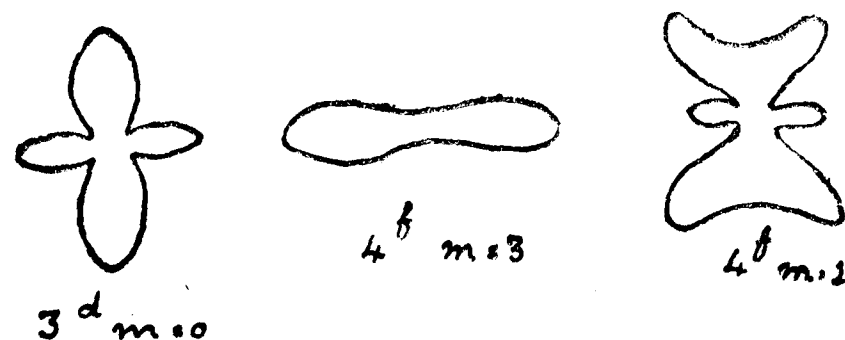
## INTRODUCTION TO WAVE MECHANICS

$\psi_0$  be the value of  $\psi$ . If  $\psi_x$  is the value of  $\psi$  in a certain direction of diffraction, no. of electrons in the diffracted beam crossing unit area is given by

$$n_x = n_0 \frac{|\psi_x|^2}{|\psi_0|^2}.$$

There is another interpretation of  $\psi$  in terms of probability given by Heisenberg. Suppose we consider a single electron instead of a beam of electrons. We have seen that with each electron is associated a wave packet. It is of especial importance to ascertain the position of the electron in the wave packet. This position can be defined in the language of probabilities as follows: "The position of the particle is believed not to be defined any more closely than is indicated by the value of  $\psi$ ," i.e., the probability of a particle being observed at a particular point will be proportional to  $|\psi|^2$  at that point. The probability of the particle being present in a volume  $(dx \cdot dy \cdot dz)$  is  $|\psi|^2 dx \cdot dy \cdot dz$ .  $\psi$  is then called the probability amplitude for position of particle. The probability of finding the particle somewhere in space is a certainty, i.e.  $\iiint |\psi|^2 dx \cdot dy \cdot dz = 1$ , because the particle is sure to be found somewhere in space. The value of  $\psi$  satisfying the above condition is called the normalised wave function.

Thus the electron density at a point is found to be defined by  $|\psi|^2$ . When we multiply this quantity by the charge  $e$  of the electron we get the distribution of charge or the 'density distribution' of the electrons in the atom, usually referred to as the 'electronic cloud' round the nucleus. The diagrams below indicate the projections of the electronic clouds in the various states.



The probability of finding the electrons outside the atom being nil, the probability amplitude outside is zero and hence the electronic cloud

## INTRODUCTION TO WAVE MECHANICS

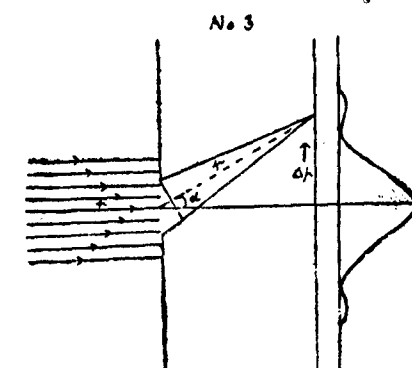
disappears outside the atom. This explains the fuzzy nature of the silhouettes represented diagrammatically.

*The principle of Indeterminacy.* From the probability interpretation of  $\psi$  as given by Heisenberg to his principle of uncertainty is neither a long way nor an abrupt transition. Bohr and Heisenberg remark that with all quantities we measure in experimental physics is associated a fundamental indefiniteness and a fundamental discontinuity. Suppose an experiment is imagined for the determination of the position of the electron. It is shown that the more accurately we locate the position of the electron the less accurately do we determine its momentum. If  $\Delta x$  and  $\Delta p$  denote the respective errors in determining the position and momentum of the electron,  $(\Delta x \cdot \Delta p)$  is of the order of Planck's constant  $h$ . This indefiniteness, first postulated in 1927 by Heisenberg is known as the "principle of indeterminacy" or the "uncertainty principle." The product of the two errors being of the order of  $h$ , this indeterminacy is so minute as to be lost in experimental errors in the macroscopic state. This principle is implied in the probability interpretation of  $\psi$  that according to Wave Mechanics it can only be said that a corpuscle should necessarily lie in a region occupied by the wave associated with it and the chance of its being at a point within this region is proportional to the wave amplitude at that point.

Proof of the assertion that both position and momentum cannot be determined simultaneously with perfect accuracy.

Let us consider the diffraction of electrons through a slit of breadth  $\Delta x$ . Let  $p$  be the momentum associated with one electron and  $\alpha$  the mean angle of diffraction.

The fact that a diffraction pattern appears merely allows us to assert that the electron has passed through the slit; at what place in the slit the passage actually took place is indefinite. The uncertainty in the specification of position perpendicular to the direction of flight is given by the breadth  $\Delta x$  of slit. From the corpuscular standpoint we have to regard the phenomenon of diffraction as occurring due to the deflection of



## INTRODUCTION TO WAVE MECHANICS

the individual electron at the slit, either upwards or downwards, and the diffraction pattern as arising from the statistical superposition of electrons in the beam. The individual electron deflected at the slit acquires component momentum perpendicular to its original direction of flight, of amount  $\Delta p$ , the resultant momentum  $p$  remaining constant. The value (mean) of  $\Delta p$  as seen from the figure is given by  $\Delta p = p \sin \theta$ , where  $\theta$  is the mean angle of deflection.

$$\text{But } \sin \theta = N \lambda = \frac{\lambda}{\Delta x}; \therefore \Delta x \cdot \sin \theta = \lambda = \frac{h}{p}$$

$$\therefore \Delta p = \frac{p \lambda}{\Delta x} \therefore \Delta p \cdot \Delta x = p \lambda.$$

$$\text{i.e., } \Delta x \cdot \Delta p = h.$$

## 5. Applications to some important cases:—

### (a) Linear Harmonic Oscillator

A harmonic oscillator is a particle vibrating under the action of a restoring force proportional to the displacement. Suppose that the particle oscillates along the  $X$ -axis and that at any instant  $t$  it is displaced to a point distant  $x$  from the mean equilibrium position. The equation of motion of such a simple harmonically moving particle is  $x = A \sin 2\pi \gamma t$ .  $\therefore \frac{d^2 x}{dt^2} = -4\pi^2 \gamma^2 x$ . The potential energy  $V = \int_0^x 4\pi^2 \gamma^2 m x \delta x = 2\pi^2 \gamma^2 m x^2$ , where  $m$  is the mass of the particle. Substituting this value of  $V$  in Schrödinger's space equation,

$$\frac{d^2 \psi}{dx^2} + \frac{8\pi^2 m}{h^2} (E - 2\pi^2 \gamma^2 m x^2) \psi = 0.$$

Using a new variable  $v = 2\pi \left( \sqrt{\frac{m\gamma}{h}} \right) x$ , the above equation reduces to  $\frac{d^2 \psi}{dv^2} + \left( \frac{2E}{h\gamma} - v^2 \right) \psi = 0 \dots (1)$ . The solutions to the above equation should be of the general form  $\psi = H(v) \cdot e^{-v^2/2}$ , where  $H(v) = \sum_0^\infty A_n v^n$ , negative powers of  $v$  being excluded because  $\psi$  should be finite, continuous and single valued at  $v=0$ . Substituting the values of  $\psi$  and  $\frac{d^2 \psi}{dv^2}$  in equation (1) the values of  $\psi$  for different values of  $\left( \frac{2E}{h\gamma} \right)$  are found to be as follows:—

$$\psi = \frac{1}{2} e^{-\frac{1}{2} v^2} \text{ when } \frac{2E}{h\gamma} = 1; \quad \psi = 2v e^{-\frac{1}{2} v^2} \text{ when } \frac{2E}{h\gamma} = 3.$$

## INTRODUCTION TO WAVE MECHANICS

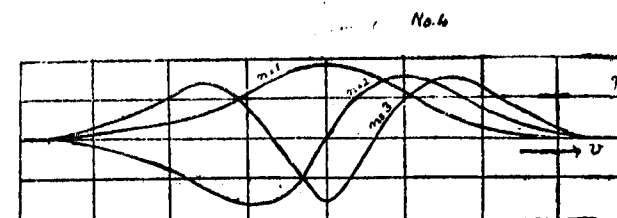
$$\psi = (4v^2 - 2) e^{-\frac{1}{2} v^2} \text{ when } \frac{2E}{h\gamma} = 5; \quad \psi = (8v^2 - 12v) e^{-\frac{1}{2} v^2} \text{ when } \frac{2E}{h\gamma} = 7,$$

and so on. Thus the proper values of  $\frac{2E}{h\gamma}$  are given by  $\frac{2E}{h\gamma} = (2n+1)$  where  $n$  is an integer and the values of  $\psi$  are the characteristic functions satisfying these values.

$$\therefore \frac{2E}{h\gamma} = (2n+1). \quad \therefore E = (n + \frac{1}{2}) h\gamma.$$

These values of the total energy represent the quantum states of the harmonic oscillator. Thus Wave Mechanics introduces further refinement that the zero point energy is  $\frac{h\gamma}{2}$  and not zero as predicted by quantum conditions. Physical theory attributes the heat energy of a body to oscillations of the atoms about their equilibrium positions. The various discrepancies between the original Quantum Theory and certain measurements of specific heats at low temperatures had led many physicists, Nernst in particular, to the conclusion that the energy of a body at absolute zero of temperature is not zero but has a finite value. We now see that this conclusion follows as a natural consequence of Schrödinger's Wave Mechanics.

The characteristic functions for which  $n=1, 2, 3$  etc., for a harmonic oscillator are indicated in the diagram below. The  $Y$ -axis represents the normalized wave functions and the  $X$ -axis represents the variable  $v$  which is a function of  $x$ .



It can be seen that the wave amplitude becomes zero even for small values of  $x$ . This is natural because the wave can be found only in the immediate neighbourhood of the particle as wave amplitude indicates the probability of presence of particle. The wave packet associated with the particle behaves very much like a particle with fuzzy edges. This has been actually proved in the "electronic cloud" demonstration.

### (b) Simple Rotator

By a rotator is understood a dumb-bell shaped body consisting of two spheres connected together with a slender rod. The system is

## INTRODUCTION TO WAVE MECHANICS

supposed to be incapable of rotation about the axial line but it can assume any orientation in space, the latter being specified by two angles, say  $\theta$  and  $\phi$ . The motion is similar to that of a particle moving about a fixed centre and at a constant distance from it, as for example a particle rotating over the surface of a sphere whose centre is fixed. Evidently since the centre is fixed no wave has to be ascribed to it. Further since the potential and kinetic energies are equal, we can write.

$$\frac{\nabla^2 \psi}{r^2} + \frac{8\pi^2 m}{h^2} E_{kin} \psi = 0, \text{ where } r^2 \text{ is a function of coordinates alone.}$$

Assuming that  $\nabla^2 \psi$  is independent of  $r^2$ , the solution to the above equation by the method of "Spherical Harmonics" indicates that the values of  $E_{kin}$  satisfying the above equation is given by

$$r^2 \frac{8\pi^2 m}{h^2} E_{kin} = n(n+1) \text{ where } n \text{ is an integer}$$

$$E_{kin} = \frac{1}{2} mv^2. \therefore n(n+1) = r^2 \frac{8\pi^2 m}{h^2} \times \frac{1}{2} mv^2 = \frac{4\pi^2 m^2 v^2 r^2}{h^2}.$$

$$= \frac{4\pi^2 p_\phi^2}{h^2}, \text{ where } p_\phi = \text{angular momentum} = mvr.$$

$$\therefore p_\phi = \frac{h}{2\pi} \sqrt{n(n+1)}.$$

According to Quantum Theory  $p_\phi = n \frac{h}{2\pi}$ . The application of Wave Mechanics shows that  $n$  should be replaced by  $\sqrt{n(n+1)}$ . This explains why Lande's splitting factor  $g \left( = 1 + \frac{J^2 + S^2 - L^2}{2J^2} \right)$  becomes on applying Wave Mechanics equal to  $\left\{ 1 + \frac{J(J+1) + S(S+1) - L(L+1)}{2J(J+1)} \right\}$ .

### (c) Hydrogen Atom and Spectral Lines

The hydrogen atom can be compared to a spherical box containing an electron and furnished with walls which reflect the electron without loss of energy. Since the electron is always associated with the atom it is evident that  $\psi$  must vanish outside the box. But according to our assumption  $\psi$  must be continuous. These two ideas can be correlated only by the statement that  $\psi$  must vanish on the side of the box. This correlated condition must be satisfied by any solution to the differential equation of wave motion for the hydrogen atom. The potential energy  $V$  at a point distant  $r$  in the electrostatic field due to

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a single proton and single electron of the hydrogen atom is  $(-\epsilon^2/r)$  where  $\epsilon$  is the charge of an electron. So the differential equation to be solved is

$$\nabla^2 \psi + \frac{8\pi^2 m}{h^2} \left( E + \epsilon^2/r \right) \psi = 0.$$

Making use of polar coordinates and considering the boundary condition specified above, the solution to the above equation, as obtained by the application of spherical harmonics, leads to permissible values of  $E$ , i.e. permissible values of  $E_n$ , the energy states of the hydrogen atom, given by

$$E_n = -\frac{2\pi^2 \epsilon^4 m}{n^2 h^2}, \text{ where } n = 1, 2, 3, \dots \text{etc., all integers.}$$

The above result which is in perfect accordance with that arrived at by Bohr's Theory clearly proves that the fundamental postulates of Wave Mechanics are essentially correct.

### (d) Absorption of Radiation.

The equation of motion of a simple harmonic oscillator subject to a periodic force  $a \sin 2\pi\gamma t$  applied to it is  $\frac{d^2 y}{dt^2} + 4\pi^2 \gamma_0^2 y = a \sin 2\pi\gamma t$ ,  $\gamma_0$  being the frequency of oscillator. The solution is given by  $y = A \cos 2\pi\gamma_0 t + B \sin 2\pi\gamma_0 t + C \sin 2\pi\gamma t$ , where  $A$  and  $B$  are arbitrary constants and  $C = \frac{a}{4\pi^2 (\gamma_0^2 - \gamma^2)}$ . If  $\gamma = \gamma_0$  the solution fails, and the two frequencies are then said to be in resonance. In such a case the solution can be shown to be

$y = A \cos 2\pi\gamma_0 t + B \sin 2\pi\gamma_0 t + Dt \cos 2\pi\gamma t$ , where  $D = \frac{a}{4\pi\gamma}$ . This means that the oscillator will vibrate with ever increasing amplitude.

Let us consider the hydrogen atom upon which light is incident. The behaviour of the electron inside the atom is analagous to the behaviour of a wave that can vibrate with one of a series of characteristic frequencies  $\gamma_0, \gamma_1, \gamma_2$ , etc. Taking a plane polarised light wave and neglecting the magnetic influence of the wave, the following conclusions are mathematically arrived at. If the frequency of the light wave coincides with the frequency characteristic of the atom, nothing in particular happens. Only very feeble forced oscillations will be set up. Unlike as in the case of the harmonic oscillator, the amplitude does not change. According to Wave Mechanics this is only natural because if

## INTRODUCTION TO WAVE MECHANICS

the amplitude increases the electron density increases which is not true to facts. If the wave function  $\psi$  of the atom is vibrating in one of its normal modes of vibration with frequency say  $\gamma_n$ , and if the frequency of the incident light is such that  $\gamma$  is equal to the difference between  $\gamma_n$  and any other characteristic frequency  $\gamma_l$  of the atom, then the amplitude of the  $n^{\text{th}}$  normal mode will die down and that of the  $l^{\text{th}}$  be excited in its stead. This means that there is a probability that the atom has jumped from the  $n^{\text{th}}$  to the  $l^{\text{th}}$  excited state. Thus considering light as an oscillating electric force the jumping of the electron from one excited state to another can be explained on the basis of Wave Mechanics. A more satisfying theory in which light is considered as a stream of quanta has been given by Dirac.

### (e) Emission of Radiation

*Bohr's stationary orbits.* In the classical theory the radiation emitted by the atom may be calculated by the time-rate of variation of the electric dipole moment  $p$  of the atom. By the correspondence principle this connection should be true in Wave Mechanics also. The dipole moment  $p$  is given by  $p = e \int r |\psi_n|^2 dv$ , where  $r$  stands for the radius vector from the nucleus to the point of integration. It can be shown that the integral vanishes for all states of an atom so that the derivative of the dipole moment also vanishes and so the radiation emitted is equal to zero. This gives an explanation of the fact that the stationary orbits are non-radiating orbits, a fact that had not been logically deduced by Bohr, but assumed for the purpose of correlating experimental observations with theoretical deductions.

#### Emission.

In analogy with the density function  $|\psi_n|^2$  of a definite state we can find the "transition density"  $|\psi_{mn}|^2$  corresponding to the transition of the electron from a state  $n$  to another state  $m$ . The dipole moment corresponding to the transition from  $n$  to  $m$  is given by

$$p_{nm} = e \int r |\psi_{nm}|^2 dv.$$

It has been calculated that during the transition the energy radiated in unit time is given by

$$J = \frac{2}{3c^3} |p_{nm}|^2 = \frac{2e^2}{3c^3} (2\pi\gamma_{nm})^4 |r_{nm}|^2,$$

where  $e$  is the electronic charge,  $c$  the velocity of light,  $\gamma_{nm}$  is equal to

## INTRODUCTION TO WAVE MECHANICS

the beat frequency which occurs when the two vibrations of frequency corresponding to the  $n^{\text{th}}$  and the  $m^{\text{th}}$  state are superimposed on each other, such that 
$$\gamma_{nm} = \frac{E_n - E_m}{h},$$

and  $r_{nm}$  is called the "matrix element of the vector coordinate  $r$ ". It has been shown by Schrödinger that it is identical with the matrix element which, in Heisenberg's coordinate matrix, occupies the  $n^{\text{th}}$  row and the  $m^{\text{th}}$  column.

It follows automatically that in the spectrum only those lines can occur whose frequency agrees with a beat frequency between two states of the atom. These are the same lines for the explanation of which Bohr had to make the fundamental assumption

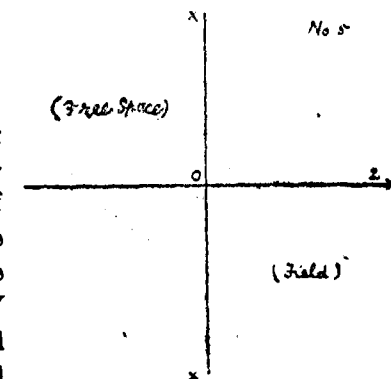
$$\gamma_{nm} = \frac{1}{h} (E_n - E_m),$$

which was not quite intelligible from the classical point of view but logically follows from Wave Mechanics.

### (f) Radio-activity.

#### Reflection of De Broglie Waves.

Let a beam of electrons infinite along the  $X - Y$  plane and of uniform density along this plane enter a field of force to the right of  $XOX'$ . Let us assume that  $XOX'$  is the boundary so that to the left of it there is free space. If  $z < 0$ ,  $V$  the potential energy is equal to zero and if  $z > 0$ ,  $V$  has a finite value, proportional to the distance of the point from the boundary line, equal to  $az$ , where  $a$  is the constant of proportionality.

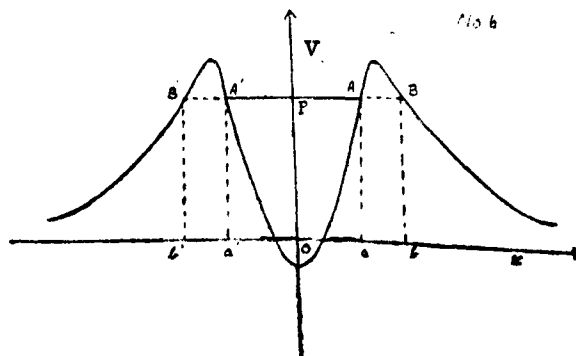


We have shown that  $\bar{\gamma} = \sqrt{2m(E - V)/h}$ . If  $z > 0$ ,  $\bar{\gamma} = \sqrt{2mE/h}$ . If  $z > 0$ ,  $\bar{\gamma}$  continually diminishes and when  $E = V = az$  or  $z = \frac{E}{a}$ ,  $\bar{\gamma} = 0$ . At this point the electron is said to be reflected according to classical Theory. If  $V > E$ ,  $\bar{\gamma} = i\sqrt{2m(V - E)/h}$ . This imaginary value of  $\bar{\gamma}$  is interpreted on the basis of Classical Theory as indicating the imaginary existence of electron i.e. its absence. This can be viewed in another way. The velocity of the electron in a field has been shown to be  $\sqrt{2(E - V)/m}$  and that in free

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space is equal to  $\sqrt{2E/m}$ . The refractive index  $n$  of the medium is equal to  $\sqrt{E/(E-V)}$ . If  $V > E$ ,  $n$  becomes imaginary. In a region of imaginary refractive index no electron can enter.

Now let us see the conclusion arrived at by Wave mechanics. We know that  $\psi = e^{2\pi i \gamma t}$ ,  $e^{-2\pi i \bar{\gamma} z}$ , where  $\gamma$  has two values, viz.  $\pm i\sqrt{2m(az - E)/h}$ . If the positive value is taken  $\psi$  goes on continuously increasing which can never be the case because at  $z = E/a$  the wave is reflected. If the negative value is taken  $\psi$  goes on decreasing which can only be the case which is in agreement with reality. Though  $\bar{\gamma}$  is imaginary,  $\psi$  is real with the important distinction that the wave function falls off exponentially after reaching the point of reflection. Thus the point of reflection in Wave Mechanics is represented by the beginning of an exponential decrease of the wave function  $\psi$ . Thus Wave mechanics predicts that at  $z = E/a$ , the electrons are reflected but the most significant additional refinement is that not all are turned back at  $z = E/a$  but a few can get beyond  $z = E/a$ .



Let  $E$  be the energy of an  $\alpha$ -particle inside the nucleus. Let  $E$  be represented by  $OP$  on the  $V$ -axis. According to classical theory between distances  $PA$  and  $PB$  or between  $PA'$  and  $PB'$  the particle must have negative kinetic energy as  $V < E$ . Therefore it is impossible for an  $\alpha$ -particle of energy less than the height of potential barrier to get out of the nucleus if it is initially inside the nucleus or get into it if it is initially outside the nucleus. According to Wave Mechanics, however, the amplitude of a wave reflected at  $A$  does not become zero at  $A$  but begins to fall off exponentially along  $AB$ . In the region  $AB$  though the wavelength becomes imaginary the wavefunction  $\psi$  is real, though small and gradually diminishing. Evidently there is a

# INTRODUCTION TO WAVE MECHANICS

probability, though minute, for the existence of the particle inside the region specified by  $AB$ . At  $B$  the wavelength becomes real again and so a wave of small amplitude leaks away from the nucleus. A wave leaking away from nucleus indicates that the wave amplitude inside the nucleus diminishes which means that the probability of escape of the particle increases. If a beam of  $\alpha$ -particles is fired at a nucleus we know that there is a small amplitude inside the nucleus which shows that there is a finite probability for the  $\alpha$ -particle being inside the nucleus. Thus we have the wave mechanical explanation of the fundamental principles of natural and artificial disintegration of radio-active substances.

*The Decay Constant  $\lambda$ .* The decay constant is defined as the probability of disintegration of the element in unit time. At time  $t=0$ , when the  $\alpha$  particle is well within the nucleus, the wave function outside the nucleus, vanishes where as inside it represents a vibration of frequency  $E/h$  and amplitude unity i.e., given by  $\int |\psi|^2 dx \cdot dy \cdot dz = 1$ . But as pointed out above a small wave begins to leak away from the nucleus. The probability of an  $\alpha$ -particle of amplitude  $a$  crossing an element of area  $ds$  at a distance  $r$  from nucleus in time  $dt$  is given by  $\left(\frac{a}{r}\right)^2 ds \cdot dt \cdot v$ , where  $v$  velocity of  $\alpha$ -particle. The probability that it passes a sphere of radius  $r$  in unit time is equal to  $\lambda = 4\pi a^2 v$ .

## 6. Conclusion

The advent of Wave Mechanics into Atomic Physics has explained to a great degree of satisfaction the Dr.-Jekyll-and-Mr.-Hyde behaviour of matter. It has shown that not only light but also matter behaves in some cases like a wave and in other cases like a corpuscle. The undulatory and corpuscular concepts are only complementary ways of viewing one and the same objective process the complete pictorial representation of which is possible only in a limiting case. "It is just the limited feasibility of measurements that defines the boundaries between our concepts of a particle and a wave." The 'thing' under consideration cannot be determined actually as a particle because the distinctive characteristics of a particle, viz., position and momentum cannot be determined accurately and simultaneously. Thus the philosophical message of Wave Mechanics consists in realising that "the wave picture and the corpuscle picture are not mutually exclusive, but are two complementary

## INTRODUCTION TO WAVE MECHANICS

ways of considering the same process—a process whose accessibility to intuitive apprehension is never complete, but always subject to certain limitations given by the principle of uncertainty."

The study of the physical universe had implanted in the minds of physicists the existence of immutable physical laws which determine the state of the universe at any time. In the words of the great geometrician Laplace, "An intelligence, knowing at a given instant all the forces operating within nature, and the respective positions of all the entities of which it is composed, and further possessing the scope to analyse these data, could comprehend in one formula the motion of the great bodies within the universe and the least atom; nothing would be indeterminate for it, the present and future alike would be present before its eyes. The corpuscular i.e., the atomic theory reduced the whole universe into 92 elements and according to Newton's laws of classical mechanics the position and motion of a corpuscle are completely well determined. If classical mechanics were to be applied to corpuscles of matter then the position and velocity of the ultimate particles that constitute the universe are rigorously defined. But as we have seen, the verdict of Wave Mechanics is otherwise. In the words of De Broglie, thanks to the mathematical and intuitive genius of whom the concept of matter waves saw the light of day, "It has been said that there was a crack in the wall of Physical Determinism, whose size was measured by the Planck's constant  $h$ ; and thus the latter receives a somewhat unexpected interpretation; it is supposed to be the limiting barrier of Determinism."

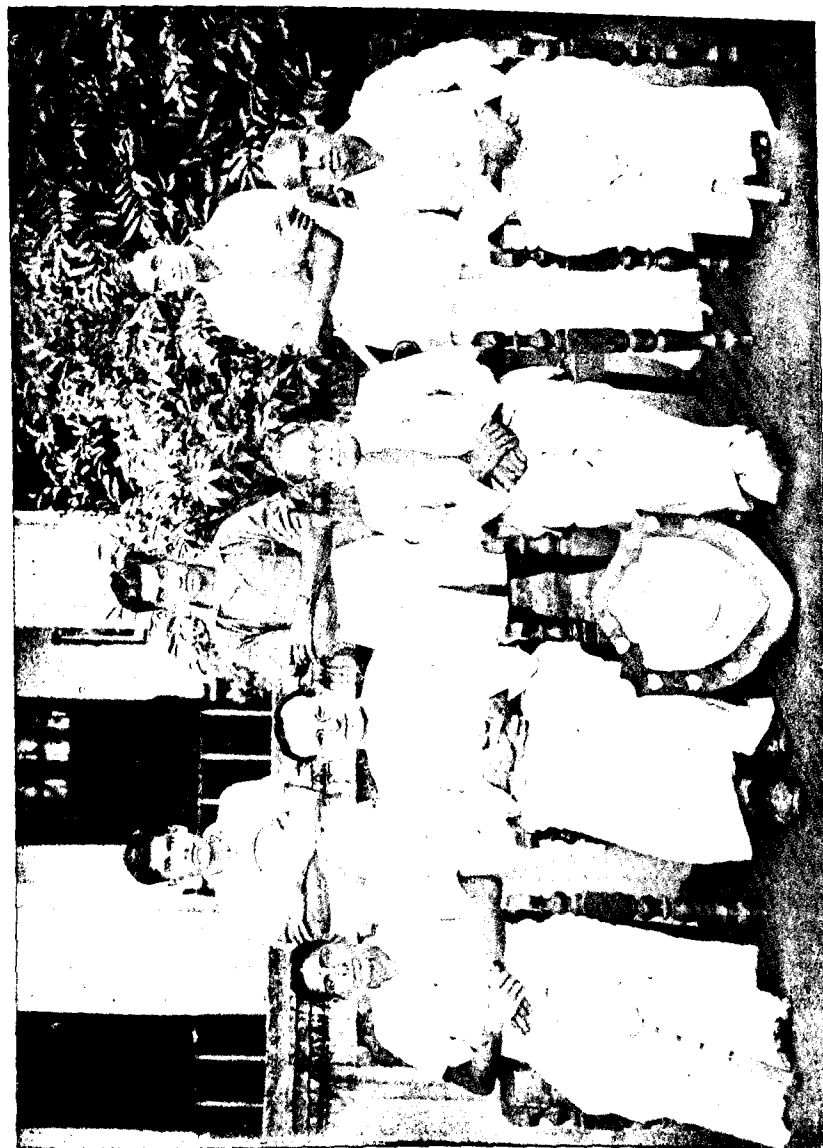
There has been, however, a tendency of late to swing the pendulum too far and extend this new principle of uncertainty even beyond the frontiers of this material universe into our concepts of Almighty creator. But such a view can be in the true spirit of neither Science that believes in experimental reality nor of Religion that is guided by faith. To dogmatize on the basis of a few observations, especially in face of the vast regions of truth that lie undiscovered before us, is not permitted even from a purely scientific point of view. The ultimate result of our study of the material universe should be such as to take us "nearer to those philosophical systems which regard the universe as a thought in the mind of its Creator".

THE COLLEGE ATHLETIC TEAM 1943-44  
Winners—T. D. A. A. Open Shield for the third year in succession.



Sitting: 2nd from the left D. Natesan, College Champion.

THE COLLEGE BADMINTON TEAM 1943-44  
Winners T. D. A. A. open shield for the third year in succession



Standing: Ananthapadmanabhan, George Aruldass, Satakopan  
Sitting: Krishnamurthi, (Capt.), Rev. Fr. Ehrhart, S.J., (President), Mr. P. R. Subramaniam, (Secretary),  
Mr. Lakshminarayanan.

## My Maiden Speech

'Aurames'

"**Y**OU, you mean? cried the secretary, "you to address a meeting, you!" The emphasis on the two "you's" seemed to me unnecessary, of course. I was known as the B. W. (bookworm) of the class and was supposed to know nothing but my text books. But what of that? Cannot I gather courage to address a college meeting? What a silly idea! I was framing my next sentence. The astonished look in the secretary's spectacled eyes had not yet subsided. "All right, you must be ready to address a meeting on the 19th." He departed.

"But" cried I

"What but?"

"I have an examination on the 20th"

"I cannot help it. I have fixed up programmes for the other days."

I was not the fellow to be put out by these threats.

The preliminaries were over. I had to prepare the essay yet. But what was the subject to be? I scratched my brain.....Yes, Honesty. What a nice subject, though abstract. 'Honesty is the best policy.' 'An honest man is the noblest work of God,' Quotations came pouring in. But there should be a quotation from Shakespeare. I went through the index of all Shakespeare editions for the word 'Honesty.' Here it is. Page No.....Line....."....." That was enough; I could write the essay now.

My evening walks were cancelled. My meal time was shortened and I took less time for my bath. In short, it was a successful time-rationing scheme. "Useless time for useless things" was my motto. I sacrificed even my precious sleep for the sake of my maiden speech.

My eyes were sore with searching for the word "honesty" in every book I met with. There was that collection of essays that I had not referred to. "I double-bolted the doors of my room, lest my friends

## MY MAIDEN SPEECH

should disturb me (Don't think I had no friends, birds of my own feather). If you had just peeped into the room through the key-hole on those days, you would have enjoyed wonderful sights. I would be standing on my head memorising a passage, or jumping up and down to forget a wrong quotation, or at least scratching my head as if to drive something through the scratch. Sometimes, I would be sitting quiet, dreaming about the inevitable success of my speech and of the laurels therefrom. 'My maiden speech will be a grand success, the secretary will be ashamed of his haughtiness and will call upon me to address more and more meetings; I shall become a regular speaker in the debating society, shall take part in inter-college debates and will be declared the orator hors pair. Hear, there strikes the clock; everything will come true. It is not an Alnaschar dream.'

I did not neglect my studies. I was simultaneously preparing for the examination also. I had divided my time for both in the ratio of their importance. What was there after all to study? I knew everything by heart and I had only to give a finishing touch to the probable essays in 'Pickwick Papers.' That was all.

At last that red-letter day arrived. My dreams began to fade, I began to forget passages suddenly and no amount of standing on head or scratching it was of any use.

The whole day I was living in a dreamland. I was in the world, though not of it. I could not see what others did and hear what others spoke. All my thoughts were centred upon that evening function *My maiden speech*.

It was the fateful evening; I was seated in the front bench. The president had concluded his introductory speech (I didn't know then what he spoke) and I was called upon. I rose from my seat like a press-the-button machine and advanced to the platform. I felt as though my body was carried there by another's legs.

My nervousness reached the climax, when I viewed the audience. It was, in theatrical language, a full house. Whoever will not be eager to see a (supposed) book-worm on the platform?

As I was brooding over this, I just realised that I had been standing still on the platform for a long time and that all eyes were gazing at me.

## "THE 'FISH' THAT HE CAUGHT"

'Ladies and gentlemen' *My maiden speech* began. (I did not notice whether there were any ladies). Fortunately, I remembered the beginning sentence. Then it was a non-stop train. I was proceeding at breakneck speed, without, however, understanding what I was speaking. I forgot all about the gestures and actions which I had practised before the mirror at home. My legs shook in my shoes and my hands trembled in my trouser-pockets and my eyes seemed to be screened by a misty haze.

I slowly gathered confidence; for my speech proceeded without any stop or interruption and I looked at the audience to read their opinions from their faces. Two of my class-mates, who were sitting in the corner were laughing and murmuring something. 'Yes, they have understood my humour,' I thought. My speech was going on. But why should others gaze at me like that? And see, what has made my professor so angry? His eyes were red with anger. Perhaps, poor man, he could not understand my speech! Suddenly he rose; my heart ceased to beat.

"You are reproducing my notes on Dickens's satire in *Pickwick Papers*," he thundered.

I received a shock which seemed to turn every hair on my head instantaneously gray. The sound of laughter and clapping filled the hall. I was about to faint and I murmured '*My maiden speech*.'

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## "The 'fish' that he Caught"

by N. S. Rengamoni, III U. C.

IT was eight o'clock in the night when Michael John rose up from his slumber which was the sequel of a heavy dose of opium taken in the evening. Opium was always a favourite with John, and daily from dawn to dusk, he would take at least half a dozen doses of that drug. He was a fisherman (he said so to everyone) but he rarely brought home any fish, after his night's labours in the sea. His innocent wife only thought that he was not clever in fishing. But people of those

## "THE 'FISH' THAT HE CAUGHT"

parts who know better gave him credit for great skill in that art, for he brought much money to the tavern.

One morning, his purse was empty and this situation touched his wife's finances which were very little. He took out a rupee from her purse despite entreaties "What! I keep it to buy a shirt for our boy. Please don't take it" she had said then. But his drink was more important than his boy's shirt. So the money reached the box of the tavern-keeper.

Now John rose up, clearing his eyes, red with the incessant doping. "Lizzie, Lizzie" he called out placidly.

"What do you want?" she said.

"Get me some eight annas."

"You know I have nothing."

"Borrow and get me immediately and I will give you two rupees in the-morning."

His wife rose up and some how got him the required money not trusting his words of course but just to satisfy him. John went out, filled himself with opium and directly proceeded to the sea-shore. The moon had not risen yet. He took out some logs of wood, tied them together as a Catamaran and set out into the sea.

He was rowing fast and for a long time, until a sudden lightning announced, that he was near a steam-launch. A man on the launch cried out "Hullo! John, old fellow! what are you doing there?"

"Fishing, brother" John replied.

"Have you caught any fish?" the stranger queried and laughed and was joined in his laughter by some men aboard.

"Yes" cried John "I am getting near the fish" and he too laughed.

"Come near Michael John. Here is work for you. You need not fish in the sea. Here you have got a hundred fish which are to be handed over by you to Messrs. Desa & Co., secretly. You know what they contain. Here is a five rupee note for your work."

## "THE 'FISH' THAT HE CAUGHT"

"The pay is too low" resented John.

The bargain was settled and soon John was rowing back to the shore with a ten rupee note in his purse and a pot, full of "fish", numbering a hundred.

It was midnight when John landed on shore and he set out with the pot containing 'fish', and his fishing materials homeward.

He was suddenly stopped by the words "who goes there" which came from a policeman.

"Don't you know me? I am John, a fisherman here and I am returning home after fishing."

"At this late hour?" asked the constable suspiciously.

"What can I do, brother" began John exhibiting his spirit of brotherliness. "Nowadays, you see, this part has been overcrowded by fishermen from outside. We don't get fish easily here. So I rowed a long distance to get these" he finished pointing to the pot. The policeman looked at the pot enviously and before he could put further questions, John quickly left the place.

"Foolish fellow! He was easily deceived." John was murmuring on his way home. "You have an usually good catch today", exclaimed his innocent wife admiringly and she was now ready to hold a wager that her husband was the cleverest in fishing.

"Keep quiet" John cut in. "These fishes are to be handed over to a gentleman in the town. Don't meddle with them."

"What a strange mysterious business this is?" He said to himself and chuckled to himself as he went to bed.

Michael John woke up late, next morning and rising up he went directly to the pot. "First take some food, dear. You are very tired. Then you can mind your business" suggested his wife. "No" he said "This thing should be given to my client as early as possible let me see whether it is correct in number." So saying he counted the fishes and to his dismay found out that there were only ninety-nine. He was alarmed.

## "THE 'FISH' THAT HE CAUGHT"

He called and in came his wife. "Did you tamper with the fish" he asked.

"My friend Kate came to me early this morning and said that she had nothing to prepare food for her husband, Francis. I gave her a fish. What does it matter if only one is gone." She said coolly.

"What does it matter?" shrieked John "You have bungled every thing. You have given the fish to my worst enemy, Francis. We can't prosper, if you disobey me like this." So saying he rushed on to beat her. At that time, there was an ominous knock at the door. Finding this, a golden opportunity to escape her husband's blows, she flung open the door. There stood, a police inspector and two constables one of whom, John had met the previous night.

"Who is John" asked the inspector peremptorily.

"I am the gentleman" replied John.

"Where are the fish you caught last night?"

"No, I did not....." John began.

"No, you can't cheat me. I have the evidence of Francis. This constable is ready to confirm that you have committed smuggling. What is there in the pot there!" So saying, the inspector rolled down the pot from the cupboard. Down fell the pot and broke to pieces, and from each fish, a beautiful fountain pen worth ten or fifteen rupees, fell down.

"Eh constable get these fishes and the pens to the police station" ordered the inspector and John too was seen to follow the policemen with fettered hands leaving his stupefied wife to her musing and misery.

## The Man in the Green Coat

THAT punctual servant of all work, the sun, had just risen when Balu came out of his bed-chamber yawning. Very soon the operation of shaving, bathing and dressing was performed. The more important business of coffee-imbibing yet remained because Balu's eyes fell upon the newspaper lying on the table and with unusual interest he perused it. The theft of a diamond ring was reported in the head-lines of the newspaper, Balu read it over and over again. In another column, a burglary was anticipated in the town in which Balu was living. Suddenly the newspaper fell from his hands and he fell into a train of rambling meditations. Perhaps, his mind wandered over past incidents of burglary of which he was the detective hero. But soon his mind came back to him, with sufficient clearness, to remind him of the fact that the coffee in the tumbler was getting cool. So, he emptied the tumbler in a single draught, turned to the newspaper and was lost in it.

A rather tall, thin, young man in a green coat, wearing cooling-glass, walked on tip-toe to the door of Balu's house. He had black hair cut rather short and a white face cut rather long. An indescribable air of jaunty impudence and perfect self-possession pervaded the whole man. He gave a gentle tap. Two or three minutes passing without any reply, he gave another tap rather louder. The door was slowly opened and the stranger was ushered into the room in which Balu was reading the newspaper with indefatigable assiduity. Balu was so much absorbed in the exciting news that he was not aware of the presence of the stranger. The stranger coughed his presence and took his seat in front of Balu. Balu looked up and nodded welcome. The stranger straightway began:—"Sir, I am glad I have the good fortune to meet a *really* great man like you. Your fame, sir, as a detective has reached distant shores. You have made your name immortal. Everywhere, people are saying that today there will be a burglary in this very town and that none but you can catch the burglar. I come from a distant place and...I...am...also...a...detective. It has been my ambition to make myself famous in this line and I thought you the right man to be approached. Today I hope to catch the thief and I want to carry out my intention solely with your help. Sir, may I ask you to do the needful?" So saying, the man in the green coat laughed within himself unnoticed by Balu. By his

## THE MAN IN THE GREEN COAT

flattery, Balu was highly elated and for a moment he felt that he was really great. So, in a tone of affected superiority, he said, "Sir, don't worry. I will help you. By the by, what is your name?" "Why, sir," said the stranger rather indifferently, "why bother about my name?" I have taken a vow not to give out my name until I become as famous as yourself! At present call me Mr. X." "Yes, that is all right. Where shall we meet to-night?" asked Balu." "In No. 10, Town Hall Road. "Good-bye." Mr. X went away extremely satisfied while Balu retired to dinner.

Seconds counted up to minutes and minutes counted up to hours..... Thus the day wore on and night came with her bright moon, her innumerable stars, her thieves getting ready for their nightly adventures. The clock in Balu's house just struck twelve. The laborious and the happy were at rest and nothing was awake but meditation, guilt, revelry and despair. No sound was heard but of the chiming clock or the distant watch-dog. At this late hour of the night, a man was seen walking fast on the Town Hall Road, with his hands executing simple harmonic motions. A flicker of moonlight illuminating the tip of the man's long, sharp nose confirmed the fact that the man on the road was no less celebrated a person than Balu. He walked in fear and dread in that lonesome road and suddenly in the parallelogram of light that fell on the road, he saw the shadow of a man moving. He looked up and saw a light burning in the top-storey of house No. 10. He forgot all about Mr. X and everything about him seemed to be a thief! Many thoughts were suggested in his mind and there was a regular debate going on in his mind. One thought:—"Oh, there is a thief in that house, Go and get hold of him." Second thought:—"Don't go. He is not the thief. He is the householder." Third thought:—"Yes, don't go there but go and inform the police." Fourth thought:—"Don't go anywhere. Let him be anybody. Go home." Fifth thought:—"You coward, why are you afraid? Go direct into the house and get hold of the thief. Your fame will spread far and wide." At last, picking up courage, he entered the house and went upstairs like a cat. His heart began to beat in double-quick time. He was about to peep into the room in which the light was burning. Suddenly the light went out and Balu stood still unable to make up his mind as to what should be done. Accidently his hand fell on the right switch and the room was illuminated. To his great surprise, Balu saw Mr. X. Mr. X said, "Sir, excuse me. I thought that a thief was coming upstairs and to catch him in darkness, I put out the light. Come on,

## THE MAN IN THE GREEN COAT

Sir, come on. You have come at the proper moment. No wonder, because you are the expert! I think that the thief will be coming to this very house very soon. We can easily get hold of him. But I want to sound one important note of warning which you should bear in mind. Do not always believe the policemen, because often a thief may come in the guise of a policeman. You know all these things. But, great men, you see, often forget such small things. That is why.....Now I shall go to the next street to see what is happening there. You remain here to watch and keep me informed." All the while Balu was listening to Mr. X with adoring admiration. Mr. X bidding good-bye to Balu, disappeared. A few minutes passed.

Balu looked at his wrist-watch. It was 1 A. M. Now and then a rattling sound was heard down stairs. Balu walked downstairs very silently only to find that a cat and a rat were at play! Then suddenly turning right about, he saw a policeman climbing to the topstorey of the same house. The words of Mr. X. came to Balu's mind. He suddenly, jumped to the conclusion that the policeman was really a thief. He was very glad that the thief was sighted but he had not the courage to get hold of him. He thought it wiser to go and inform his friend Mr. X! So, crying out 'Thief—thief—thief.....' Balu ran in search of his friend. Seeing Balu, the detective, running in the street crying 'Thief', the policeman thought that Balu was running after a thief and so ran after him. Balu ran street after street, now turning to the right and then to the left, maintaining the same speed and the same cry! He did not know that the policeman was following suit. At last Balu dropped into a coffee hotel which was open.

There Balu saw the man in the green coat. His joy knew no bounds and he embraced Mr. X crying out 'Thief!—thief!' The policeman, who was closely following Balu, entered the same hotel just at the right moment and saw Balu embracing Mr. X. Immediately the policeman caught hold of the long neck of Mr. X and examined him from head to foot. Balu stood like a pillar dumb with surprise. It was all a big puzzle. As soon as the policeman fished out of Mr. X's pocket a diamond ring along with currency notes to the value of Rs. 2000, everything was as clear as day light. Only then he realized that his friend Mr. X was the real thief and that the policeman was a real policeman. Then the policeman turned to Balu and said, "Sir, I am greatly indebted to you. It was you who brought me to this place.

## SOME THOUGHTS AT NIGHT

Very intelligent how you spotted the whereabouts of this thief. You ran straight to this place to get hold of him, unmindful of the help that was following you. You are so great a detective that police help matters little to you." Balu knew his luck and smiled.

Just then the sub-inspector followed by a stout gentleman arrived on the spot. The sub-inspector saw Balu and said, "Oh! you are here. Then naturally the thief must be here." Balu nodded his head rather proudly by way of reply. Joy radiated from his face and a sweet smile played upon his lips. The policeman told the sub-inspector that it was Balu who caught the thief. He then gave the diamond ring and the two thousand rupees to his officer. The stout gentleman who was ignorant of what was going forward all the while, suddenly opened his mouth on seeing the 2000 rupees which of course belonged to him and which Mr. X had stolen from his house (No. 10). The sub-inspector and the stout gentleman shook hands with Balu alternately. Then the police officer tapped Balu on his back and said, "you are indeed great!" The stout gentleman also did likewise.

'Some are born great, some achieve greatness and some have greatness thrust upon them.' It is no insult to Balu's greatness if we place him in the last category!

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## Some Thoughts at Night

by R. Balasundaram I. U. C.

**I**T was a summer night in April. Darkness enveloped the earth like a veil and Night rode on steadily on her black steed, punctual and unerring in her duty. In a corner of the house, I was lying awake in my bed. The house was asleep and the whole earth seemed to be dead. Sleep could not enchant me, or perhaps I could not enchant her. As I lay in my bed travelling through the limitless realm of thoughts, I could clearly see Night in her real form and terror, through the window close to me. Peering forward into the darkness I began to people the night with my thoughts and fancies.

## SOME THOUGHTS AT NIGHT

Out of the window near a large tree, I began to suspect the presence of a human being. That dim blackness near a leafy branch was surely a head! Yes, the hands move slowly. The man is slowly coming towards my window! O Horror! What do I see in his hand? A dagger stained with blood! A murderer just out of his cruel business! His eyes are ablaze and his cheeks are filled with blood—I see terror in his countenance. Yet what has he done? A murder? and what more! No—this scene is not real, the dagger is of the mind; still let me drop such creations from my mind! Let me think of a more solacing scene.

Fortunately my thoughts entered a completely different sphere—books. All round me were hundreds of books—arranged as carefully as the stones of the pyramid. I looked at them and read their titles at random—Tale of Two Cities, Essays of Macaulay, The French Revolution, and a host more. Soon I began to be tired of them. I despise books! I believe in Life!

Yes, Life. Life is a good thing—to enjoy and to survey. Let me consider life in the literary field. The life of an author is indeed real and attractive. An author, a Grub Street writer, striding over mountains of hardship, living a simple life and on the whole wonderfully successful.

Several authors visited my room that night. Around a table were seated many of them, sage and witty men of old. There was seated a figure with a fiery, nervous face and a fringe of beard. He wore a white hat tilted back carelessly; he had bright old-fashioned pantaloons, and waistcoat and a very fantastic coat; his luminous eyes opened wide. He seemed to be sad and, turning to his companion, he said "These modern men are living and I am dead." His companion sat mute. The man who spoke was not dead! He is still living. "You still live while the world is dying," said I. The man was no other than Charles Dickens.

Next in the group of silent men, I looked at one for a long time. He was sitting in an old-fashioned chair. His eyes were wonderfully bright and piercing. His face revealed a certain amount of richness. He now and then turned his face and eagerly looked at his companions. His hair hung behind in curls. He wore a long dress, neat and somewhat gorgeous. As I looked at him I at once recognised him. He was the immortal poet of the universe. Slowly I saw him in many different forms. I saw him standing on the Roman forum and declaiming vigorously "Friends! Romans! Countrymen . . . .". Next in a wood,

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standing beside a tree, he jovially but seriously began "All the world is a stage". I was completely thrilled at these sights. Unhappily the next one was horrible! He had a dagger in his hand which was smeared with blood. The guilty Macbeth's face was unendurable.

Suddenly I felt uneasy at the thoughts that the sights suggested. These venerable poets and authors were great. They lived and died, leaving everlasting footprints on the sands of Time. Yet before them, we are mere urchins, looking at a stage. On the stage they are the real players and we, mere spectators. With these thoughts I slowly withdrew myself from the authors.

After approaching the great men mentioned above, I completely dropped them behind and found myself again in my own solitary room, still awake. I thought of my country. Thinking of my country, I began to deplore the dullness of our life. We, Indians, think of ourselves. We have been ever bounded in the sphere of trifles. We do not think beyond. We have little differences made great, barring national progress. Why cannot we look out of our own homes? I thought one day we should look beyond our borders. Yes, we must know the world, that there is a Europe and an America, a Hitler and a Tojo, a Roosevelt and a Churchill and a Smuts. Mussolini, we must know there was one. Really I do not think we know these. Let our people think and see!

Soon sleep overtook me in the race of thoughts. I slept for some hours and awoke refreshed. The thoughts and imaginations of my mind during the wakeful hours of the night were somewhat inspiring. As I awoke I was a new man with an appreciating outlook on the world around me. I looked out of the window and though I was used to the scenery before me, that morning I looked upon it in a special way. The world was monotonously and unendingly beautiful. From the mango trees in the garden a flood of sweetness swept against me. The birds "poured forth their souls in ecstasy." Their exhilarating shouts flung rushing time into the sky. The sun was gloriously rising up. The adders of sunlight darted through the clouds. Morning had come and the Day was before me.

Indeed an hour or so of wakefulness at night makes one fresh. Let everyone eagerly look for that opportunity!



THE COLLEGE BAND, 1943-'44.



“WHAT DOTH IT PROFIT;”  
Played on The C. T. A. Anniversary day. 30th January 1944.

## புத்துலகம்

வி. இராஜேந்திரன் (நான்காவது வகுப்பு)

மலைத்தென்றல், சோலை மணம், மலையருவி, குயிலோசை இவை யார்க்கும் மகிழ்ச்சி தருவனவே. விடுமுறை காலங்களில் கவலையின்றி நேரம் போக வேண்டும் என்று நினைத்தால் இருமைலுக்கு அப்பாலுள்ள நம்பிமலைக்கு நான் சென்றுவிடுவேன். கலகலப்புடன் ஓடிவரும் தெள்ளிய நீரோடையருகே குளிர் மா நிழலில் இருக்கும்போது இயற்கையுடன் ஒன்றிவிடவே முயலும் என் மனம். சங்கத் தமிழ் நூல் இச்சமயங்களில் புதுச்சுவை தரும். அன்று என் கைக்குக் கிட்டியது புறநானூறு. மந்தமாருதம் விளரி வண்டினம்போல் ஆங்காங்கு மலர்ந்த பூக்களில் சென்று தேனோடு மணத்தையும் அள்ளி வீசிக் கொண்டிருந்தது. என் மனமும் எல்லையற்ற இன்பத்தில் திளைத்தது. உற்சாக மேலீட்டால் புத்தகத்தைப் புரட்டினேன்.

மாந்தரஞ் சேரலிரும் பொறையோம்பிய நாடே  
புத்தேளுகத் தற்றெனக் கேட்டுவந்  
தினிது கண்டிசிற் பெரும.....

என்னும் அடிகள் கவனத்தை ஈர்த்தன. இயற்கையில் ஈடுபட்டிருந்த மனம் வேறொன்றில் பாய்ந்து விட்டது. சங்கிலித்தொடர்போல் எண்ணங்கள் எழுந்தன. “செந்தமிழ் நாடென்னும் போதினிலே” என்ற பாரதியார் கவி மனத்தில் எழுந்து வாய்வழியே வந்தது. மறு விநாடியில் பாரத அன்னை யுத்தத்தாலும் பஞ்சத்தாலும் படும் பரிதாபமான பாடு படம் பிடித்துக்காட்டினாற் போல் என் கண்முன் காட்சி தந்தது. அருகாமையில் உள்ள பாரத பாரையில் மேலாடையை விரித்து, வலது காதத்தைத் தலைக்கணையாகக்கொண்டு படுத்தேன். மலையத்திலிருந்து எழும் மந்த மாருதம் தவழ்ந்து வந்து சில்லென வீசிற்று. நித்திரையும் மெல்லென வந்து என் கண்களைக் கட்டினள். ஆயினும் மனக் குரங்கோ ஒன்றிலிருந்து ஒன்றுக்குத் தாவிக்கொண்டே இருந்தது. கனவோ, நனவோ! யானறியேன். ஆனால் கண்டவைமட்டும் இன்றும் மறக்க முடியவில்லை.

பாழ்பட்டுக்கிடக்கும் இப்பாரத உலகத்தைப் பங்கிட்டுக்கொள்ள முயலும் பங்காளிகளான ஹிட்லர், முசோலினி, டோஜா ஆகிய மூவரும் புதிய உலகம் ஒன்று செய்யவேண்டும் என்று ஆலோசனை செய்கின்றனர். மற்றோர்புறம் நேய நாடுகளின் தலைவர்களின் கூட்டம் நடைபெறுகின்றது. அவர்களும் ஏதோ புத்துலகம் ஒன்று செய்துவிடப் போவதாகத்தான் பேசிக்கொள்ளுகின்றனர்.

## புத்துலகம்

ஹிட்லர் இறுதியில் பின் வரும் முடிவுக்கு வரலாயினர். உலகம் என்பது கடல் சூழ்ந்ததும், குடி நெருக்கமானதும் உருண்டையென்று சொல்லப்படுவது மாகிய இப்பூமியே. விஞ்ஞானிகள் புகழ்வதுபோல் கோடானகோடி கோளங்களுள் நமது உலகம் ஓர் சிறிய பொருளே எனினும், அதிலும் நமது நாடுகள் சிறு பாகங்களே என்றாலும், அவற்றிலும் தலைவர்களாகிய நாம் அனுக்கள் போன்றவராயினும் யாவற்றையும்கூட நாமே பெரியவர்கள். ஏனெனில் நம்மால் உலகமே தலைகீழாகப் புரண்டு எழுகிறது. இன்றுவரை உலக சமாதானத் துரோகிகளான நேச நாட்டார் நம்மை ஒன்றுஞ் செய்து விட்டதில்லை. இறுதியில் உலகத்தில் உள்ள மக்கள் அனைவரையும் நச்சுக்காற்றால் நாசஞ் செய்தா கிலும் நாமே வெற்றியடைவோம் என்பது திண்ணம். உலகத்துக்கு நீடித்த சமாதானம் நம்மால்தான் ஏற்படவேண்டும். உலகினர் யாவரும் நமது அதிகாரத் தின்கீழ் வாழ்வதற்கு ஆசைப்படவேண்டும். நாமே உயர்குலத்தோர். ஆகவே நமமக்களான இதர இனத்தினர் நம் தேசத்துக்குத் தொண்டுபுரிவதிலேயே உள்ளம் பூரிப்படைந்துவிடுவர். இத்தகைய திருத்தொண்டுபுரிய மக்களும் ஆவல்கொண்டுதான் இருக்கின்றனர். ஆனால் ஆளும் வர்க்கத்தினர் அவர்களை அடிமைப்படுத்தி உண்மை இன்பம் அவர்களுக்குக்கிட்டாமல் செய்துவிட்டனர். ஆகவே நமது இலட்சியம் மக்களைக் கொடுங்கோலர் கைகளினின்று மீட்டு நமது குடிகளின் தொண்டர்களாக்குவதும் இவ்விதமாக நம் குடிகளுக்கும் அவர்கள் தொண்டர்களுக்கும் நீடித்த சமாதானம் அளிப்பதுமே. உலகை வகுப்பதற்கும், ஆண்டு அருள் புரிவதற்கும் நமக்கன்றி வேறு யாருக்கும் வல்லமை போதாது— என்று வீராவேசத்துடன் அலறினர். அங்கங்குலுங்க அங்கிருந்தோர் கைதட்டி ஆர்ப்பரித்தனர்; ஆமோதித்தனர்.

அமெரிக்க ஐக்கிய நாட்டு அதிபதியோ, ஆழ்ந்த யோசனையில் அமிழ்ந்திருந்தவர் சுருட்டு வாசனை தட்டியதும் சர்ச்சில் அருகில் வந்து நிற்பதை அறிந்து ஆவலுடன் எழுந்து தனது திட்டத்தைக் காட்டுகின்றார். சுருட்டு துரை அவர்கள் முகத்தில் ஈயாடவில்லை. “புதிய உலக திட்டம் என்பதில் இந்தியா சம்பந்தப்படவில்லை என்பதை நீங்கள் ஏன் கண்டு கொள்ளவில்லை. இந்தியாவுக்கென்றே தனித்திட்டம் நண்பர் அமெரி தயாரித்து வருகின்றாரே, அவர் காரியத்தை அவரே பார்த்துக்கொள்ளட்டும். ஒன்றுபட்டாலன்றி, பூரண சுதந்திரம் குதிரைக் கொம்புதான் என்று சொல்லிக்கொண்டுதான் இருப்பாரேயொழிய அவர்களாக ஒன்றுபடப் பார்ப்பாரோ? ஜின்னா போன்றவர்கள் விட்டுக்கொடுக்கவா போகிறார்கள்? அவர்களுக்கு ஆண்டவன் நீண்ட ஆயுள் அருள வேண்டுமென்பதுதான் அமெரியின் வேண்டுகோள். ஆகையால் பொது

## புத்துலகம்

வாக நீங்கள் சொல்லிவைக்கவேண்டியதைச் சொல்லிவிடவேண்டியதுதானே. யுத்த முடிவில் யார் இருக்கப்போகிறார் என்று யார் கண்டார்? ஆனால் ஒன்று நிச்சயம். தோற்றாலும் சற்று வெற்றியடைந்துகொண்டுதான் இருக்கிறோம். இறுதி வெற்றி நமதே” என்று ஓர் சொற்பொழிவாற்றினார். ரூஸ்வெல்ட்டும் “சரிதான்” போட்டுவிட்டுத் தனது திட்டத்தைச் சீர்திருத்துவதில் முனைந் தார். “நேச நாடுகள் வெற்றியடைந்தே தீரும். யுத்த முடிவில் நான்குவகைச் சுதந்திரங்கள் நிறுவப்படல்வேண்டும். 1. பேச்சு சுதந்திரம். 2. மத சுதந்திரம். 3. பசி நீங்கு சுதந்திரம். 4. பயம் நீங்கும் சுதந்திரம்” என்றார். ஆனால் அமெரிக்கோ இவை திருப்தி அளிக்கவில்லை

இவையெல்லாங்கேட்டிருந்தன இந்தியாவின் இல்லத் தேவதைகள். சிறு கட்டங்கள் கூட்டின. “ஒன்றுபட்டால் உண்டு வாழ்வே என்னும் கவி பாாதி யின் அபயக் குரலுக்கு எதிர்ப்பொலி கிளப்பின” துண்டு பட்டால் சாந்தியுண்டு என்றார்கள். பெரியார் ஒருவர் நம் ஐம்பதினாயிரம் பேருக்கும் பாக்கியஸ்தானம் பக்கிஸ்தானே என்றனர் கராச்சியில் கூடிய கூட்டத்தில். அமிர்த சாஸில் ஓர் கூட்டம் நடந்தது. அங்கும் ஐம்பதினாயிரம் பேர், கூடினர். பக்கிஸ்தான் கூடவே கூடாது என்று கூக்குரலிட்டனர். தென்னிந்தியா மட்டும் விட்டதா! பெரியார் ஒருவர் எழுந்தனர். யுத்த முடிவில் எங்கள் தாய் நாடு தனியாக நேரே லண்டன்மா நகர் மேற்பார்வையில் இருக்க வேண்டும்; எங்களை இதர இந்தியரோடு இணைத்துவிடக்கூடாது என்று அழாது அழுது மன்றாடி நின்றார். கூட்டம் நடைபெறும்போதே ஆகாயத்தில் பேரிசைச்சல் கேட்டது. “டபார்” என்று ஒன்று விழுந்து வெடித்தது. தூர்க்கந்தம் வீசியது. சிறு துண்டுகள் சிதறின. என் முகத்திலும் சில தெரித்தன. அரை உறக்கத்திலேயே நடு நடுங்கித் துள்ளி எழுந்தேன். வெடித்துக்கிடந்தது விமானக் குண்டல்ல; குருவி முட்டை. காற்று இறைந்து வீசிக்கொண்டிருந்தது. மேலே நோக்கினேன்; ஆடுங்கிளையொன்றில் குருவிக்கூடு தென்பட்டது.

“மழை விட்டுத் தூவானம் நிற்கவில்லை” என்பதுபோல, உறக்கந் தெளிந்தும் உள்ளம் தெளிவடையவில்லை. கண்ட காட்சிகள் மனத்தைப் புண்படுத்தின. புத்துலக நினைவே சதா ஊசலாடியது. புதிய உலகமோ பழைய உலகமோ, நம் நாடு சம்பந்தப்பட்டவரை புத்துயிர் இல்லையெனின் எதுவாயின் என்ன என்றும் இருந்துவிட முடியவில்லை. யுத்தத்தின்பின் ரோடு போடுவதில் கூட புதிய அமைப்பு தேடுகிறார்களே, இப்புதிய உலக திட்டங்களெல்லாம் ஏன், என்னும் வினாவெழுந்தது.

## புத்துலகம்

ஆம், தலைகால் தெரியாமல் தடுமாற்றம் அடைந்த இந்நிலையில் ஓர் ஒழுங்கு கட்டாயம் வேண்டியதே. ஆனால் இத்தடவை அமைக்குந் திட்டங்கள் நீடித்த சமாதானத்தைத் தரவேண்டும்.

“நோய்நாடி நோய் முதனாடி யது தணிக்கும்  
வாய்நாடி வாய்ப்பச்செயல்”

என்றார் வள்ளுவ நாயனார்.

யுத்தநோய் வந்தவாறு அறியின் அது வராதவாறு தடுக்கலாம். சென்ற மகாயுத்த இறுதியில் வில்லன் தனது அபா உழைப்பாலும் ஊக்கத்தாலும் உலகப் பிரமுகர்களின் கூட்டம் ஒன்று கூட்டி, சர்வதேச சங்கம் என்று ஒன்று நாட்டி அதன்மூலம் பதினான்கு திட்டங்களையும் வகுத்துக் காட்டினார். அவை யாவும் நன்றென யாவராலும் ஒப்புக்கொள்ளப்பட்டன. ஆனால் உள்ளே அரித் துக்கொண்டே இருந்த கொள்கை பேதங்களாலும், சாம்ராஜ்யப் பேராவலாலும், முதலாளித்துவத்தில் அதிக ஆசைகொண்டமையாலும், இனத்துக்கு ஒரு இராட் சியம், வர்க்கத்துக்கொரு வட்டாரம் என்னும் வகுப்புப் பிரிவாலும், சமாதான உடன்படிக்கைகளைப் பேராசைகள் இகழ்ந்து இழந்ததோடு நிற்காமல் ஆயுதம் திரட்டவும், சமயம் பார்த்து எளியநாடுகளைத் தாக்கவும் தலைப்பட்டன. இவ் விதம் ஏற்பட்ட உலகயுத்தம் என்னும் பெருங்கொள்ளைநோய்க்கு மருந்து இதன் உற்பத்தி நிலைகளின் வேறுப்பு அல்லவா? ஆகவே எவர் திட்டம் வகுத் தாலுஞ்சரி; தனி உரிமைக்கென்றும் தன்னலம் கருதியும் எழும் திட்டங்கள் அர்த்தமற்றவை.

‘நீதியின் பயன் சமாதானம்.’ உலக முழுவதையுமே ஓர் பெருங் குடும்ப மாகப் பாவித்து, அக் குடும்பத்தின் ஒவ்வொரு அங்கத்தினரின் செளகரியங்களை யும் கவனித்து, ஒருவருக்கொருவர் சகோதர தர்மத்துடன் நடக்கும் வகையை அடிப்படையாகக் கொண்டாலல்லது எத்திட்டமும் நீடித்த சமாதானம் அளிக் காதே! சமாதானத்தையே குறிக்கோளாகக் கொண்ட பாப்பாசர் வகுத்த திட்டம் நன்றாக இருக்கிறது. அவர் ஐந்து திட்டங்கள் வகுத்துள்ளார்.

முதலாவது: நீதியில் ஊன்றியதும் மதிக்கத்தக்கதுமான சமாதானத்தின் அடிப்படையான நியமம் என்னவெனில் எல்லாத்தேசங்களும், அவை சிறியவை, பெரியவை, வலியன, எளியன என்ற வேறுபாடின்றி, தேசங்களாகப் வகுக்கப் பட்ட யாவும் சுய ஆட்சி அளிக்கப்படவேண்டும். பொருளாதார அமைப்பில் பெரிய தேசங்களுக்கு அதிகமான செல்வாக்கு இருக்கலாம். ஆயினும் எல்லா நாடுகளும் ஒன்றோடொன்று சகோதர முறையில் அன்புடன் நடந்துகொள்ள

## புத்துலகம்

வேண்டும். எக்காரணப்பற்றியும் பிறர் உரிமைகளில் தலையிட்டுக்கொள்ளக் கூடாது.

இரண்டாவது: ஆயுதப்பிரகாசம், மேற்கூறிய முறைப்படி நடக்கும் நாடுகளுக்கு ஆயுதம் தேவை இல்லை. அவை நாடுகளைக்காப்பாற்ற உதவுவதற் குப்பதிலாக பிறநாட்டை கொள்ளையடிக்கவே தூண்டும்.

மூன்றாவது: பொதுநலத்தைக்கோரும் உலகப் பொதுச் சங்கங்கள் அமைக்கப்படவேண்டும். சமாதானத் திட்டங்களை வேண்டும் வகையில் மாற்றி அமைக்கவும், தனித்தனியே ஒவ்வொரு நாடும் அத்திட்டங்களுக்குத் தனி அர்த்தந்தந்து அனர்த்தஞ் செய்யாமலும் நீடித்த சமாதானத்தைக்கொள்ள வேண்டுமாயின் எல்லா நாடுகளின் பிரதிநிதிகள் கொண்ட நியாயச் சங்கங்கள் இருப்பது அவசியமே.

நான்காவது: சமுதாயங்களுக்கும், தேசங்களுக்கும் சுதந்திரம் கொடுக்கப் படுவதுபோலவே சிறுபான்மைக் கட்சியினருக்கும் அவர்களுக்கு நியாயமாக வேண்டிய தேவைகளுக்குத் தகுந்த ஏற்பாடுகள் செய்யவேண்டும். ஏற்படுத் தப்பட்ட சட்டதிட்டங்களைச் சாக்காக வைத்துக்கொண்டு சிறுபான்மைக் கட்சி யினரை இம்சிக்கக்கூடாது. நாட்டிலும் சட்டதிட்டங்கள் எல்லா மக்களுக்கும் இயைந்துபோகக்கூடியவையாய், அல்லது மக்கள் கடைப்பிடித்தொழுகத் தகுந் தனவாய் அமையவேண்டும்.

ஐந்தாவது: நாட்டை நடத்துபவர்கள் உலகமெங்கும் நிறைந்தொளிரும் கடவுள் ஒருவரின் ஆற்றலை அறிந்து என்றும் அசையாத தேவ பராமரிப்பின் ஒழுங்குகளுக்குக் கட்டுப்பட்டு நீதியின் மேலும் சமாதானத்தின் மேலும் தீராத தாகங்கொண்டவர்களாய்த் திகழ்பவர்களாகவேண்டும்.

இத்திட்டங்களை நடைமுறையில் அமுலாக்கிப்பது கடினமாகத்தான் தோன் றும். ஆயினும் இவற்றின் பயன் தாராள குணமுள்ளவர்களுக்கு எத்தகைய பெருந்தியாகம் செய்தும் அடையத் தகுந்ததே என்று தோன்றாமல் இருக் காதா, என்று பாப்பாசரே சொல்லியிருக்கிறார்.

கடவுளை மறந்து மனிதன் மனச்சாட்சியை மங்கடித்துக்கொள்வதே சகல புாட்சிகளுக்கும் மூலகாரணம். உலகில் உள்ள சகலமும் அவர் ஆணைப்படித் தத்தமக்குரிய கடமையைச் செவ்வனே செய்கின்றன. ஆனால் மானிடன்மட்டும் ஒழுங்கற்றவனாய் நடக்கின்றான். ஏனெனில் அவனுடைய சுய இச்சையானது அவனை ஆட்டி அலைக்கின்றது. மனித சரித்திரத்தைப் புரட்டிப்பார்ப்போமானால்

ஆதி மனிதன் ஆதாம் முதல் இன்றுள்ளவர் வரை புரட்சிசெய்தே வந்திருக்கின்றனர். அதன் பயனையும் அனுபவித்திருக்கின்றனர். கடவுள் இட்ட கட்டளையை மீறியதால் ஆதாம் ஏதேனை (Eden) விட்டு விரட்டப்பட்டார். அவர் வம்மிசா வழிகள் கடவுளை மறந்ததால் பெரும் நீர்ப்பிரளயம் ஏற்பட்டது. நோவாவுடன் எட்டுப்பேர் தப்பினர். அவர்கள் பலுகிப்பெருகியபின், மக்கள் திரும்பவும் தேவ பராமரிப்பை இகழ்ந்தனர். அதன் பயனாகச் சோதோம், கொமாரா என்ற பட்டணங்கள் நெருப்பு மழைக்கிரையாயின. சென்ற மகா யுத்தமும் ஐரோப்பிய நாகரிகத்தின் சீர்கேட்டின் பயனாக விளைந்தது. பின்னும் 'கடவுளைக் கண்ட தார், பாவ புண்ணியமேது?' என்று ஆர்ப்பரித்தோம். இகோ அல்லற்படுத் தும் தொல்லை வந்து விடிந்தது. உலகைவாட்டும் போருடன், கொள்ளைநோயும் பஞ்சமும் பாவலுற்றன. இன்னும் தாமதமேனோ? உண்மைக் கடவுள் ஒருவர் உண்டென்று உணர்ந்து உய்வதே அறிவுக்கமுகன்றோ.....? என்றெல்லாம் எண்ணமிட்டுக்கொண்டே வழி நடந்தேன்.

மலையடிவாரத்தில் வந்தபோது வடதிசைக்கண் கதிரோன் கருமேகங்களுள் புகுந்து மறைந்தான். ஆனால் பொன்னையும் பழிக்கும் ஒளி வர்ணங்களைப் பின்னே அவன் அள்ளி வீசிஞன். அவை கார்மேகங்களையும் ஆடகமாக்கின. கால்போன்ற கதிர்கள் வாளைப்பிளந்து சென்றன. மாருதம் மருவிறு; மாங்க்ள் பேசின; புள்ளினம் அடங்கின. தூரத்தில் விழும் சிற்றருவியின் 'சோ' வெண்ணும் ஓசைமட்டும் காற்றில் மிதந்து வந்துகொண்டேயிருந்தது.

## வேட்கை

by V. Ponniah, III B. Sc. (Hons.)

காற்றாதக், கல்லத்திப் பெருமாங்கள் கனித்தாடக், குளத்துத் தண்ணீர் சாற்றுமொரு பாடல்தனைக் காதாக் கேட்டு,கரை வழிந டந்தே, மேற்சாய்ந்து விரைந்தேகும் குளிர்மேகப் பெருங்காட்டின் கூட்டங் கண்டே போற்றுக மகிழ்ச்சிபொங்குங் காட்டுடே களித்தலைய விரும்பு வேனே.

2

மழையெழுந்து தானணியும் முகிலாடை விளிம்பிலுள்ள முத்துச் சிந்த, தழையணிந்த மாமெங்கும் தரிக்காத மகிழ்வாலே உடல்சி விரக்கும் :— இழையிழைத்த தூண்களென மண்ணுக்கும் விண்ணுக்கும் நேரே நிற்கும் பழம்பனைகள் மழைகுளிக்கும் :—பண்ணிறைந்த இதையேகண் டிருக்க வேண்டும்.

3

தும்பைவளர் மலர்க்காட்டில் திரிந்தலைந்து, பக்கத்தில் உயர்ந்த ஏரி பம்புபுனல் கலுங்கெற்றிப் பாய்ந்துவிழும் அதிசயமும் கண்டு கண்டு, கொம்புசுழல் வண்டார்ப்பக் குளிர்ந்தநிழல் மாதத்தடியில் அமர்ந்து, நீரில் அம்புயங்கள் எனஇருக்கும் வெண்கொக்கின் அழகினையும் அருந்த வேண்டும்.

4

அழகென்னுந் துணிநெய்ய ஆறென்னும் பாஅமைக்கும் பாங்கோ, என்றன் விழைவென்னும் விடாய்தீர்ப்ப வியன்காட்டின் இடைகிடக்கும் ஆற்றின் சீரே? இழைகளென வெண்மணலுங் கருமணலுங் கலந்தோடும்; விளிம்போ என்ன தழைமினுங்கும் ஈந்துபல இருமருங்கும் நெய்திருந்த இயற்கை காண்பேன்.

5

நிலந்தனக்கு முத்துவடம் எனக்கிடக்கும் ஆற்றினிடை மாக தம்போல் வளர்ந்துயர்ந்த நெடுஞ்சவுக்கந் தோப்புதனில் வயங்குமொரு மாலே வேளை, உலர்ந்தஇலை மெத்தையிசை நடந்துலவி, உயர்ந்தவிசும் பதனிற் செக்கர் உலர்த்துதன திறகினிறம் பருகியிருந் தயர்ந்திருக்க வேண்டும் வேண்டும்.

6

காற்றெழுந்த ஆடிதனில் கரையிருக்கும் மாமெல்லாங் காங்கள் சுற்றி 'வீற்றிருந்தோம் வீழ்ந்திடோம்' என் றாதுகின்ற பேரோலம் காதில் வீழ, மேற்றெழுமோர் பெருமிதத்தில் நடந்து, மணல் ஆடையெனப்

புடைத்தெழுந்தே

காற்றதனோ டோடுகின்ற காட்சியையுங் கண்டுகொண்டு திரிய வேண்டும்.

7

எனக்களித்த இயற்கைவளம் இனையபல என்கண்கள் கொள்க; இன்பம் மனக்கினிய சிலநேரம் மயங்கிடுக; மயங்காதே நெஞ்சந் தானும்; எனக்கினிய மணவாளன் இருதயத்தில் சேர்ந்தல்லால் என்றன் நெஞ்சம் தனக்குரிய நிலைகொள்ளா(து); இயற்கையினும் இனியொரு இடமே நாமும்.

## குறுந்தொகையும் குறட்பாவும்

by P. Nagappan, IV U. C.

குறுந்தொகை என்பது, அமிழ்தினுமினிய நந்தமிழ்மொழிமாட்டுச் சங்கமருவிய எட்டுத்தொகை நூல்களுள் ஒன்பான் சுவையும் ஒருங்கே ஒழுகப் பத்தழகும் பார்துநிற்கக் கழிபெருஞ் சிறப்புடைத் தாயதோர் நூலாம். மேற்குறிப்பிட்ட எட்டுத்தொகை நூல்கள் யாவையென உணர்த்தா நிற்கும் “நற்றிணை நல்ல குறுந்தொகை.....இத்திறத்த எட்டுத்தொகை” எனும்—வெண்பாவால் குறுந்தொகைக்கு ‘நல்ல’ எனும் அடைமொழி கொடுக்கப்பட்டிருத்தலானே இதன் திறம் வெளிப்படும்.

பெறுதற்கரிய மானிடப்பிறவி பெற்ற மகனொருவன் பெறும் பேறுகள் அகம் புறம் என இருபாற்றையாமென வகுத்தனர் நம் ஆன்றோர். அறம் பொருள் இன்பம் வீடு எனும் இந்நான்கும் இவ்விண்ணுள் அடங்குவனவே. மன மொருபட்ட தலைவன் தலைவியர் “பிறப்பே குடிமை யாண்மை யாண்டோருருவு நிறுத்த காமவாயில், நிறையே யருளே உணர்வொடு திருவென முறையறக் கிளந்த ஒப்பினது வகையே” எனக் கூறிப் போந்த ஒப்புமை யாவையும் ஒருங்கெய்தியவராய், காதலுள்ளத்தால் ஒன்றுபட்டு களவின்கண் கிள்ளுட்ப் பழகிப் பின் கற்பியலில் புக்கு நானில மீயிசை நல்லறமாய இல்லறம் நடாத்தி இறுதியில் வீடுபேறெய்துவர். தகைசால் புலமைமிக்கோர் கைக்கிளைக்காமமாம் ‘சிறுமையுறவு’ முதலிய மிகுந்து பாடாதொழிந்து ஒத்த காமமாய ஐந்திணைப் பகுதியினையே பாடுவாராயினர் என்பதனைத் தொன்மைமிக்க தொல்காப்பியரும் “இன்பமும் அறனும் பொருளும் என்றாகு அன்பொடு புணர்ந்த ஐந்திணை மருங்கின்” என்றார். மேலும் தலைசிறந்து நிற்கும் உரிப் பொருளாய கூடல், இருத்தல், ஊடல், இரங்கல், பிரிதல் எனுமிவற்றினை முறையே குறிஞ்சி, முல்லை, மருதம் நெய்தல் பாலை எனும் திணைகளில் அமைத்துப் போந்த தன்மை,

“போக்கெல்லாம் பாலை புணர்தல் நறுங்குறிஞ்சி  
ஆக்கஞ் சேர் ஊடல் அணிமருதம்—நோக்குங்கால்  
இல்லிருக்கை முல்லை இரங்கல் நறுநெய்தல்  
சொல்லிருக்கும் ஐம்பால் தொகை”

எனும் வெண்பாவால் வெளிப்படுகிறது.

ஈண்டு எடுத்துக்கொண்ட குறுந்தொகை கடவுள் வாழ்த்துமுதல் நானூற்றிரண்டு அகவற்பாக்களமைந்த அகப்பொருளை இனிது எடுத்துக்கூறும்

## குறுந்தொகையும் குறட்பாவும்

ஆற்றல் பெற்றமைந்தது. அருமை பெருமை மிக்க இந்நூலைத் தொகுத்தோன் பூரிக்கோ எனும் மன்னன். இந்நூற்கு அருமந்த உரை ஆசிரியர் பேராசிரியர் எழுதினொன்றும், அவரால் பொருளெழுதாது விடுத்த இருபது பாக்கட்கு ஆசிரியர் உச்சிமேற்கொள் நச்சினுர்க்கினியர் உரைவரைவாராயினர் என்றும் சீழ்வரும் பாக்கள் உணர்த்தும்.

“பாரத் தொல்காப்பியமும்.....குறுந்தொகையுள் ஐஞ்ஞான்கும்.....  
விருத்தி நச்சினுர்க்கினியமே !!

“நல்லறிவுடைய தொல் பேராசான்  
கல்வியுங் காட்சியும் காசினியறியப்  
பொருள் தெரி குறுந்தொகை யிருபது பாட்டிற்(கு)  
இது பொருள் என்றவன் எழுதா தொழிய  
இது பொருள் என்றதற் கேற்ப வுரைத்தார்  
தண்டமிழ் தெரித்த வண்புகழ் மறையோன்  
வண்டியிர் சோலை மதுரா புரிதனில்  
எண்டிசை விளங்கவந்த வாசான்.”

(நச்சினுர்க்கினியர் உரைச்சிறப்புப்பாயிரம்).

நூன்முகத்துக்கு விளங்கும் கடவுள் வாழ்த்து பாரதம்பாடிய பெருந்தேவனாராலும் மற்றைய நானூற்றொரு பாக்களும் திப்புத் தோளார் முதல் அம்மூவனார் இறுதிவரையும் நல்லிசைப் புலவர் பெருமக்களால் சொல்லப்பெற்றனவாம். கல்வியும் காட்சியும் காசினியறியப் பொருள் காட்டுங் குறுந்தொகை, பொன்னோராயிரம் பொதிந்து நூக்கிய பொற்கிழியொன்று தருமியென்னும் பனவன் பெறுமாறு, அவன் தன் அன்புடைமைக்கிரங்கிய கோலமாமிடற்று ‘ஆலவாயவிர்சடை அண்ணலாய’ மதுரையம்பதி சுந்தரேசக் கடவுள் திருவாய் மலர்ந்தருளிய ‘கொங்கு தேர் வாழ்க்கை’ எனும் தெய்வப் பாசரமதை தன்னுள் கொண்டு நேரிய எதிர் ஒப்பின்றி விளங்குதல் ஒன்றானே இதன் வரம் பெற்ற பெருமை நன்கு விளங்கா நிற்பதாயிற்று. மேலும் சேவலங்கொடியோனும் பிணிமுகவூர்தியோனுமாய தமிழ்த் தெய்வமாம் குமாக்கடவுளைக் காப்புடைச் செய்யுளாகக் கொண்ட இந்நூலிடைக் காணும் தமிழ் மொழியின் நயங்கள் யாவும் உள்ள உள்ளத் தேனயம் பயப்பனவாயுள்ளன. அகத்தின் பகுதிதனையே எடுத்துரைக்கும் இம் மாபெருந் தண்டமிழ் நூலிடை ஆங்காங்குத் தேனுறலென உள்ளுறை, இறைச்சி முதலாய பகுதிகள் அழகுமிகக்கொண்டு காணப்படுகின்றன. சொன்னயம் பொருணயங்களும் அத்தன்மைத்தேயாவன. மட்டற்ற மாண்புடைக் குறுந்

## குறுந்தொகையும் குறட்பாவும்

தொகைக் கண்ணுள்ள செய்யுட்கள் சுவை கனிந்து பலவற்றைச் சார்ந்துள்ளன. இன்னவையிற் சில வரலாறுகளையும் தொல்லோர் வாழ்க்கை முறைகள் பலவற்றையும் பண்டைத் தமிழர் மாண்புகளையும், மலிந்து காட்டுகின்றன.

இனி இக் கட்டுரைத் தலைப்பின் மற்றொருபகுதியாய் ‘குறட்பா’ என் பதனைச் சற்று நோக்குவோம்.

“வள்ளுவன் தன்னை உலகினுக்கே தந்து வான்புகழ் கொண்ட தமிழ்நாடு,” என வழத்தினார் நம் வரகவி சுப்பிரமணிய பாரதியார். அக்கவிஞர் பெருமானே கம்பநாட்டைக் கூறுமிடத்து “கம்பன் பிறந்த தமிழ்நாடு” என்கிறார். இவ் விடத்து நாம் அறியத்தக்கது யாதெனில் கவிபெருமான் கம்பன் நம் தமிழ் நாட்டுக்குத்தானாவன். ஆனால் திருத்தகு தெய்வப்புலமைத் திருவள்ளுவனார் உலகினுக்கேயாவர் என்பதேயாம். இப் பொய்யில் புலவரது அருமை பெருமை யினையும் அவர் தம் தமிழ்மறை மாண்பினையும் கூறப்புகின் பாற்கடலினை வெவ் வாய் வெருகொன்று நக்குதற்கிச்சித்த தன்மையே. வள்ளுவர் செய் திருக்குறள் இவ்வுலகத்தோர் உள்ளிருள் நீக்கும் ஒளியாகும். அதுவே ‘சிந்தைக்கினிய செவிக்கினிய வாய்க்கினிய வந்த விருவினைக்கு மாமருந்தாம்! வெங்கதிரோக்கும் இந் நாப்புலமை வள்ளுவனார் செய் வெண்குறட்பாக்கள் ‘கலை நிரம்பிக் காண்டற் கினிதாகி கண்ணின் நிலை நிரம்பு நீர்மைத்’ துள்ளன. ‘ஆரியம் வேதமுடைத்துத் தமிழ் திருவள்ளுவனார் ஓது குறட்பாவுடைத்து’ என வழத்தலான் தண்டமிழ் மொழி என்றும் ஆரியத்திற்குக் கீழாகாதென உணரக் கிடக்கின்றது. தேவிற் சிறந்த திருவள்ளுவரது திருக்குறள் ஓதற்கெளிதாய் உணர்தற்கரிதாகி அறிவுடை யோர் உள்ளுந்தொறும் மனதைக் கரைக்கும் தன்மைத்து.

செந்நாப்போதாரின் பொது மறைக்குரை கண்டோர் பதின்மருள் ஆசிரியர் நச்சினுர்க்கினியரும் ஒருவராவர். அவர் கண்ட உரை கால வெள்ளத்தில் அழிவுண்டது. “நூலிற்பரித்த உரையெல்லாம் பரிமேலழகன் தெரித்த உரை யாமோ தெளி” என்றமையான் பரிமேலழகர் உரையே இதனுக்குச் சிறந்ததென அறிகிறோம். மக்கள் யாவரும் ஒப்ப ஏற்றுக்கொண்டு ஒழுகவல்ல இந் நூல் பதினென்கீழ்க்கணக்கு நூல்களுள் ஒன்றதாகும்.

இச் செல்வச் சேனை வள்ளுவ முதுமகன் செய் திருக்குறளை எடுத்தாளாத வள்ளுவருக்குப் பின் வந்த புலவர் நம் தமிழ்நாட்டில் இல்லை எனக் கூறிவிடலாம். ஆகவே வள்ளுவருக்குப் பாமாலை இயற்றிய நல்லிசைப் புலவர் பெருமக்களது பாக்களுட் பல குறுந்தொகைக் கண்ணிருத்தலால் அப் பொய்யில் புலவரது

## குறுந்தொகையும் குறட்பாவும்

கருத்துத்தோன்றவமைந்த பாக்களும் உளவாயின. ஈண்டு வள்ளுவர் குறட் பயனைத் தம்முள் கொண்ட குறுந்தொகைச் செய்யுட்கள் சில குறிக்கப்பட்டன.

தொல்கடிலர் எனும் புலவர் பெருமகன் குறிஞ்சித் திணைக்கண் தலைமகள் தன்மையைக் கூறுமிடத்து “வந்தவார்ந்திலங் குவையெயிற்றுச் சின்மொழி யரிவை” என்றார். இங்கு தலைமகள் சில சொல்லித் தன் தலைவனை இன்பம் நுகரச்செய்யும் தகைமை “பல சொல்லக்காழுறுவர் மன்ற மாசற்ற சிலசொல்லத் தேற்றாதவர்” என வரும் வள்ளுவர் வாக்கினுக்கோர் எடுத்துக்காட்டாக இலங்கு கின்றது. மேலும் மொழி சிலவாயிருத்தல் அழகுடைத்து எனும் கருத்தைக் கருத்துட் கொண்ட ஓரம்போகியாரெனும் நாவலர் “சில மெல்லிய கிளவி” என்றார். “சலத்தால் பொருள் செய்து ஏமார்த்தல் பசுமட்கலத்துள் நீர் பெய்திரீஇயற்று.” எனவரும் குறளிலுள்ள உவமையைக் கையாளுவான் வேண்டி நம் ஒளவைப்பிராட்டியார் இரவுக்குறி மறுக்கப்பட்ட தலைமகனொருவன் வாயில் வைத்து “நல்லுரையிகந்து புல்லுரைத்தா அய், பெயனீர்க்கேற்ற பசங் கலம்போல வுள்ளந்தாங்கா” என கூறலுற்றாள். குறிஞ்சித்திணையில் செம்புலப் பெய்நீரார் தலைமகன் கூற்றாக வைத்துக் கூறுதலாவது “யானும் நீயும் எவ்வழி யறிதுஞ், செம்புலப் பெய்நீர் போல வன்புடை நெஞ்சந்தாங்கலந்தனவே” என்பதாகும். இங்கு காணும் உவமை பொது மறைக்கண் சிற்றினஞ்சேரமை யிற் கூறப்பட்ட “நிலத்தியல்பா நீர்திரிந்தற்றாகும்” எனும் உவமை நலத்திற் கொப்பாம். “ஈதல் இசைபட வாழ்தல் அதுவல்லது ஊதியமில்லை யுயிர்க்கு” என்று அருளிய பொய்யில் புலவர், “தம்மினும் வறியார்க்கு ஈக; அதனற் புகழுண்டாக வாழ்க; அப்புகழல்லது மக்களுயிர்க்குப் பயன் பிறிதொன்றில்லை” என்று அறைதலுற்றார். தீந்தமிட் புலவர் உகாய்க்குடிகிழார் பாலைத்திணையின் பால் கூறுதல் யாதெனில் “ஈதலும் துய்த்தலும் இல்லோர்க் கில்லென” என்பதேயாம். துய்த்தலினும் ஈதலே சாலச் சிறந்தமை, அஃது வள்ளுவப் பெருந்தகையாலே வலியுறுத்தப்பட்டது என்று கண்ட புலவர் ஈதலை துய்த்தலின் முன் வைக்கலானார். மேலும் ஈண்டு கூறப்பட்ட உண்மையை “வழங்கலும் துய்த்தலும் தேற்றாதான் பெற்ற முழங்கு முரசுடைச் செல்வம்.....நாய் பெற்ற தெங்கம் பழம்” எனும் பழமொழிச் செய்யுளிடத்தும் காணலாம். பாணர் என்பார் குறுந்தொகையில் கூறும் “நோயை நெஞ்சே நோய்ப் பாலோயே” என்ற அடியின் கருத்து செந்நாப் போதாரின் அமுத வாக்காய் “நோயெல்லாம் நோய் செய்தார் மேலவாம்...” என்பதனுள்ளிருப்பதேயாகும்.

வள்ளுவர் நூலினுக்கு அவரது கருத்தமைதிதானே கருதி வாய்ப்புடை யுரை வரைந்த ஆசிரியப் பெருமான் ‘பன்னுதமிழ்த்தேர் பரிமேலழகர்’ தமது

குறுந்தொகையும் குறட்பாவும்

உரையகத்து சிறப்புடைத்தாய உயரிய தமிழ் நூல்களின் கருத்துக்களை உரை நடையிற்கொண்டு வரைந்துளார். அங்ஙனம் வரையப்பெற்ற நூல்களுள் நமது நல்ல குறுந்தொகையும் ஒன்றதாகும். இவ்வுண்மையினைக் காட்டுவதோரீண்டு சான்றுகளைக் கூறுவாம்.

பொழுது கண்டிரங்கலெனும் அதிகாரம் ஐந்தாம் செய்யுளுக்கு வந்த உரையில் “கங்குல் வெள்ளத்திற்குக் கரையாய் வாராநின்றது” என வருகின்றது. இங்குக் குறிப்பிட்ட கங்குல் வெள்ளம் எனும் சொற்களைக்கொண்ட அடி குறுந்தொகையிலுள்ளதாவது “..... வாழி தோழி, கங்குல் வெள்ளம் கடலினும் பெரிதே” என்பதாகும். நிறையழிதல் எனும் அதிகாரத்தில் வரும் “செற்றார் பின் செல்லாப் பெருந்தகைமை காமநோய் உற்றார் அறிவதொன்றன்று” எனும் குறளுக்குப் பரிமேலழகர் பகர்ந்த உரையில் “நன்றென வுணரார் மாட்டுஞ் சென்றே நிற்கும்” எனும் சொற்கள் காணப்படுகின்றன. இச்சொற்களமைந்த குறுந்தொகைச் செய்யுளடியொன்றாவது யாதெனில் ‘காமம்.....யாவதும், நன்றென உணரார் மாட்டுஞ், சென்றே நிற்கும் பெரும் பேதைத்தே’ என்பதே.

எல்லாம் வல்ல இறைபேருளால் நம் செந்தமிழ் மொழியாம் பைந்தமிழ்மீது ‘பல்லுயிரும் பலவுலகும் படைத்தளித்துத் துடைக்கினுமோர் எல்லையுமபாம் பொருள்முன் இருந்தபடி யிருப்பதுபோல்’ இருந்து, தமிழ் மக்களின் பண்டை மாண்பினையும் அவர்தம் அறிவு, புலமை, வீரம், கல்வி முதலியவற்றை அங்கையுறு நெல்லியெனக் காட்டி நிற்கும் தெய்வப் புலமை மிக்க சான்றோரின் தீஞ்சுவைப் பாக்களும் நூல்களும் எண்ணிறந்தவையாக்கொண்டு பண்புடைத்தாய் நிற்கின்றது. தமிழன்னையின் இரு கண்ணையென தமிழ்மொழிக்கண் விளங்குவன பொய்வருங் கற்பனைகள் புகன்றிடாத நூல்கள், ‘வள்ளுவர் செய்திருக்குறளும்’ நல்ல குறுந்தொகையுமாம். மாபெருஞ் சிறப்புடைத்தான இவ்வருமந்த நூல்களிரண்டனையும் பெற்று அதனுள் அடங்கிக்கிடக்கும் அரும் பெருங் கருத்துக்களை யுய்த்துணர்தல் தமிழ் மக்கட்குக் கடமையாம்.

“ பழக்கப்பட்டு விடுதலும், கலையுணர்ச்சியும் ”

யுஜீன் அமல்ராஜ் (பழைய மாணவர்)

கலையுணர்ச்சி ஓர் பெரும் திரவியம். இது ஓர் அபூர்வ அறுபவம். இதன் இன்பம் இவ்வனுபவத்தை நுகர்ந்த யாவரும் அறிவர்.

இவ்வுணர்ச்சிக்கு அவசியமான தயாரிப்புகள் எவை? நாம் எவ்விதமாய் பயிற்சி பெற்றிருந்தால் இவ்வின்பத்தை ருசிக்கலாம்?

பல பெரும் ஆசிரியர்களை வாசித்து, நமது கற்பனைசக்தியை தட்டி எழுப்பி உலக தத்துவ ஞானத்தை நம் மனக் கண்களால் கண்டு, ஓர் உள்ள நெகிழ்ச்சி யடைந்து, சந்திராகிரணங்கள்போன்ற ஓர் குளிரந்த பூரிப்பு நிலவ, நமது மனத் தைப் பழக்கிவைத்திருந்தால், இப்பெரும் கொடையாகிய கலையுணர்ச்சியை அனு பவித்துக் களிக்கலாம்.

அறிவாளிகள் பலர் கூறுகின்றனர்: ‘இந்த ஆத்ம சக்தி நம்மிடம் உண்டானபின், பாஷை, தேசம், மதம் இவ்வேறுபாடுகள் இக்கலையுணர்ச்சிக்கு இடையூறுகளில்லா.’ இது முற்றிலும் உண்மையா, இல்லாவிடில் எவ்வளவு தூரம் என்று சிறிது இங்கு ஆராய்வோம்.

ஆங்கில சங்கீதத்தை ரசிக்கும் அநேகர் ஏன் நமது கர்நாடக சங்கீதத்தை ரசிக்க இயலாதவராயிருக்கின்றனர்? ஒவியம், சிற்பம், காவியம், இவைகளிலும் இந்த முரண்பாடு உண்டாகிறது. இது குரோதம் அல்லது இன வேற்றுமையால் உண்டாதலுமுண்டு. ஆனால் நாம் எடுத்துக்கொண்டு பேசுவது, நல்ல மன துடன் உண்மையாகப் பிரயாசைப்படுவோரது நிலமையே.

சிலர் இம்முயற்சியில் வெற்றிகொண்டு, நாம் மேற்கூறியவரைப்போல் மனம் தோல்வியடையாது, சகல ஜாதி ஜனங்களுக்கும் உரியவராகிவிடுகின்றனர். இதன் மர்மம் என்ன? பழக்கப்பட்டு விடுதல்.

மில்டனுடைய “பாரடைஸ் லாஸ்ட்”, ஹோமரது “ஒடிஸ்ஸி, இலியட்”, டான்டியின் “திவினா கொம்மேதியா” இவைபோன்ற காவியங்களை வாசித்தபின், கந்தபுராணம், கம்பராமாயணம், பெரும் பாரதம் இந்நூல்களை வாசிக்க வந்தால், இவ்விந்தியக் காவியங்கள் தோன்றிய காலம், இடம், மதம், நாகரிகம் இவற்றையெல்லாம் சரியாக நம் மனத்தினையில் கொண்டிருக்கவேண்டும். இல்

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லாவியில் சீதை என்ன ஹெலனைப்போன்றவளா, பியாட்ரிஸ் போன்றவளா திளையாதி, யுலிஸ்ஸிஸ் போன்றவளா இராமன் என்ற தாறுமாறான கேள்விகள் தோன்றும். பிற நாட்டுப் பெரும் நூல்கள் கூறுவதை நமது பழய எண்ணங்க ளால் நிர்ணயிக்காது, முதலில் அவை என்ன கூறுகின்றன என்பதைப் பேத மின்றி அறிதல்வேண்டும். இதன்பின்பு நாம் வாசித்த பழய நூல்களையும் இப் புதியவைகளையும் ஒப்பிடவேண்டும். அப்பொழுதுதான் இவைகளின் புலமை சரியாகப் புலனாகும்.

இந்த முன் தயாரிப்பையே நான் ஒரு விதத்தில் ‘பழக்கப்பட்டு விடுதல்’ என்று கூறுகிறேன்.

இதற்கு விரோதமானவை, ஒவ்வொரு இனத்தினரின் வித்தியாசமான நினைக்கும் விதமும், மனவளர்ச்சியின் இயற்கையுமே.

ஆதிகாலத்து கிரேக்கர் சரீர அழகுதான் சர்வமும் என்றிருந்தனர்; ஆனால் இந்தியரோ சரீர வனப்பு ஓர் முடிவல்ல: ஆத்மாவின் குணங்களை வெளிப்படை யாக தோற்றுவனக்க கடவுள் கொடுத்த ஓர் கருவி என்றிருந்தனர். தமது மதக் கொள்கையால், தாவரம், மிருகம் யாவையும் பரமனின் ஆத்மாவைப் பாகங் கொண்டு, நமக்கு சமத்துவமானவை என்று இந்துமத இந்தியர் எண்ணுகின்ற னர். ஆனால் மேல் தேசத்தவரோ, மனிதன் மற்ற சிருஷ்டிகளைவிட கடவுள் முன்னிலையில் உயர்ந்தவன் என எண்ணுகின்றனர். இவ்வித வேறுபாடான மனப்பான்மை வேரூன்றியிருக்கும் இருதிறத்தாரிடத்தும், ஓர் விபரீதம் தோன் றுவதில் என்ன ஆச்சரியம் இருக்கிறது? இதைத்தான் நினைக்கும் விதத்தில் வித்தியாசப்படுதல் என்று கூறுகிறேன். இவை மேம்பாடான எண்ணத்தின் வேறுபாடல்ல: இரத்தத்தில் கலந்து, நினைக்கும் விதத்தையே வித்தியாசப் படுத்தும் ஓர் அம்சம் இது. இவ்வித இரு ஊற்றுகள் பாயும் இடம் வெவ்வேறு விளைவைக் கொடுப்பதில் அசம்பாவிதமான செயல் என்ன இருக்கிறது?

உலக அந்தஸ்து, சமூக நிலைமை, நாட்டின் வழக்கபழக்கங்கள், இவைக ளால் செய்யப்படுவது மனவளர்ச்சியின் இயல்பு. (Psychological develop-ment) இது நமது மூளையை வளர்க்கும் தாதுக்களின் விளைவு.

இவ்விரண்டை விட்டு, நாடு, மதம், பாஷை இவற்றையெல்லாம் ஆதாரமாகக் கொள்ளாத மற்றொரு மனோபாவமும், இந்த இடையூறின் கர்த்தாவாக இருக் கிறது. இதையும் “பழக்கப்பட்டு விடுதல்” என்றே கூறுகிறேன். புலா லையே உண்டு பழக்கப்பட்ட வேடுவன், வேறு காரணம் எதுவுமின்றி தாவா

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உணவுகளை வெறுத்தல், இவ்வார்த்தைகளை நன்கு விளக்கிக் காட்டும் ஓர் உதாரணம்.

இந்த அரிய கலையுணர்வைப் பெற நாம் வெகு நல்ல எண்ணத்துடனே பயி லுங்கால், பாற்கடலிலிருந்து விஷம் தோன்றியதுபோல், இந்த தீய மனோபாவம் தக்க காரணமின்றி ஓர் விஷயத்தை ருசிக்கவோ, வெறுக்கவோ செய்கிறது. வெறுக்கச் செய்வதில் மட்டும் ஆபத்து உண்டு என்று எண்ணவேண்டாம்: விரும்பச் செய்வதிலும் பெரிய ஆபத்து உண்டு.

கட்டின மனைவி அழகாய் இல்லாவிடினும், அவளையே தினமும் கண்டு, உறவாடுவதால், அழகாய்த்தான் இருக்கிறாள் என்று நம் மனதை நம்மையறியா மலே தேற்றிக்கொள்வதில்லையா? இது பழக்கப்பட்டு விடுதலின் தீய அம்சமே யாகும். ஆனால் குடும்ப சந்தோஷத்திற்கு இஃது கடவுள் கொடுத்த ஓர் பாக் யமான நன்கொடை. ஆனால் கலையுலகிலோ, இது வருந்தத்தக்க ஓர் ஸ்தானமே பெறுகிறது.

ஓர் ஓவியம் நன்றாய் இருக்கிறது என்று கூற காரணம் நமக்குத் தோன் றவேயில்லையாயினும், அதை அநேக தரம் பார்த்துப் பார்த்து, மற்றவர் நன்றா யிருக்கிறது என்று கூறக்கேட்டு, நம்மையறியாமலே நாம் அந்த ஓவியத்தை விரும்ப ஆரம்பித்துவிடுகிறோம். உண்மையான காரணம் அறிந்து இந்தியக் கட் டிட சாஸ்திரக் கலையை (Indian Architecture) விரும்புதல் மெச்சத்தக்கதே. ஆனால் குடும்பத்தில் கோவிர்தாவென, இதைப் புகழ்வோர் கூட்டத்தில் சேர்ந்து, தானும் இக் கலையை நிலைநிறுத்தப் புகுந்தால், இக் கலைமகள் கண் கலங்குவதில் என்ன தவறு இருக்கிறது? இந்திய வகையில் எழுதப்படும் சித்திரங்களை அடிக் கடி கண்டதன் காரணமாக, இதைத் தன் மாதிரிகையாகக் கொள்ளுபவனது கடி கலையறிவு எவ்வளவு பயிற்சி பெற்றிருக்கப்போகிறது? இதே முறையில் நம் காவியங்களைப்பற்றியும் கூறலாம். இப்படிப்பட்ட மனிதர் கலை அபிவிருத்திக்கு உதவியா, இடையூறு? இவர் நன்மாமா, புல்லுருவியா?

இது சம்மந்தமாக, தேசிய பற்றும் பலரிடத்தில் புல்லுருவிப்போல் தழைத் தோங்கி இருப்பது எவ்வளவு பயத்திற்கிடமான விஷயம்? நாட்டின் எழுச் சிக்கு, இதை ஆதாரமாகக் கொள்வோரது கதி, மண் குதிரையை நம்பி ஆற்றில் இறங்கியவன் கதிர்தான்.

இந்தத் தீய “பழக்கப்படுத்தல்”, விஷமென யாவரும் அதற்றல்வேண்டும். ஊன்றிப் பேயாத மழை, மழையாயிருந்தபோதிலும் திங்கே விளைவிப்பதுபோல்,

## भरतलक्ष्मणौ

மேற்பார்வைக்கு குற்றமற்றதாக இப் “பழக்கப்பட்டு விடுதல்” தோன்றிடினும், உண்மையில் இது வெகு ஆபத்தானதே. நம்மில் பலரிடத்து இந்தப் “பழக்கப்பட்டு விடுதல்” என்னும் ஒரு மனப்பான்மையே கலையறிவை வளர்த்து வருகிறது.

கலையைப்பற்றி விசேஷமாக நாம் இங்கு தர்க்கிக்கிறோம். இது வாழ்க்கையில் மற்றத் துறைகளிலும்—மதம், ராஜ்யக் கொள்கை, சிநேகிதரைத் தெரிந்து கொள்ளுதல், இவைகளிலும்—இப் “பழக்கப்பட்டு விடுதல்” வெகு நிர்ப்பாக்கியங்களின் சுணை.

இந்த அழகிய ஜந்துவை நம் இருதயத்தில் பாலும் பழமும் கொடுத்து வளர்த்து வருகிறோம். ஆனால் இந்த அழகிய மின்மினிப்பு விஷப் பாம்பின் வெளித்தோற்றமென்று நாம் அறிதல் வேண்டும்.

பாண்டியன் மதுரைமாநகரையும், தன் வம்சத்தையும் அறவே அழித்தான் : மனுச் சக்கிரவர்த்தி இன்றும் தனது ‘மனுச்சட்டத்தால்’ நம்மத்தியிலேயே ஜீவிக்கிறான். ஏன்?

## भरतलक्ष्मणौ ।

by V. Rangan, V Hons.

सन्ति हि लोके विविधासु भाषासु गद्यपद्यनाटकात्मकाः बहवो ग्रन्थाः । तेषु संस्कृतभाषायां विरचिता अनेके ग्रन्थाः पाश्चात्यैरपि श्लाघ्यमानविभवाः परं स्थानमधितिष्ठन्ति । धर्मस्वरूपप्रतिपादने, तान्धर्मानुष्ठितवतां चरित्रानुवर्णनेन धर्माणामादर्शप्रदाने च ताः गैर्वाणीकृतयः निरूपमाः समुल्लसन्ति । तास्वपि च कृतिषु इतिहासपुराणादयः “मनुष्यः विविधेषु अवसरेषु ऐहिकामुष्मिकसुखानि धर्मभ्रंशं विना कथमासादयेत्” इति विषयं कथारूपेण विवृण्वन्ति । श्रीरामायणाख्यः इतिहासश्च धर्मप्रतिपादकेषु ग्रन्थेषु प्रथमं पदमध्यास्ते । तस्मिन्काव्ये निरूपिताः रामादयः पितृभक्त्यादिधर्माणां आदर्शाः विराजन्ते । तत्र उपबृंहितेषु विविधेषु धर्मेषु भ्रातृधर्मः अत्र किञ्चिदुपपाद्यते ।

## भरतलक्ष्मणौ

युद्धकाण्डान्ते महर्षिर्वाल्मीकिः रामायणश्रवणफलमेवं व्याहरति—

“आयुष्यमारोग्यकरं यशस्यं सौभ्रातृकं बुद्धिकरं शुभं च ।  
श्रोतव्यमेतन्निजमेन सद्भिराख्यानमोजस्करसृष्टिकामैः ॥”

अस्माच्छ्लोकात् भ्रातृधर्मः अस्मिन्काव्ये सम्यगाविष्कियते इति प्रतीयते । अत्र चत्वारः भ्रातृवर्गाः सन्ति । प्रथमः रामलक्ष्मणभरतशत्रुघ्नवर्गः, द्वितीयः जटायुसंपातिवर्गः, तृतीयः वालिसुग्रीववर्गः, चतुर्थः वैश्रवणरावणकुम्भकर्णविभीषणवर्गः । एषु भ्रातृषु भरतलक्ष्मणौ स्ववृत्तेन भ्रातृधर्मं लोकेभ्यः प्रतिपादयतः । तयोश्चरितं किञ्चिद्वर्णयित्वा तारतम्यं च यथामति किञ्चित्प्रदर्शयते ।

लक्ष्मणस्य भ्रातृस्नेहं महर्षिः वाल्मीकिः एवं वर्णयति—

“बाल्यात्प्रभृति सुस्निग्धो लक्ष्मणो लक्ष्मिवर्धनः ।  
रामस्य लोकरामस्य भ्रातुर्ज्येष्ठस्य नित्यशः ॥

सर्वप्रियकरस्तस्य रामस्यापि शरीरतः ।

लक्ष्मणो लक्ष्मिसंपन्नः बहिः प्राण इवापरः ॥

न च तेन विना निद्रां लभते पुरुषोत्तमः ।

मृष्टमन्नमुपानीतमभ्राति न हि तं विना ॥

यदा हि हयमारूढः मृगयां याति राघवः ।

तदैवं पृष्ठतोऽभ्येति सधनुः परिपालयन् ॥” इति ।

रामे लक्ष्मणस्यानुरागं कैकेय्यै प्रदर्शयन्ती कुब्जा मन्थरा एवं भाषते—

लक्ष्मणो हि महेष्वासः रामं सर्वात्मना गतः ।

गोप्ता हि रामं सौमित्रिः लक्ष्मणं चापि राघवः ।

अश्विनोरिव सौभ्रात्रं तयोर्लोकेषु विश्रुतम् ॥” इति ।

भ्रातृभक्त्या लक्ष्मणः सबान्धवस्य स्वपितुः निग्रहार्थमपि आत्मानं सिद्धं निवेदयति । वनगमनाय कृतनिश्चयं भ्रातरं दृष्ट्वा स्वयमपि वनाय प्रतिष्ठते । वने रात्रावपि जाग्रदेव भ्रातरं परिपालयति । रामस्य गुप्त्यर्थमागतेन निषादाधिपतिना गुहेन निद्रासेवनाय प्रार्थ्यमानः सौमित्रिः स्वजागरणकारणं अस्मिन्श्लोके प्रतिपादयति—

“कथं दाशरथौ भूमौ शयाने सह सीतया ।  
शक्या निद्रा मया लब्धुं जीवितं वा सुखानि वा ॥”

लक्ष्मणस्य भ्रातृस्नेहे मातृवात्सल्यस्य साधर्म्यं दृश्यते । माता तु सुते निर्विण्णे तमाश्रयस्य कर्तव्ये कर्मणि प्रोत्साहयति । तद्वत् सौमित्रिरपि सीताहरणसंतप्तं पम्पा-सरस्तीरे प्रलपन्तं भ्रातरं राघवं आश्वासयन् तं सीतोपलब्ध्यर्थे प्रयत्ने एवं प्रोत्साहयति ।

“उत्साहो बलवानार्थं नास्त्युत्साहात्परं बलम् ।  
सोत्साहस्यास्ति लोकेऽस्मिन् न किञ्चिदपि दुर्लभम् ॥

उत्साहवन्तः पुरुषाः नावसीदन्ति कर्मसु ।

उत्साहमात्रमाश्रित्य सीतां प्रतिलभेमहि ॥

यज्यतां कामवृत्तत्वं शोकं सन्यस्य पृष्ठतः ।

महात्मानं कृतात्मानं आत्मानं नावबुद्ध्यसे ॥

रामरावणयुद्धे प्रवर्तमाने रावणः विभीषणस्योपरि दुर्निवारां काञ्चन शक्तिं क्षिपति । तां शक्तिं सौमित्रिः स्ववक्षसा धारयति । एवं राघवप्रतिज्ञायाः भङ्गो मा भूदिति आत्मनः प्राणानपि त्यक्तुं प्रवृत्तस्य सौमित्रेराशयः सौभ्रात्रकाष्टायाः निदर्शनं भवति ।

रामायणे करुणारसभूयिष्ठं भावपूर्णं घट्टमेकं अद्य प्रदर्शयामि । एषु श्लोकेषु जानकी लक्ष्मणस्य त्यागादिगुणान् हनूमत्समीपे विवृणोति—

“स्रजश्च सर्वरत्नानि प्रिया याश्च वराङ्गनाः ।  
ऐश्वर्यं च विशालायां पृथिव्यामपि दुर्लभम् ॥

पितरं मातरं चैव संमान्याभिप्रसाद्य च ।

अनुप्रव्रजितो रामं सुमित्रा येन सुप्रजाः ॥

आनुकूल्येन धर्मात्मा त्यक्त्वा सुखमनुत्तमम् ।

अनुगच्छति काकुत्स्थं भ्रातरं पालयन्वने ॥

सिंहस्कन्धो महाबाहुः मनस्वी प्रियदर्शनः ।

पितृवद्वर्तते रामे मातृवन्मां समाचरन् ॥

ह्रियमाणां तदा वीरः न तु मां वेद लक्ष्मणः ।  
वृद्धोपसेवी लक्ष्मीवान् शक्तो न बहुभाषिता ॥

राजपुत्रः प्रियः श्रेष्ठः सदृशः शशुरस्य मे ।

मत्तः प्रियतरो नित्यं भ्राता रामस्य लक्ष्मणः ॥

नियुक्तो धुरि यस्यां तु तामुद्वहति वीर्यवान् ।

यं दृष्ट्वा राघवो नैव वृत्तमार्थमनुस्मरेत् ॥

स ममार्थाय कुशलं वक्तव्यो वचनान्मम ।”

स्वबन्धुवित्तसुखादीनां सर्वस्वपरित्यागः, तत्स्नेहस्य मातापितृवात्सल्यसाधर्म्यं, सीतापेक्षयापि लक्ष्मणस्य रामबुद्ध्या प्रियतरत्वं, रामस्य पितृमरणशोकमपि विस्मारयितुं कुशलस्य लक्ष्मणकैङ्कर्यस्य महनीयता इत्येते बहवः लक्ष्मणस्य गुणागुणाः सर्वं साक्षात्कृत-वत्या वैदेह्या एव वर्ण्यन्ते ।

मारीचमायामृगस्य ‘हा लक्ष्मण, हा सीते’ इति आर्तस्वरं श्रुत्वा सीता ससंभ्रमं रामस्य रक्षणार्थं गन्तुं लक्ष्मणमादिशति । सौमित्रिस्तु अजय्यस्यात्मभ्रातुः पराक्रमाभिन्नः ‘नायमग्रजस्याक्रन्दः, तेन हन्यमानस्य मायामृगस्यार्तरव एव’ इति तां सान्त्वयति । किंतु मैथिली तस्य सान्त्ववचनान्यनादृत्य तं बहुधा वाक्यशल्यैः तुदति । एषु श्लोकेषु पूर्वकृतलक्ष्मणनिन्दायै पश्चात्तपन्या जानक्या कृता लक्ष्मणगुणप्रशंसा अतीव भावपूर्णा ।

अथ भरतस्य भ्रातृस्नेहमधिकृत्य वक्तुमारभ्यते । केकयेभ्यः विनिवृत्तः भरतः रामं प्रव्रजितं श्रुत्वा मात्ने अतीव कुप्यति, तां बहुधा निन्दति च । रामभयादेव केवलं मातृवधं न करोति । वसिष्ठादिभिः राज्यभरणाय नियुक्तोऽपि राज्यं तृणाय मत्वा रामं प्रत्यानेतुं चित्रकूटाय प्रतिष्ठते । मध्येमार्गं गुह्यस्य विषयानभिगतः तत्र इन्द्रदीतरो-र्मूले रामशय्यामवेक्ष्य भृशं निर्विण्णहृदयः एवं विलपति—

“अजिनोत्तरसंस्तीर्णे वरास्तरणसंचये ।

शयित्वा पुरुषव्याघ्रः कथं शेते महीतले ॥

प्रासादबरवर्येषु शीतवत्सु सुगन्धिषु ।

भरतलक्ष्मणौ

उषित्वा मेरुकल्पेषु कृतकाञ्चनभित्तिषु ॥  
गीतवादित्रनिर्घोषैः वराभरणनिःस्वनैः ।  
मृदङ्गवरशब्दैश्च सततं प्रतिबोधितः ॥  
हा हन्ताऽस्मि नृशंसोऽहं यत्सभार्यः कृते मम ।  
ईदृशीं राघवः शय्यामधिशेते ह्यनाथवत् ॥”

ततश्चित्रकूटं गतस्यास्य कैकेयीसुतस्य रामनिवर्तनमोघोद्यमस्य प्रायोपवेशव्यवसायः  
रोमाञ्चं जनयति । ऋषिगणैः कथं कथमपि सान्त्वितः रामस्य पादुके गृह्णन् एवं  
प्रतिज्ञां करोति—

“चतुर्दश हि वर्षाणि जटाचीरधरो ह्यहम् ।  
फलमूलाशनो वीर भवेयं रघुनन्दन ॥  
तवागमनमाकाङ्क्षन् वसन्वै नगराद्बहिः ।  
तव पादुकयोर्न्यस्तराज्यतन्त्रः परन्तप ॥  
चतुर्दशे हि संपूर्णे वर्षेऽहनि रघूत्तम ।  
न द्रक्ष्यामि यदि त्वां तु प्रवेक्ष्यामि हुताशनम् ॥”

एवं सुभ्रातृणामग्रेसरौ भरतलक्ष्मणौ भ्रातृधर्मं लोकेभ्य उपदिशतः । तयो-  
र्भ्रातृभावे किञ्चिद्भेदः अवगम्यते । लक्ष्मणस्य रामाद्विप्रयोग एव नास्ति । वनेऽपि सः  
भ्रातरं छायेवानुगच्छन् तस्य सुखदुःखानि स्वयमपि अनुभवति । भरतस्तु चतुर्दश  
समाः रामाद्वियुक्तो भवति । तस्य भ्रातृप्रेम लक्ष्मणस्य भ्रातृप्रेम्णा तुल्यमेव । तस्य  
रामवियोगजं दुःखं अतीव दुःसहमासीदित्यस्मिन् विषये नास्माकं संशयलेशोऽप्यस्ति ।  
एतस्मात् कारणात् लक्ष्मणः भरतात् भाग्यवत्तरः । भरतोऽपि एनमाशयं दृढीकुर्वन्निव  
श्लोकेऽस्मिन् इत्थं व्याहरति—

“धन्यः खलु महाभागः लक्ष्मणः शुभलक्षणः ।  
भ्रातरं विषमे काले यो राममनुवर्तते ॥”

भरतस्य त्यागः लक्ष्मणस्य त्यागात्प्रशस्यतरः । सत्यप्रतिज्ञस्य दशरथस्य वचनात्  
मातुः कैकेय्या वरप्रार्थनया वसिष्ठादिगुरुवरणां निर्बन्धेन च स्वयमागतां राज्यलक्ष्मीं

भरतलक्ष्मणौ

तृणीकृत्य, सदा रामप्रत्यागमनकालं अवेक्षमाणः तपश्चरति महात्मा भरतः । लक्ष्मणस्य  
वनवासादिक्लेशः राघवसंसर्गेण तत्कैङ्कर्यरूपसुखानुभवेन च समाश्वासयितुं शक्यः ।  
लक्ष्मणस्य अयोध्यापरित्यागवनसेवनादिरूपस्य तपसः रामसामीप्यं नाम महार्घं फल-  
मापतितम् । तादृशं दास्याचरणस्यापि अवसरमलब्ध्वा परोक्षमेव रामं सदा निध्यायन्  
नन्दिग्रामे विद्यमानोऽपि वन्यवृत्तिमाचरतः भरतस्य फलसङ्गप्रसक्तिरहिता रामभक्तिः  
सुतरां श्लाघनीया ।

“अहं सर्वं करिष्यामि जाग्रतः स्वपतश्च ते ।”

इति आत्मानमर्पयति रामस्य चरणयोः लक्ष्मणः । भरतस्तु ‘अहं राज्यं च रामस्य’  
इति आत्मानं, आत्मीयं राज्यं च रघुवरपदद्वन्द्वे अर्पयति । रामसेवया आत्मानं  
कृतकृत्यं मन्यमानस्य लक्ष्मणस्यापेक्षया रामपादुकामात्रसेवया परितुष्टचित्तस्य साधोः  
भरतस्य दासवृत्तिः अधिकमावर्जयति पारतन्त्र्यरसाभिज्ञानां भक्तानां चेतांसि ।

भरतलक्ष्मणयोर्मध्ये भरतस्य रामे पारतन्त्र्यं अधिकं दृश्यते । अयोध्यायामेव  
स्थातुं पुनः पुनर्निर्बद्धोऽपि लक्ष्मणः रामानुगमनमेव प्रार्थयते । रामप्रब्राजनरूपं पापं  
कृतवतो दशरथस्य, तत्संबद्धानां अन्येषां च वधं प्रतिजानन् रामस्य हृदयमाकुलयति  
सौमित्रिः । पुनरपि रामप्रत्यानयनाय चित्रकूटमागच्छता भरतेन सह योद्धुमनुज्ञां  
प्रार्थयन् लक्ष्मणः रामहृदयमजानन् आत्मानं रामस्यापि रक्षकं मन्यमानश्च स्वातन्त्र्य-  
माविष्करोति । आरण्यकाण्डे मायामृगग्रहणार्थं गच्छता रामेण सीतासंरक्षणाय

“अप्रमत्तेन ते भान्यं आश्रमस्थेन सीतया”

इति दृढमादिश्य उदजे स्थापितः सौमित्रिः सीताया आक्रोशवचनैर्विद्धः सन् आत्मनो  
मनोव्यथां च बहु विगणयन् रामाज्ञां किञ्चिदतिक्रामति । भरतस्तु अचेतनसमाधि-  
गम्य आत्मनः स्वातन्त्र्यं कदापि न अवलम्बते । भ्रातुः भावसर्वस्वं अभिज्ञाय,  
तदाज्ञाकरणे अनुलां दास्यवृत्तिं आचरति । वनवासाद्रामं निवर्त्य तं राज्ये अभिषेक्तुं  
निश्चित्य चित्रकूटं आगतवान् भरतः रामस्य संकल्पमनुरुद्ध तदाज्ञामिव तत्पादुके  
शिरसा प्रतिगृह्य कोसलान् प्रत्यागच्छति ।

## SACRED HEART HOSTEL AND BOARDING HOUSE CHRONICLE

समाप्तेषु चतुर्दशसु वर्षेषु रामागमनं प्रतीक्षमाणं क्षणिकमपि विलम्बमसहमानं जटावल्कलधारिणं हुतवहप्रवेशोद्यतं करणत्रयेणापि राममेवानुध्यायन्तं महात्मानं भरतं अन्तश्चक्षुषा दृष्टवतां विमर्शकाणां “भरत एव विग्रहवान् भ्रातृधर्म” इत्यत्र न जायेत संशयलेशोऽपि ।

भ्रातृधर्मे सर्वोत्कृष्टत्वं लोकाय प्रकटीकुर्वतः श्रीरामचन्द्रस्य—

“न सर्वे भ्रातरस्तात भवन्ति भरतोपमाः”

इति वचनमनुस्मृत्य, सर्वे भ्रातरः यथाशक्ति भरतमनुगन्तुं व्यवस्येयुः इति च आशास्य विरम्यते ॥

## Sacred Heart Hostel and Boarding-House Chronicle

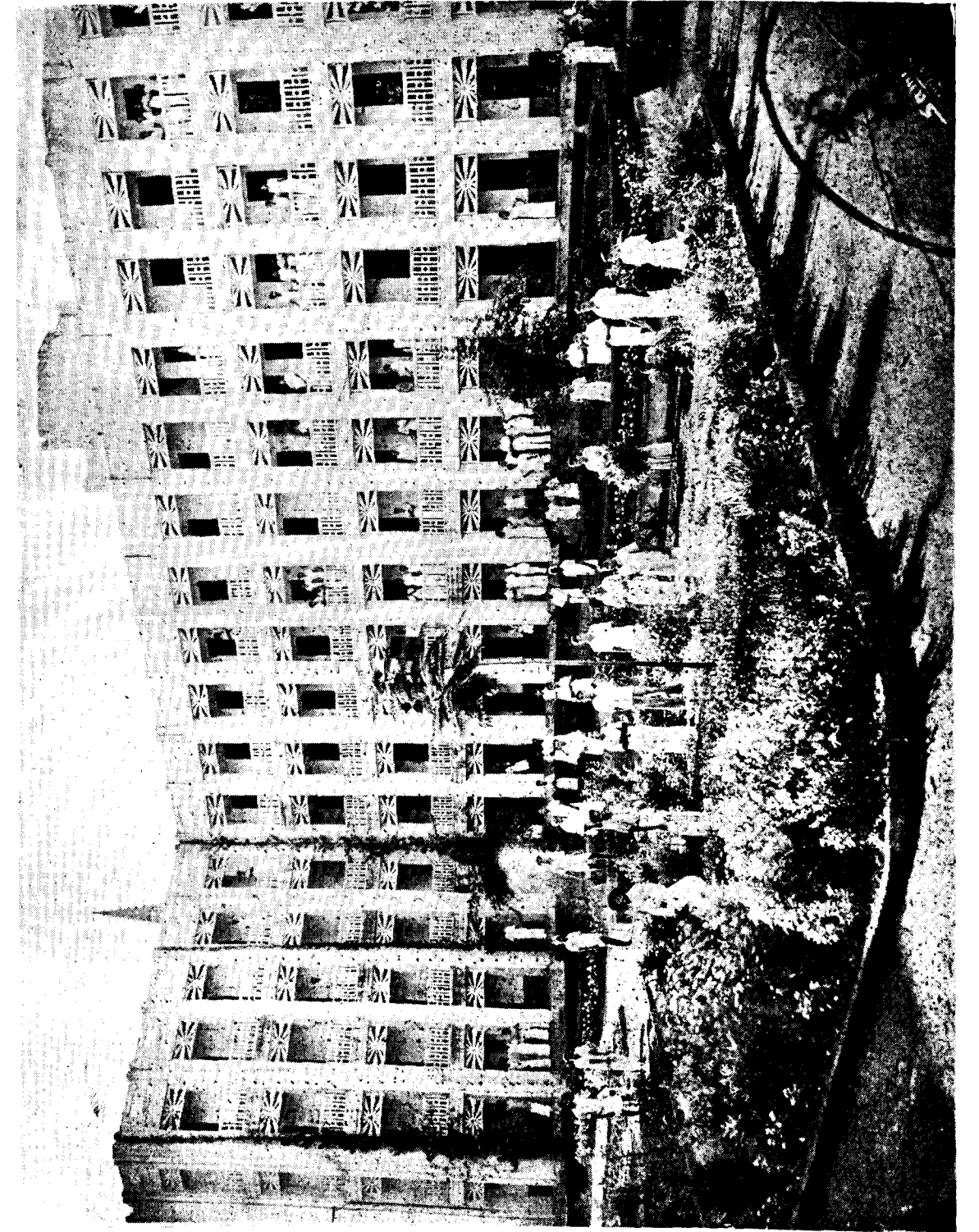
by A. Vas

*June 25th.*—College re-opens. We regret to learn from official circles that two of our distinguished generals—Principal and General Prefect—are besieged by I. U. C. (Euclids) and I Division (Malabar) respectively.

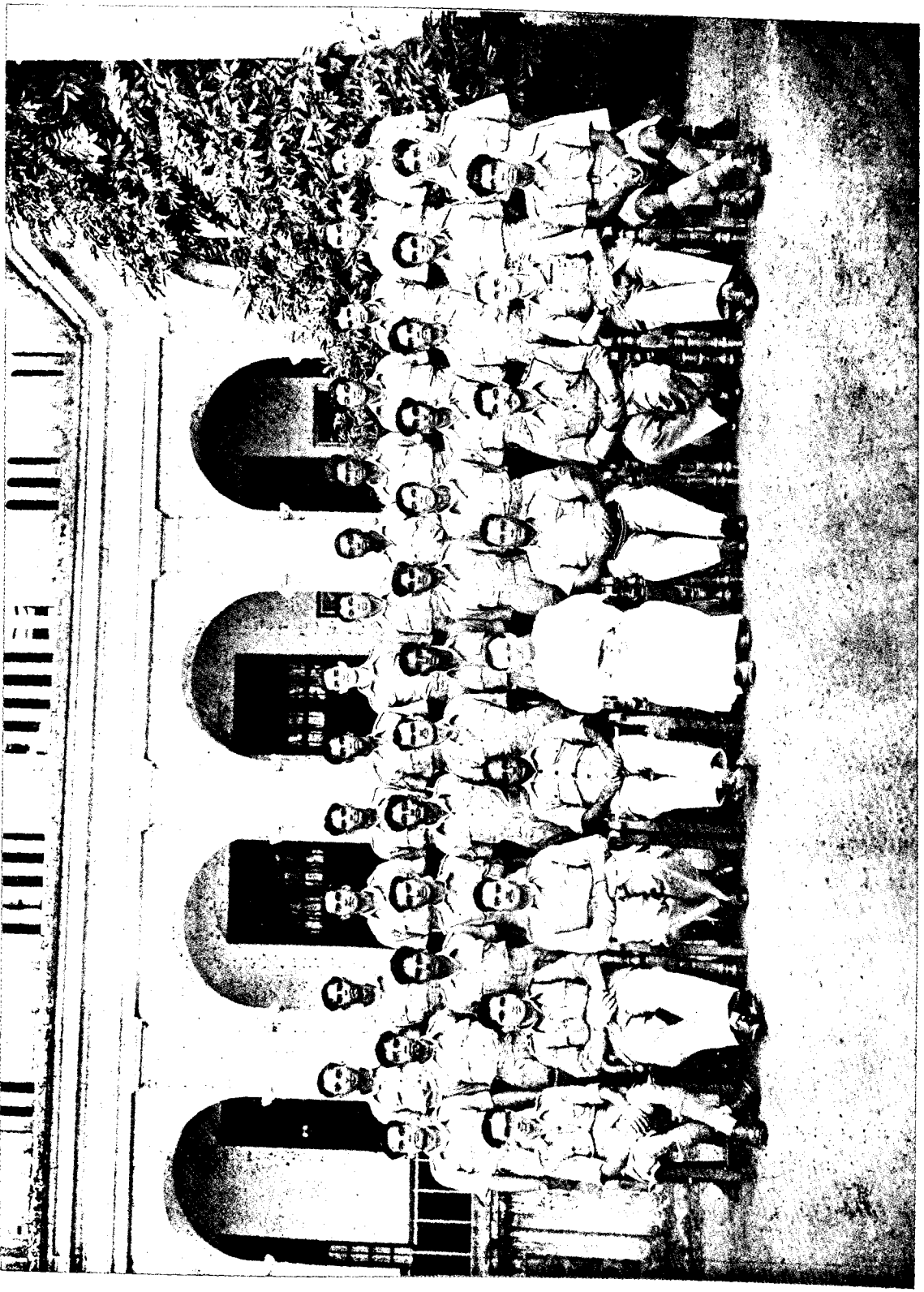
*June 27th.*—Our warden speaks: “Doors are not the playthings of the winds.” Beware his secret night weapon, that long silver-clad torch with its powerful beam of light,—a searchlight in miniature! And during the day, Fr. Fournier's brass keeps sounding a constant challenge to “free-time study” advocates!

*July 1st.*—All homage to our new officers. Pray, Masters, a word with you—efficiency commends itself, A Hostel cabinet is a most welcome chamber. But let it not degenerate into one of too frequent nutations!

*July 7th.*—Psychologically, there is no bath without song; but we are reminded from above that psychology is no norm of Hostel regulations regarding silence. Only a Hostel radio can take away this monopoly from our nightingales! Perhaps next year?



THE SACRED HEART HOSTEL.



War Certificates A Part-II & B Parts I & II Candidates of  
B Company (St. Joseph's College), 2nd Madras Bn. U. O. T. C.  
[RESULTS:—100 per cent pass.]

SACRED HEART HOSTEL AND BOARDING HOUSE CHRONICLE

July 21st.—A new custom creeps in among us,—is it not because of our gregarious instinct?—to stage farewells to friends leaving the Hostel during the year. Examples: Jacob Andrews and Joseph Nathan.

July 25th.—We grow indoor-minded, not of course to be identified with bookworms;—carroms and chess are initiated into our recreation room. And debates! What can match with them for interest?

July 31st.—Feast of St. Ignatius of Loyola, that dauntless soldier saint! A radio playing the whole day kept all books away. In the evening, the Lawley Hall screen took us into movieland.

August 7th.—The Hostel Magazine arrives to add to the novelties,—“Our Life” in a dozen foolscaps. Was the editor scared by printer’s devils?

August 11th & 15th.—We “retreat” from fleeting fancies into eternal realities with an Irish wit, Rev. Fr. Coyle, in command of operations. The reaction sets in quick—the next day a “treat” at Pandamangalam villa!

August 22nd.—World Sodality Day. Round their Mother they rally, our youthful band of Sodalists. Proud of their world numbers, seven million strong; they honour their Queen with an Academy and a Procession.

September 4th.—Rector’s Day Celebrations everywhere—college chapel, Lawley Hall, Mahé Ground, Hostel, Refectory.....

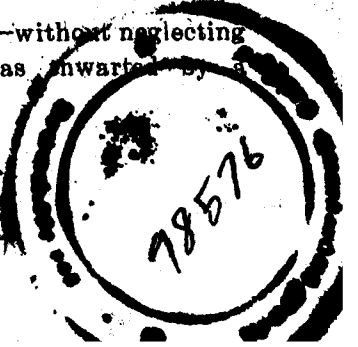
September 13th.—The inevitable evil day dawns. Examinations! An earnest wish is crossed; the paper delusion passes away. The atmosphere grows stiff and bookish.

September 17th.—Is friendship so evanescent? Books that were courted to distraction these four days are now kicked high in pleasant contempt. Holidays! Is there a greater joy?

October 4th.—Hum! Black Monday. Made blacker still to some by the disclosure of marks. “Perseverance” is no vain advice; success oft figures in the tail.

October 7th.—Our warden takes to Nature culture,—without neglecting us, of course! But much of his nursing effort was unwarted by a

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## SACRED HEART HOSTEL AND BOARDING HOUSE CHRONICLE

progressively multiplying brood of chameleons that found ready habitation in the luxurious greens!

*October 24th.*—Mission Sunday Celebrations: a summary defeats its purpose. Along the Hostel verandahs stood gay-coloured charts and maps, small and large, round which clustered close all day long bands of youth fired with missionary zeal to witness a spectacular presentation of Mission statistics in circular or staircase fashion,.....all moved you to the realization of the proximity of these missions to you. The Mission Literature Stall was heavily patronized. The evening Academy equally deserves eloquent praise. No thanks are too great to Rev. Fr. Thekaekara and his able assistants for this most successful novel venture.

*October 31st.*—The maiden celebration of the Catholic Students' Day. In the evenings much of histrionic talent was put up on the stage. The function was long, yet delightful in its length and social all round.

*November 6th.*—"Our Life" ventures out into a second release.

*November 10th.*—The Investiture ceremony. Fr. Vice-Provincial officiates at the service and receives the "aspirants" into the Sodality.

*November 20th & 30th.*—During these days, our Infirmary is crowded out and accommodation is refused to several "marginal" cases.

*November 29th.*—A Charity Box stands superimposed on the Letter-Box to receive donations in cash or cheque (on G. P.'s Bank, of course) for relieving victims of famine in Bengal.

*December 2nd.*—Again the sun disappears behind dark clouds; selection examinations commence. Take courage, friends, and face the questions bravely!

*December 3rd.*—Feast of "Our" Francis Xavier. We gather round our beloved warden in the Xavier Hall to offer him our greetings in regal fashion and measure. A huge blessing descends on us at the end of it all!

*December 7th.*—Holidays, happy holidays once more! A last flick of excitement, trunks being hurried out, and carts moving away, and then all cools down to the dead silence of desolation.....

*January 4th.*—All smiles everywhere and greetings in the air! The bustle of re-opening is indeed a sight! A "Proclamation" by the warden

## DEAR OLD CLIVE'S

announces a new General Monitor,—Mr. Bernard Ryan. Congrats to the new, thanks to the old!

*January 7th.*—In words of abiding gratitude, we offer our adieu to Rev. Frs. Thekaekara and Ambrose, assuring them of our prayers for the fulfilment of their noble mission in life. On the 9th evening they leave us in desolate thought and entrain for Kurseong.

*January 21st & 22nd.*—The Regional Conference of the S. I. C. U. F. is held in the Lawley Hall, presided over by H. E. the Bishop of Madura. The students obey, co-operate with Fr. Carty to make it a glorious success.

*January 30th.*—The World Sodality Day and the C. T. A. Anniversary are jointly celebrated in gala fashion under the presidency of the "missionary" Bishop of Salem. The best of the day was the able rendering of Goodier's "What Doth It Profit?" a drama in four Acts, by our College Students. Our hearty congratulations to Rev. Fr. Coyle, to whom we remain ever grateful for standing by us whenever anything is to be put on boards.

*February.*—Requires the chronicle to stop and get ready for print. So here ends a year's story of the dull and the interesting, the novel and the successful. Adieu to our memorable yesterdays!

## Dear Old Clive's

by A. D. P.

*25th June.*—The new year begins. If I were a historian, I could say how many such reunions the old trees here have witnessed. Fr. Warden shakes hands with everybody. Lots of shy little things everywhere. "Juniors"! But where are our veterans of old? One has had a second class, whereas another has been plucked!

## DEAR OLD CLIVE'S

*3rd July.*—Quadrangle meeting: Office-bearers for the year announced by extraordinary gazette. Representatives walk off to their sections full of resolutions! But as Fr. Warden said, "Representatives do not run the hostel!"

*9th July.*—After all the pestering from subscription-raisers, Clive's Union elections come off. The atmosphere is electric. Prabakaran is "Mr. Speaker!"

*10th July.*—Hot campaign everywhere: hostellers try to snatch off all the Secretaryships in the College, and succeed in most cases. Clive's has got 'election-minded' this year.

*17th July.*—New Hostellers show the white feather in Basket Ball—Children dear, wasn't it yesterday you lost the volley-ball match against us? Heartfelt sympathies, sure!

*18th July.*—Most of the courts appear like Saharas. Hostellers rush to the War Services Exhibition.

*21st July.*—Bye-election in Clive's Union due to resignation of Pisharodi. B. Sc. Block sweeps everything before it by sheer propaganda, and gets Krishnamurti elected. A conscientious worker, the Union owes him much. Quadrangle Meeting: 'Exposition' usurps the place of "exhibition" in the lecture!

*26th July.*—Kunhunni Menon's 'Victory' at the exhibition oratorical contest. Isn't he our veteran?

*28th July.*—A record audience listen to the Inaugural Address of Begum Amiruddin. For the first time in the history of the Union, a lady visits us.

*31st July.*—First feast and many say the best.

*4th August.*—We throw out socialism in our Parliament by the boarding fence and then get defeated by the Y. M. C. A. in Basket Ball. Life is full of ups and downs!

*15th August.*—One of the many Avani Avittams this year is celebrated with a feast.

*24th August.*—Discussion of August resolution of Congress begun. Adjourned owing to volume of argument forthcoming.

## DEAR OLD CLIVE'S

*29th August.*—Adjourned meeting decides that the congress resolution need not be withdrawn (After 21 speeches!!)

*2nd Sept.*—In spite of great hopes, our 'tug' team is pulled off by the boarding.

*5th Sept.*—Mr. Purushotham of Holy Cross asks our Union "Quo vadimus?" Our enterprising editors publish the first issue of the Hostel Magazine.

*15th Sept.*—Doomsday! Books! Reading in mess and Quadrangle and in all sorts of poses. Alas for those who wake up at 8-30 betrayed by Mr. Time-Piece!

*17th Sept.*—Homesick babies brighten up. Evacuation at night. Earlier batches are safely seen off at the station. When the last batch is off, Fr. Warden shuts himself up in his room.

*3rd Oct.*—Rooms occupied by our own forces under cover of night. The taps sing welcome.

*4th Oct.*—Answer papers come back to drive out Dame Mirth.

*7th Oct.*—Saraswati Pooja, the student's festival, reminds us of the greatness of knowledge.

*20th Oct.*—The store-keeper wishes us all good-bye and his dear almonds too!

*24th Oct.*—The second issue of the Hostel Magazine sees the light.

*25th Oct.*—Deepavali: all enjoy the feast except Mappillais gone to receive presents and eat sweetmeats. The small hours of the morning hear various bath room melodies.

*31st Oct.*—Satakopan and partner bag Badminton doubles championship.

*4th Nov.*—Day scholars accept defeat meekly at the hands of our Basket Ball giants.

*7th Nov.*—Fr. Coyle, in talking to us about "Eire, the land and its people", advises us, "never trouble trouble until trouble troubles you". Irish wit is proverbial!

*14th Nov.*—The I. A. F. raid us in the volley ball court, but are forced to withdraw defeated. They could drop few bombs! Spectacular and keenly contested match!

## DEAR OLD CLIVE'S

17th Nov.—Mr. Sessa Iyengar's lecture on Bhāratīar is acclaimed by one and all as a piece of inspiration.

2nd Dec.—The cursed day that once a term comes round again. Swollen eyes and haggard looks betray a sleepless night.

7th Dec.—Prospect of long holidays makes us cheerful as we bid good-bye to the rotten, smelling Teppakulam and dreadful books.

4th Jan.—The early bird gets down from the train and knocks at the Hostel door. We wish one another a very happy new Year under the margosa trees in the Quadrangle.

9th Jan.—Members, except those who go out locking their rooms, are rounded up for Hostel tours.

14th Jan.—Pongal feast. Music competition—all sorts of music, even whistling! Congrats to winners and compliments to comedians!

22nd Jan.—“Has Gandhian Leadership outlived its usefulness?” Certainly not! At least, so the Clive's Union has decided by an overwhelming majority.

23rd Jan.—Oratorical contest. Twenty compete, of whom Messrs. Srinivasan, Vydiathan, Pisharodi & Subrahmanyam come off with success. Fr. Arulswami, and Messrs. Arokiaswami and K. R. R. (of National College) sit in judgment.

26th Jan.—The third issue of the Hostel Magazine is published.

30th Jan.—Hostel seismograph records ‘quakes’ in the quad. Oh; the early athletes practice for ‘Hostel day’

13th Feb.—Valedictory address of the Union by Rev. A. E. Rushton. Good speeches crowned by good Tea. Order and harmony prevail everywhere in the function. Shows what good management can do.

## New Hostel Calling

**H**ULLO, everybody! This is a New Hosteller speaking. May the days of the New Year bring forth bright chances and may every chance greet us all with cartloads of luck!

A sparrow came and lisped to me the other day. “What, you sit here idle, when the outside world is pining for news about you people?” I sat up, all my drowsiness gone. I told myself I would speak. So then, sharpen your ears.

Out amidst the fields of waving verdure, we here form a happy lot. There is splendid natural scenery all round; and lying mixed up with it we have a unit here and a unit there of man's handi-work. Towards the north-west, far far away shimmer blue ridges. At our side, the Cauvery canal gets up a softening melody. The College Church glistens yonder; the mighty Rock-temple soars into the sky. Trains whistle past. Cars and buses glide along the distant road, hooting out the vibrant joy of motion. Near at hand, two giant structures are reaching completion.

In these picturesque surroundings we abide like philosophers on the brink of busy life—a cloud of vapour that we are and are not (My apologies to good old Ruskin) Our philosophy of life is peculiar. It is a mixture of mirth and freedom from care, with responsibility and a love of duty. Of an evening, come and watch us at play. Come back when the scene has changed when there is the moonlight in the Quadrangle, when we are in our rooms, silent and active, and the Warden walks round with his happy face. You will understand.

The Stream of Time wafted away from our midst a few from whom we would not willingly have parted. When we returned this year, we were wholly unprepared for the disappearance of that constellation of which Ghost and -5 were principal members, not to speak of the intellectuals, Orator and Vepa and that luminary, who proved (?) to us last year that ‘marriage is a curse’. [Our hearty congrats to Vepa and Safdar on their gallant victories in the University Exam.] Perhaps the richness of variety left behind in people like the distinguished President of the A. B. C., and the no less distinguished Defence Member, are sufficient to buoy up our spirits; but our sense of loss lingers.

## NEW HOSTEL CALLING

We had lots and lots of new people this time. The variety is gratifying; long, lean people, short, fat people, with all grades between the two, fast people and slow people, fashionables, roughs, and non-descripts. There is a chic little boy from Palghat, a specimen by himself. There is 'Swami' with the sweet countenance, who will counterbalance, if not outdo, our Defence Member. There is quite a big gang, who at the stroke of the bell dart into the dining-hall and sit on tender-hooks, until the serving begins. Then they start right clean away, stowing in, emitting all the noises of an asthmatic engine. The chimpanzee in the London zoo, which drinks its soup without noise, might be heartily ashamed of them. There is the anti-climax as well. There is one nice-looking gentleman, who sits in a graceful posture all the time, with his porcelain cup and saucer beside him, pecking away at his food. He will interest the biologist, I bet.

Among the fashionables the pride of place goes to one who carries a name that means so much in the field of Physical Science; keep it a secret, he is an object-lesson in 'emissivity.' There is of course George to run a close race with him—George who glided into our midst this year and lately into the limelight, by virtue of his magnificent finishes in Badminton and graceful smashes of the Volley-ball.

Now to our sprightly characters. With a genial soul like Ambi, who pops about like a squirrel, with his witticisms and stunning imitations—a cheery spirit like our popular Rep. Chidambaram, who superadds to his schoolboyish gusts joviality and pertness of speech—our indefatigable Defence Member, who swaggers about with a benevolence that tugs at your heart-strings—the stalwarts Mathen and Elias, who are our turrets of strength—Kandappa, who is going to storm us with his play for the Hostel-day drama, and, more than all, that radiant figure, the remarkable exponent of Kerala culture, who abhors daily baths—with these our little world is quite full. We never need to look beyond with the hope of meeting with such a joyous array of human types.

Speaking about our intellectuals, I may be looking modest, but I am not modest really. It is our tradition to bag for the College the top ranks in the University Examination. Look at last year's splendid record. We hope to maintain it. There is inspiration in the air, what with Ramaswami, in our midst, who knocked away the Sastri Medal recently and bids fair to get a triple first in the University, what with Sastri who brings a Mangalorean finesse to bear on his movements, and

## NEW HOSTEL CALLING

Sambasivan, whose company is so vitalising and leaves so pleasant an after-taste, and Harihara Iyer, who for all his sharp looks and 'tornado of words' is so gentle and affable at heart.

With a lucid talk from Mr. Thomas Srinivasan by way of inauguration, the chrysalis-soul of the Hostel-Union received the magic touch of life. But strangely the winged butterfly never ventured on its busy round of life. There is no use blaming the Secretaries—a pair of fellows, wonderfully enthusiastic, but so incompetent for the job.

Taking the good and the bad together, we have had during the year much to be thankful for. The Hostel-management has proved a model of efficiency—efficiency not a little due to the unsparing efforts of our Mess Representatives, no less due to the excellent bearing and activity of our Games Captains. The Warden's shrewd choice of them has been borne out by the unqualified success in the two departments during the year. The great enthusiasm behind our Tournaments will blazon forth the fact that we of the New Hostel look for the betterment not merely of our heads and hearts, but of our limbs as well. The Hostel-day is near at hand. We feel its throbbing pulse already. May it please God to make it for us a day of unalloyed happiness—the day of days of a year of cordial association and friendship!

Those who have sauntered about our Badminton Court of an evening and lately our Volley-ball ground, know what an energetic, youthful-minded Sire we have to look after our interests. It is so truly touching to think that a man, who has left his country and people far behind, should have taken so kindly to us, sons of a soil foreign to him, and should watch over us with a mother's care. A year of happiness we owe to his unstinting generosity—a year in which he has implanted in our hearts a sense of duty and discipline, love and veneration. We can repay him only by praying for his long life, a good many years of usefulness and service to the great institution to which he belongs, and mental peace and tranquillity to himself.

The year will soon draw to a close. And Time will have sounded its call; many of us will be dispersing into the various walks of life. Some of us will come back. But we shall all remember how, in this little world of ours, we were taught to develop a spirit of camaraderie and social sympathy, in order to make life cheery and bright all round.

I end as I began. I wish great good luck to all as the days go by.

## U. O. T. C. Notes

**T**HE year under review began with the 2nd. Madras Bn. U. O. T. C. in full working order, Major P. R. Subramanian Commanding. The St. Joseph's Contingent was re-named B. Company (some say it is the abbreviation for Best Company. Well, why not?), Capt. T. V. Krishnan Commanding, ably assisted by Lieut. S. M. Diaz. Our Adjutant, Capt. V. Sunderesan, had by then done quite a lot of fine work setting the new Battalion on its well-oiled wheels, so that everything was smooth sailing when the recruiting season began.

The most notable feature of this year is the re-designation of the old U. T. C. as the University Officers' Training Corps—U. O. T. C. Though people might ask what is in a name, the new designation has definitely raised the prestige of the Corps, and has marked it out as the sure recruiting ground for potential officers of the growing, glorified Indian Army.

### Training

Hand in hand with the change in name, there has been a change in Training also. The cadet is afforded opportunities to be trained to be a potential officer, and with the introduction of the A & B War Certificate Examinations, nearly half and more than half the training given to the gentlemen cadets at any O. T. S. is done here itself. Cadets who pass the A & B certificate exams, on being selected for Commissions will, therefore, do only four and two months of training respectively at the O. T. S.

In keeping with the change in the designation and the restatement of the object of the Corps, training has now been definitely upgraded. The new programme and new weapons have been received with greater keenness and enthusiasm on the part of the under-graduates. Subjects like Fieldcraft, Tactics, etc. have been given greater importance, while drill which was before the present War the most important of Military training, has now gone to the background. Thus a cadet, in his two years of training in the Corps, is given a good grounding in leadership which is what is required of a present-day efficient Officer.

## U. O. T. C. NOTES

We should not fail to make mention of the encouragement gratefully received by the O. R's from the University in the form of recognition of War Certificate examinations as part of their University Courses. While some of them successfully put in additional hours of work for extra training, others have grabbed the opportunity to take the Certificate Exams in lieu of one of their optional subjects or of the antiquated Shakespeare and even present Modern Poetry in B. A. part I.

### Strength

The strength of the Company was increased from 120 to 160 as a result of the re-organization. Therefore, we had to recruit nearly a hundred from the junior classes. It should not have been very difficult considering the two hundred applicants we got, but all the same it was difficult, I mean, in the choice. Our Recruits of this year have ably kept up our traditions for discipline and efficiency.

### Camps

On account of the War Certificates training, two Camps will be the normal feature in future—one, the Cadre Camp which will usually be held in SEPTEMBER for the Certificate trainees only, and the other, the usual Annual Camp for the whole Battalion.

Our first Cadre Camp was held between the 19th-Sept. & the 3rd Oct., 1943. Eighteen trainees for A Certificate and eight for B certificate attended the Camp. It was a very successful camp where intensive training of a high standard was given to the trainees.

The training period during October to December afforded good opportunities to the War Certificate trainees in handling and instructing the men on the Company parades, thus putting into practice what they had learnt in the Cadre Camp. During this period the general training, preparing the men for the Annual Camp, was gone through. In addition, from among the Recruits selection was made to prepare them for the A certificate, part I examination. Owing to the large intake of recruits this year, we had to restrict the number for the A-I training to about sixty only, and so many an enthusiastic recruit had to be denied the opportunity of taking the exam, as we are staunch believers in quality and not in quantity.

## U. O. T. C. NOTES

This period had the unique importance of the inspection of the G. S. O.-I from the Southern Army Head Quarters, on November, 25th inst. The inspecting officer was so much pleased with the high standard of training that the O. R's of this Company had acquired, that he congratulated the Company on the 'damned good work' it was carrying on.

The much eagerly awaited Annual Camp came off on the 8th December, 1943. The Company, less 5 sick cadets, moved into Camp that forenoon. The camp site was a lovely spot, best suited for fieldcraft, tactics, etc. the like of which we can never dream of anywhere near the College for training during term time.

This, the first Annual Camp of its kind for the new Battalion, was a very grand success. The training in the Camp was quite interesting owing to the appropriate training programme drawn up by our ever keen and untiring Adjutant. The cadets were in a position to put into practice on natural ground their knowledge of what they had learnt on the College parade grounds. The certificate trainees had once again another spell of intensive training in those parts of the programme they had not seen so far, and also a revision of the parts they had done during the earlier months of the year and at the Cadre Camp. While one and all of the O. R's had their thirst for advanced and interesting training during parade hours, they had full relaxation in the form of games and entertainments in the evening hours.

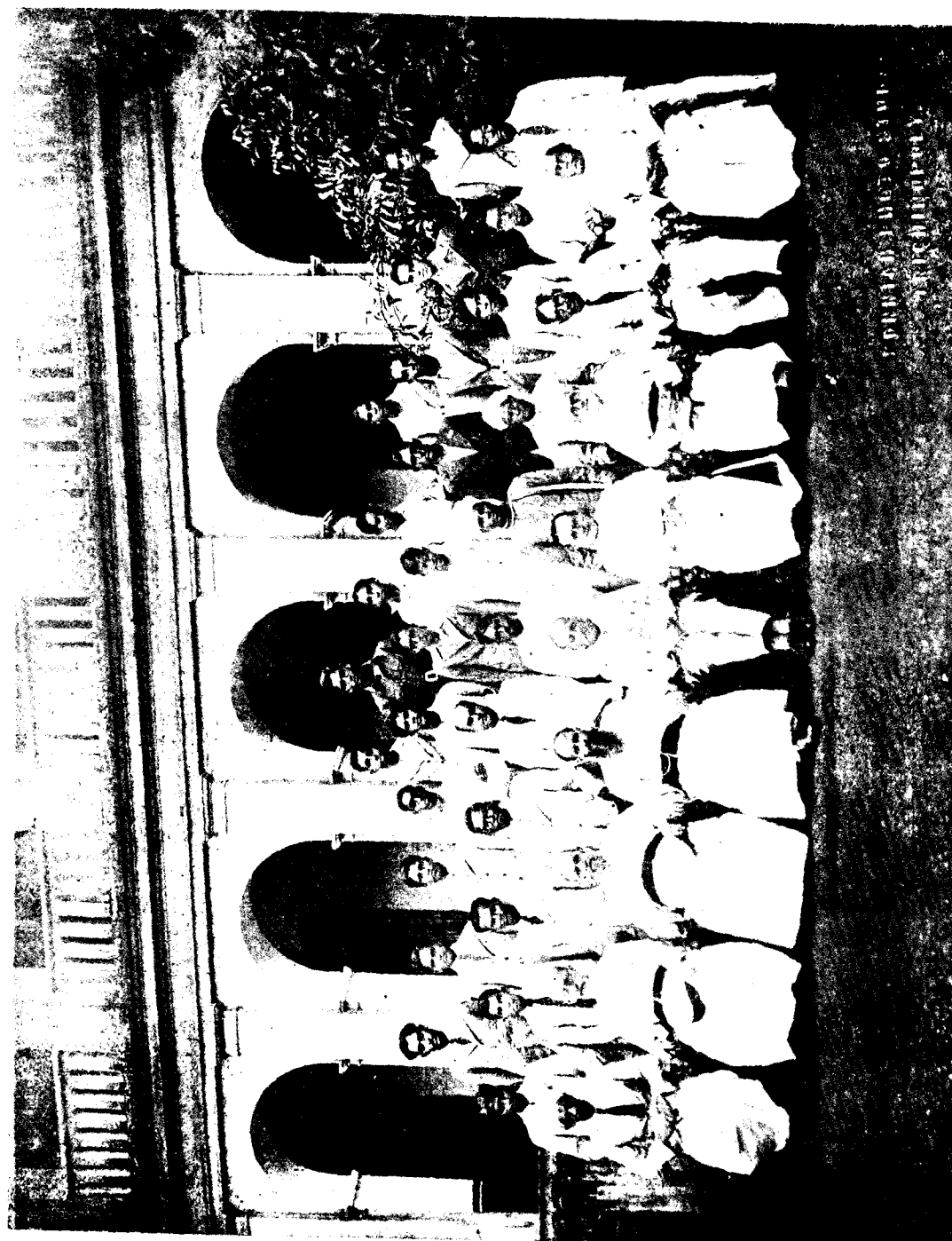
## Entertainments in Camp

Though the O. R's, in the first few days of Camp regretted that they could not go to any picture, house, it is recorded with pleasure that the talkies moved up to them into Camp. We had programmes of regular music through the Radio, and free tea thanks to the fatherly direction given by the Sub-Area Commander to the Indian Tea Marketing Expansion. Even entertainments were not unmixd with useful instruction, as we had a number of training films too.

Inter-Company excitement and healthy rivalry was well exhibited in the keen competitions witnessed at the Battalion Annual Sports held on Tuesday, the 21st December. With pleasure and pride many a cadet ran up to the centre to receive prizes from the hands of Col. Gain M. C., a person ever remembered with filial affection by officers and men alike in our Battalion.



Actors in the College Societies' Anniversary Day Drama—1943-'44  
"THE DEVIL'S MEMOIRS"



Group Photo of the Officials, College Societies  
with Mr. REYNOLDS, C.I.E., Agent and General Manager, S. I. Ry.,  
President, College Societies Anniversary Day—1943-'44.

## Interior Economy

We look back with gratitude to the Almighty for having strictly ordered General Rain to keep aloof from our Camp this year, so that we had not the unpleasant, and sometimes, unhealthy experiences that we had in Camp the last two years. The corporate life under the canvas, with good feed well digested by plenty of exercises both to the body and the brain, not to mention the strict rules of interior economy relentlessly enforced regarding cleanliness of Company lines, mess tents, etc., kept the general health of one and all at an exceptionally high standard.

It is reported from authoritative quarters that the Medical Officer complained of very little work in the Camp. Just a sprain, a cold, a real or fictitious stomach ache, or loose motions were all the ailments to be cured by medicine, or shall I say, better by warning regarding possible extra-parade for flimsy complaints.

Of course, the ideal being high, perfection cannot be expected. Out in the blue, with a lorry transporting water at a great distance from the Camp site for all our needs, the luxurious desire of some of our grumblers for more and yet more water could not be met satisfactorily. The river Cauvery unfortunately does not flow in floods all over this district, and the lavish supply of water through the Trichy pipe system does not extend everywhere. Thanks to the relentless efforts of our enthusiastic and energetic C. O. and his Head Quarters personnel, we had enough water for our necessities though not for luxuries, much more than what can be dreamt of under any war conditions. We are sure that even these would be fully catered for on future occasions.

## Post-Camp Period

This was a very strenuous period for the Certificate trainees. For just at the beginning of January we were informed by the G. H. Q. of the Obstacle training course for the B and the Physical efficiency training for the A certificate trainees that had to be done. Besides some of the weapons arrived late. All these and the final revisions and polishing of the trainees, required the engaging of them almost every evening and also some mornings, ever since the re-opening of the College in January. Owing to this heavy work the Company training had to suffer, and we promise our cadets a much better treatment in future.

U. O. T. C. NOTES

All this intensive training of the certificate trainees was well paid at the end. We are proud to announce that we put up six candidates for the B Certificate exam. and seventeen for A certificate exam. part II, all of whom have passed; and out of the forty five sent up for A certificate exam. part I, only one failed. Let us take this opportunity to congratulate each and every one of them on their brilliant successes and also on the record they have set up in the Battalion. Well done B Company, keep your tails up. We should also take this opportunity to extend our most hearty thanks to all officers, especially to the Officer Instructors, Capt. Chauhan and Lieut. Muggarab for their untiring and ceaseless efforts in training our men.

Obituary

We regret to announce the sudden and unexpected demise of one of our cadets, Cadet Gnanapathy S. He attended the Annual Camp and went back home. He then suddenly took ill and after a very brief illness passed away just before the re-opening of the College in January. His death is really a very great shock to us, and in him we have lost one of the best, keenest and most enthusiastic Cadets. We tender our deep heartfelt sympathies to the bereaved parents.

Musketry

In accordance with the new syllabus of training, we had this year three different annual musketry courses, for the three categories of men recruits, trained cadets, and senior cadets. These courses were fired during the second term, and we are really proud to say that the average in each of them is very high. The following proved to be the best shots in their respective groups:—

Recruits :—

|                            |          |
|----------------------------|----------|
| No. 17 Cdt. Rajaraman N. } |          |
| „ 68 „ Arulappan A. B. }   | ... 1st. |
| „ 364 Cdt. Kasturi G. ...  | ... 2nd. |
| „ 58 „ Nagaratnam N. ...   | ... 3rd. |

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Trained Cadets :—

|                                     |          |
|-------------------------------------|----------|
| No. 6946 Cdt. Selvaraj A. ...       | ... 1st. |
| „ 7199 L/Cpl. Joseph K. S. ...      | ... 2nd. |
| „ 7329 Cdt. Radhakrishnan V. C. ... | ... 3rd. |

Senior Cadets :—

|                                      |          |
|--------------------------------------|----------|
| No. 6011 U/O Parthasarathy M. N. ... | ... 1st. |
| „ 6506 Cpl. Ralph Papali ...         | ... 2nd. |
| „ 5985 U/O Frank Rodrigues ...       | ... 3rd. |

College Societies

Junior Physics Society

The year 1943-44, has been a year of true and real usefulness and activity. It was in this year that in order to help the junior Science Students the junior Physics Society was introduced.

The Inaugural Address of the Society was delivered by Rev. C. Leroyer, S.J.

In the course of the year, we had a good number of ordinary and extraordinary meetings and debates. A list of them is given below.

| DATE     | SUBJECT                                         | LECTURER                         | PRESIDENT                            |
|----------|-------------------------------------------------|----------------------------------|--------------------------------------|
| 26- 8-43 | Great Men of Scince                             | S. Bhaskaran                     | N. Anantakrishnan, B.A. (Hon)        |
| 28-10-43 | Science, today and tomorrow                     | R. Balasundaram                  | P. Savarimuthu, M.A.                 |
| 12-11-43 | The Human Side of Science                       | Krishna Wariar                   | A. Damodaran                         |
| 17- 1-44 | Some Defects of visions.<br>How to Remedy Them. | P. Raghavachari                  | Dr. A. Shankar Rao,<br>L.M. & S.L.D. |
| 29- 1-44 | Colour.                                         | N. Anantakrishnan<br>B.A. (Hons) | From the Chair                       |

## COLLEGE SOCIETIES

### Debates :

| PROPOSITION                                         | MOVER            | OPPOSER         | SPEAKER          |
|-----------------------------------------------------|------------------|-----------------|------------------|
| Literature does better service than Science         | E. R. Narasimhan | S. Venugopalan  | K. Narasimhan    |
| It is Science that has caused this war              | P. Raghavachari  | B. Nagasundaram | P. K. Sankaran   |
| The progress of civilisation is retarded by Science | M. Venkataraman  | K. Narasimhan   | A. Venkateswaran |

Before coming to the end of the chronicle we express our heartfelt gratitude to all those that figured in our meetings and in particular to Mr. N. Anantakrishnan, B.A. (Hons) for the kindness with which he lent us his support in the conduct of meetings.

24-2-44.

K. NARASIMHAN  
S. BHASKARAN  
*Secretaries.*

## The Annual Report of the Physical Society, 1943-44

It is with great pleasure that we place before you the annual report of the Physical Society for the academic year 1943-44. We record with regret the retirement of Mr. P. E. Subrahmanya Iyer who for many years as President of the Society rendered it valuable service. He was succeeded at the beginning of this year by Rev. Fr. J. B. Rajam, S.J., D.Sc. who has infused new life and vigour into the Society and the year under review has been one of the most successful years in the history of the Society, thanks mainly to his able guidance. Mr. K. S. Mandalam Iyer M.A., L.T., and Mr. N. Anantakrishnan, B.A. (Hons.) became Vice-Presidents.

The activities of the Society commenced with a business meeting on the 15th July 1943 for the election of the Secretaries. The President announced the formation of a Junior section of the Society for the Intermediate students. Mr. C. Srinivasan IV. B.Sc. (Hons.) was returned unopposed and in the B.A. B.Sc. constituency Mr. P. K. Sankaran IV B. Sc. won the election by an overwhelming majority. Mr. S. Bhaskaran and K. Narasimhan were elected secretaries of the Junior Section.

## COLLEGE SOCIETIES

The Inaugural Address was delivered by Rev. Fr. C. Leroyer, S.J. of the Campion High School on "A simple method for the calculation of transformers". There were epidiascopic projections. The first ordinary meeting was held on 20-8-43 when Mr. P. Surendranath Menon spoke on "The roll of chance in Science". "Baby Universe" was the subject of the next talk by Mr. V. Balasubrahmanyam IV B.Sc. Hons.

The nature and causes of atmospheric electricity formed the theme of the first of a series of extraordinary meetings held on 10-9-43 with the president of the Society, Rev. Fr. Rajam, as the lecturer.

The next extraordinary meeting was held on 29-10-43 when Mr. K. A. Padmanabhan, B.Sc. (Hons.) spoke on "Diamonds in the sky", the diamonds referred to being the various constellations and nebulae systems in the sky. There were epidiascopic projections.

"Scientific Renaissance in India" was the subject of an interesting talk by Rev. Fr. Thekaekara in the course of which he traced historically the factors that have contributed to the Scientific renaissance in this country. The meeting took place on 3-11-43.

On 9-11-43 there was an ordinary meeting when Mr. Ramaswamy IV B.Sc. (Hons.) spoke on "Mirrors in the Sky". Mr. S. L. Thomas, B.A. was in the chair. The next meeting was held on 15-11-43 when Mr. R. Raman IV B.Sc. lectured on "Colour photography" and the lecture was illustrated by epidiascopic projections.

The next was an extraordinary meeting addressed by Mr. N. Anantakrishnan B. A. Hons. on 10-1-44. The lecturer dealt with the process of Atom-smashing and explained clearly with the help of picture projections the design and functions of the cyclotron.

The next was an ordinary meeting on 26-1-44 when Mr. A. Damodara Pisharodi gave a talk on "The celestial Hurly-Burly and the message of light". Mr. K. S. Subrahmanyam was in the chair.

The next extraordinary meeting was addressed by N. Anantakrishnan B. A. Hons. on "Recording and reproduction of sound".

The next was an extraordinary meeting held under the combined auspices of the Mathematics Association and the Physical Society. The meeting was held in the Physics Theatre on 8-2-44 when Mr. T. Totadri Iyengar M. A. Professor of Mathematics gave an enlightening and

## COLLEGE SOCIETIES

humorous talk on "The theory of Relativity". Mr. K. S. Mandalam Iyer M.A., L.T., was in the chair.

On 12-2-44 there was an ordinary meeting when Mr. S. Krishnamurti V. B. Sc. (Hons.) gave an interesting talk on "Cosmic Rays".

"Thermonics" or 'Paramagnetism' "low temperature" or "Electrolysis" were the subjects for the B.Sc. Hons. and B.A., B.Sc. classes respectively in the annual essay competition held this year. From Hons. classes Mr. S. Sampath IV B.Sc. Hons. got the 1st prize and A. R. Ramakrishnan, V B.Sc. Hons. got the II. From the B.A., B.Sc. classes R. Raman IV B.Sc. got the first prize and Mr. R. V. Chakravarthy, IV B.Sc. got the second.

The valedictory address of the Society was delivered on 14-2-44 in the Lawley Hall by a distinguished former pupil of this College, Dr. R. S. Krishnan M.A., D.Sc. Dept. of Physics, Indian Institute of Science, Bangalore. The subject of the address was "The New Alchemy." As one who has worked for nearly 3 years in Cambridge, he was able to give us an instructive picture of the various processes involved in the transmutation of metals. With a few concluding remarks by Rev. Fr. Rajam in the course of which he showed the inter-relation between Philosophy and Physics, the meeting came to an end.

It remains for us only to thank all who have co-operated with us during the course of this year and helped us in making the year a grand success.

C. SRINIVASAN,  
P. K. SANKARAN,  
*Secretaries.*

## Chemistry Society—Annual Report 1943-44

The Society commenced the activities of the year on the 1st of August, 1943 with the election of Mr. C. V. Ramaswamy IV. B.Sc. and Mr. A. J. Lourdes III. B.Sc. as the secretaries for the year.

The Inaugural Address was delivered on the 6th August 1943, by Sri K. M. Ramamurthy M. Sc. Professor of Chemistry, Holy Cross College, Trichy. He gave a very interesting lecture to a crowded audience on "Colloids." Mr. A. C. Joseph presided.

## COLLEGE SOCIETIES

"Chemistry and Warfare" was the subject of a talk by Mr. K. Ramamurthy IV B.Sc. on the 21st August. He discussed at length the various chemicals employed in modern warfare, to the accompaniment of epidiascopic projections. Mr. K. Chidambaram IV B.Sc. occupied the chair.

On the 27th August, Mr. N. S. Thyagarajan IV B.Sc. presiding, Mr. N. Srinivasagopalan IV B.Sc. gave a lecture on the biological and biochemical aspects of 'Proteins.' On the 30th October Mr. N. Sivaraman IV B.Sc. delivered a lecture on Sulphadruugs'. Mr. S. Venkatachalam IV B.Sc. presided.

The next meeting was on the 5th November and was addressed by Mr. S. Venkatachalam IV B.Sc. on 'Pellets of Power, the electrons,' with epidiascopic projections. Mr. C. V. Ramaswamy IV B.Sc. was the president.

On the 13th November Mr. N. Srinivasagopalan IV B.Sc. presiding, Mr. C. V. Ramaswamy IV B.Sc. gave a talk on 'Aluminium in this modern world.' Electro-chemistry was the topic of a discussion by Mr. P. H. Venkatesvaran III B.Sc. on the 19th November, with Mr. T. L. Thomas III B.Sc. in the chair.

On the 15th January, Mr. C. K. Ramakrishnan M.A., explained in detail to an enthusiastic audience the discovery and importance of 'Isotopes.'

Mr. K. Ramamurthy IV B.Sc. gave an interesting and exhaustive lecture on 'Isomerism' on the 21st January with Mr. T. L. Kuriappan IV B.Sc. in the chair. In these dark days of economic depression and rationing, the importance of the utilisation of waste products was pointed out in a lecture on 'Wealth from Waste' by Mr. C. V. Ramaswamy IV B.Sc. on the 1st February. Mr. V. Ramamurthy IV B.Sc. was the president.

The progress of science with the ages was very well brought out in an excellent lecture on 'Scientific Renaissance' by Mr. S. Venkatachalam IV B.Sc. on the fourth February. Mr. K. Ramamurthy IV B.Sc. occupied the chair.

'Origin of elements and their destiny' formed the subject of a talk by Mr. N. S. Thyagarajan IV B.Sc. on the 9th February under the presidency of Mr. D. Gopalakrishnan IV B.Sc.

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On the 12th February Mr. Joseph C. Konnoth III B.Sc. gave a detailed account of 'Milk and its products' with Mr. T. L. Kuriappan IV B.Sc. in the chair.

The extraction of petroleum and the various applications in industry and at home of the several products of petroleum were very well discussed by Mr. S. Shajehan, IV B.Sc., on the 15th February. Mr. S. Seshan, IV B.Sc., was the president.

The Valedictory address of the Society was delivered on the 19th Feb. by Mr. P. A. Narayana Iyer, M.A., M.E.S., (Retired) on 'a hundred years of science—a retrospect.' He traced the important progress and achievements made during the past one hundred years in the field of physics, chemistry, biology and medicine, achievements that fill the mind with wonder and awe.

As usual two essay competitions were held, one for the degree classes and the other for the Intermediate. In the degree classes, the first prize was won by Mr. V. M. Sivaramakrishnan IV B.Sc. and the second prize jointly by Mr. C. V. Ramaswamy IV B.Sc. and K. Ramamurthy IV B.Sc. The intermediate prize goes to Mr. N. Sundareson II U. C.

We are glad to record that we had a crowded, interesting and useful programme. We are indebted to the members for their kind co-operation. We shall be failing in our duty if we do not gratefully refer to the ready help and valuable guidance given by our president, vice-president and the other members of the chemistry staff.

C. V. RAMASWAMY, IV B.Sc.

A. J. LOURDES, III B.Sc.

*Secretaries.*

## The History and Economics Association

1. A business meeting of the Association was held on the 20th of July 1943, with Mr. M. Arokiaswamy, M.A., the Vice-President, in the chair. Mr. R. V. Janakiraman and Mr. P. J. Jacob, both of the IV Hons. Class were elected Joint Secretaries for the year 1943—44.

2. Rev. Fr. Carty, the President of our Association delivered the Inaugural Address on the 29th of July, the subject of the address being

## COLLEGE SOCIETIES

MODERN ECONOMICS. He dwelt on the services of Dr. Marshall to Economics especially in establishing its claim as a science, pure and applied, and made a critical study in contrast of the economic notions of Marshall and Robbins. The Address was both 'light-bearing' and 'fruit-bearing.'

3. On the 10th of August, with Mr. M. Arokiaswamy M.A., as the Speaker, Mr. O. V. Kuruvilla (V Hons.) moved that "Rationing is both necessary and feasible." He contended mainly that rationing was necessary if the poor were to be fed. The motion was seconded by Mr. T. Srinivasaraghavan (III Hons.) Mr. A. J. Francis (IV U. C.) opposing it, pointed out the failure of the govt. efforts to ration Kerosene and Sugar. Mr. W. Vaz B.A., supported him. After a heated discussion the motion was put to vote and carried by a large majority.

4. Mr. R. Krishnaswamy (V Hons.) read a paper on "Post-War Exchange Stabilisation", on the 25th of August. Mr. A. Hirudayaswamy, M.A., B.L., presided. The paper dealt with the U. S. A. and British plans of an International Currency.

5. On the 15th of October, Mr. O. Mathias (III Hon.) moved that "The study of History is a waste of time and must be abandoned by our University." Mr. P. T. Chacko, M.A., was the Speaker. The motion was seconded by Mr. A. T. Thomas (IV U. C.). Mr. A. C. Chiramel (IV U. C.) opposed the motion emphasising the cultural value of History, and was ably seconded by Mr. K. Venugopal, B.A., After a furious contest the champions of History won the day by an overwhelming majority.

6. "The Beveridge Report" was analysed by Mr. M. Arokiaswamy, M.A., on the 11th of November, in his usual clear and precise style. He with the help of charts not only analysed the changes outlined in the report but also sketched the Social Insurance scheme as it worked at present in England.

7. On the 8th of January, 1944, Mr. Arokiaswamy gave another lecture on "The Revision of the Indian Constitution." He suggested a constitution based on the Swiss model of Democracy for India and stressed the desirability of an all-party cabinet.

8. An extraordinary meeting was held on the 29th of January when Dr. R. N. Poduval, M.A., M.Sc., (Lond.), Ph.D. (Lond.), Professor and Head of the Department of Economics, Annamalai University, addressed

## COLLEGE SOCIETIES

a packed house on "The Problems of Indian War Economy"? Rev. Fr. Ehrhart, our Principal, presiding. The Lecturer said that the main problem of Indian War Finance was the checking of Inflation, which was rampant in India and suggested Rationing, Price Control and increased production of consumption goods as checks to Inflation.

9. An extraordinary meeting was held on the 19th of February, when Rev. Fr. Carty spoke from the chair on "Planning and Pricing." He examined the flaws in the state planning of economic life which was so fashionable at the present day and pleaded for the maintenance of individual initiative and enterprise, subject to due checks by the State. Referring to the Bombay scheme for Industrial progress he wished that the authors had more clearly indicated the exact nature of the scheme in several important aspects.

10. The Valedictory Address was delivered on the 20th of February by Prof. C. Srinivasachariar, M.A., Head of the Dept. of History, Annamalai University, on "The Interpretation of Modern Indian History." Rev. Fr. Carty presided. The lecturer strongly criticised the way in which historians interpret the past, making it too idealistic to be true and made an impassioned plea for an objective and impartial presentation and interpretation of historical facts.

11. We wish to place on record our deep sense of sorrow at the sad and untimely demise of two active members of our Association, Mr. R. Gopalan (V Hons.) and Mr. S. Ganapathy (III Hons.). Condolence resolutions were passed by our Association and communicated to their bereaved parents.

12. A new feature of the Annual Essay Competition this year was the award of two prizes to each class, instead of one as before. The subjects for this year's competition were:

- |                      |                               |
|----------------------|-------------------------------|
| B. A. Hons. Classes: | Four Freedoms.                |
| B. A. Pass.          | " The Future of Democracy.    |
| Intermediate         | " Air-Power in War and Peace. |

The following are the prize-winners in the Annual Essay Competition:—

### B. A. Hons. Class:—

- I. Prize: W. J. F. Vaz., B. A. V Hons.
- II. Prize: R. Krishnaswamy, V Hons.

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### B. A. Class:—

- I. Prize: A. Annamalai, IV U. C.
- II. Prize: Banal Rajaram, III U. C.

### Intermediate:—

- I. Prize: Chacko K. Joseph, I U. C.
- II. Prize: N. C. Mathew, I U. C.

13. During the year under report we held altogether 10 meetings which were all well attended and very lively. We would be failing in our duty, if we do not thank the members for their zealous and whole-hearted co-operation; and Rev. Fr. Carty, the President, Mr. Arokiaswamy, the Vice-President and all the members of the staff of the History and Economics Department for their ready help and advice. We are specially indebted to Rev. Fr. Ehrhart, both as Principal and as a leading member of our Association, for the unstinted assistance given us at all times. In laying down our office, we would like to thank one and all for affording us an opportunity to serve as the secretaries which function, we trust, we have administered to the best of our abilities.

R. V. JANAKIRAMAN,  
P. J. JACOB,  
*Secretaries.*

## The Samskrita Samajam

The Inaugural Address of the Samajam was delivered on the 6th August 1943, by Sri K. V. Subba Iyer, M.A., L.T., M. R. A. S., Retired D. E. O., on "The Uniqueness of Sanskrit Literature". Stressing the fact that Sanskrit literature is the source and fountain-head of all the diverse channels of Indian culture, he pointed out that a proper understanding of Indian culture is possible only through the intense and genuine study of Sanskrit.

On 23rd August, R. Venkatagopalan III U. C. spoke in Sanskrit on कालिदासस्य स्वभावोक्तिः. Surveying the peculiar aspect of his genius he established that Kalidasa is unsurpassed in the art of accurate and vivid portraiture of life and nature.

"The Nine Gems Theory" was the subject of a lecture delivered by G. Doraiswamy IV U. C. on 31st August, when P. Vedanathan IV U. C.

## COLLEGE SOCIETIES

presided. Discussing the dates of the nine great poets who are by tradition placed in the court of King Vikramaditya, he dwelt on the nine gems theory of Dr. Kernes and said Kalidasa, the most resplendent of these nine gems, must be placed in about the 5th century A. D.

On 14th October 1943, R. Rajagopalan IV U. C. spoke on "Indian Epics" with V. Balasubramanian IV B.Sc. (Hons). in the chair. He discussed the several theories about the contents of the epics and spoke on the influence of the epics on later literature.

"Predecessors of Kalidasa" was the subject of a lecture delivered by K. R. Nagarajan IV U. C. on 29th October 1943, when N. Ramaswami IV U. C. presided. He discussed the dates of the predecessors of Kalidasa and finally spoke on Kalidasa in whose works sweetness of expression and ease of language seem to have attained perfection.

On 9th November '43, B. V. Raman III U. C. spoke on "The Greatness of Bhasa", with N. Dharmarajan IV U. C. in the chair. He spoke on the works of Bhasa and said that the unrivalled merit of Bhasa lies in the spirit of realism, expressed by apt, sweet and lucid words suggestive of lofty ideas.

इससन्देशम् was the subject of a lecture delivered in Sanskrit by K. Narasimhan II U. C. on 15th January 1944, with Mr. V. Gopala Iyengar, M.A., in the chair. He brought out with quotations the lyrical qualities of the work comparing it with Kalidasa's Meghaduta.

On 21st January 1944 N. Nagasundaram II U. C. spoke in Sanskrit on कालिदासः. He gave us a picture of Kalidasa, the man and the moralist and brought out the charm of his lifelike descriptions and the harmony of his expression.

On 5th February '44, T. R. Ananta Raman II U. C. spoke in Sanskrit on रामस्य वात्सल्यम्. He characterised Rama as the embodiment of affection and spoke at length on his love towards his brothers, parents and friends, enriching his lecture with quotations.

On 17th February '44 Mr. V. Rengan V Hons. spoke in Sanskrit on कलाशालासु संस्कृतम्. He laid stress upon the defects of the present system of imparting Sanskrit education and proposed many schemes by which learning could be improved.

## COLLEGE SOCIETIES

On February 2nd an Essay Competition in Sanskrit was held for the B. A. classes. The first prize was won by B. V. Raman III U. C. and the second prize by V. Kalyanasundaram IV U. C.

A General Knowledge Test open to the Intermediate classes was held on the same day. The first and second prizes were won by T. R. Anantaraman II U. C. and K. V. Janaki Raman I U. C. respectively. Sri V. Gopala Iyengar M.A., and Mr. M. M. Mani M.A., were kind enough to act as judges at both the competitions.

The work of the Samajam for the year came to a close with the Valedictory Address by Sri K. Chinnaswami Iyer, M.A., Retired Professor of English. He entertained the audience with a very illuminating discourse on some aspects of Bhavabuti's great classic, the Uttara Ramacharita.

We take this opportunity of expressing our profound gratitude to the chairmen of our meetings, to the judges at our competitions and to all others who have made the work of the Samajam a success.

N. DHARMARAJAN.

## Malayalee Samajam 1943-'44

The association commenced its activities with a general body meeting on the 23rd July 1943 with Mr. T. K. Devassia, M.A., in the chair. A. Vijayaraghavan IV U. C. and K. I. Mathai III U. C. were elected secretaries for the academic year.

The Inaugural Address of the Association was delivered by Rev. Fr. M. Thekkaekara S.J., B.A. (Hons) on 9th August on "The origin of Kerala Culture." In his address the speaker pointed out that researches have revealed that Kerala possessed a unique and glorious culture dating from a remote age.

On August 20th we had a debate with P. Surendranatha Menon V B.Sc. (Hons) presiding when Mr. Antony C. Chiramal IV U. C. moved the resolution that in India there is more of unity than diversity. Mr. A. T. Thomas opposed. The motion was carried out.

An extraordinary meeting was held on September 1st under the president ship of Mr. T. K. Devassia when Mr. A. K. K. Nambiar IV (Hons).

## COLLEGE SOCIETIES

moved a condolence resolution on the sad demise of Mahakavi Kuttamath, a talented and veteran scholar of Malayalam. The resolution was unanimously passed.

There was an interesting debate on September 9th on "Under the present political conditions the Congress should accede to the Pakistan demand." Mr. K. V. Ramachandran IV U. C. presided. The motion was moved by Mr. G. Krishna Variyar I U. C. and Mr. A. K. K. Nambiar IV (Hons.) vehemently opposed it. After a heated discussion the motion was thrown out.

The second term opened with an extraordinary meeting, Mr. T. K. Devassia presiding, when Mr. C. K. Padmanabhan IV U. C. moved a condolence resolution on the sudden passing away of Mr. M. R. Nayar, M.A., popularly known as "Sanjayan," an ingenious and talented scholar of Malayalam and English and an unsurpassed humorist. On the same day another condolence resolution was moved by Mr. T. L. Thomas III B.Sc. on the demise of H. H. Kerala Varma, Maharaja of Cochin. Both resolutions were passed.

On November 12th a debate was held with Mr. T. K. Devassia in the chair when Mr. K. Madhava Menon IV (Hons.) moved that in a free India Native States have no place and Mr. C. V. Joseph II U. C. opposed. The motion was carried by a vast majority. With Mr. O. V. Kurivulla V (Hons.) presiding, an ordinary debate was held on January 25th Mr. T. L. Thomas III B.Sc. moved "Without the expulsion of Nationalism world peace cannot be maintained." Mr. C. Shankaran Nayar III U. C. opposed the motion which was lost.

An extraordinary meeting was held on 28th January when Dr. C. Kunhan Raja, B.A. (Hons.) Ph., D. Reader in Sanskrit, University of Madras, delivered a speech from the chair on "The modes of appreciating Malayalam Literature." The speaker lucidly analysed the growth of Malayalam literature under the patronage of versatile poets and writers. He impressed on the students the necessity of bestowing more attention on Malayalam literature that has priceless resources.

The annual speech contest took place on February 22nd. In the ex tempore speech competition Mr. A. P. Kuriakose III B.Sc., and Mr. A. Damodara Pisharodi IV (Hons.) won the first and second prizes respectively. In the elocution competition open to Intermediate Students Mr.

## COLLEGE SOCIETIES

K. P. Joseph I U. C. and Mr. M. I Joseph I U. C. were winners. Rev. Fr. Vattathara, S.J., Mr. P. P. Kailasam, B.A. (Hons.) and Mr. Mani, M.A., kindly acted as judges.

The Valedictory Address of the Association was delivered by Mr. Gopala Pillai, M.A., lecturer, American College, Madura on 24th February. The speaker dealt on the importance of 'Mahakavyams' in Malayalam literature and the unrivalled rank 'Keshaveeyam' occupies in it, owing to its superb simplicity, picturesque and exquisite descriptions combined with piquant humour and a refreshing style.

A. VIJAYARAGHAVAN,  
K. I. MATHAI,  
*Secretaries,*

## Annual Report - Mathematics Association

The year under review has been one of immense success to us, the credit being in no small measure due to the enthusiastic and encouraging co-operation of all, from the President down to the members. We take this opportunity to express to them our heartfelt and sincere thanks.

The activities of the Association commenced on 20th July with a general body meeting with our Vice-President in the chair to elect office bearers. Mr. R. Hanumantha Rao IV (Hons.) representing the Hons. and Mr. V. Krishnamurti representing the Pass course were elected secretaries by an overwhelming majority.

"Counting Infinity" was the topic of the Inaugural Address by Dr. V. Ganapathy Iyer M. A., D. Sc., of the Annamalai University on 24th July, 1943. A combination of great thoughts and remarkable lucidity was the marked characteristic of this lecture.

We record with pleasure the excellent opportunity that occurred this year of listening to the Honorary Readership Lectures delivered by our Vice-President, Sri. T. Totadri Iyengar M. A. under the auspices of our Association on 30th of July, 6th of Aug., 10th of Aug. and 17th of August. on "Ramanujan and his theorems." Our invitation to the general public met with a cordial and ready response and lectures were well attended.

"Number-concept" the first and fundamental notion of Mathematics formed the topic at the first ordinary meeting addressed by Mr. Karunakaran IV (Hons.) with Mr. A. O. Kunjipaulo B.A., (Hons) in the chair on 28th

## COLLEGE SOCIETIES

Aug. After tracing the history of the fundamental processes of algebra the speaker dilated on the decimal system and rightly credited the Hindus with the introduction of zero in the numeral system.

On the 31st Aug. Mr. R. Tyagarajan IV (Hons.) gave us an enlivening talk on his recent tours in "Flatland". He enumerated tales of life and living in Flatland and thanked the citizens of that land for contributing to the enlargement of the imagination among the superior races of solid humanity.

On the 25th of Oct. Mr. A. R. Krishnamurti IV (Hons) spoke on the theory of restricted relativity with M. I. Francis Raj M.A., in the chair. He described and illustrated the Michaelson-Morley experiment with numerical examples. Sri V. Balasubrahmanyam IV B.Sc., (Hons) supplemented the lecturer.

The delusion among many that Mathematics is unpractical was dispelled by Sri T. G. Pranatharthiharan M.A., of the National College during his address "Scope and use of Mathematics" on 15th Nov. 1943 with Sri V. Ranganathan B.A., (Hons) in the chair. The lecturer enumerated instances of the unignorable usefulness of this subject in Biology, Medicine, Sociology and Psychology.

A highly philosophical dissertation on "Why Mathematics?" was made on 11th Jan. 1944 when Rev. Fr. Thekkaekara S.J., maintained that Mathematics alone caters best for the needs of men in the spiritual field. The question as to what intelligence and idiocy are was answered by Sri S. Krishnaswamy Iyengar M.A., L.T., of the National College in his Lecture on "Mathematical ability" on 20th of Jan. Sri S. Suryanarayana Iyer M.A., presided. Among many interesting features the Mathematical formula, Intelligence Quotient is equal to  $\frac{\text{Mental age}}{\text{Chronological age}} \times 100$  was noteworthy.

On the 24th of Jan. we had Mr. V. Balasubrahmanyam IV B.Sc. lecturing on "Physicists' stand to Astronomy." Mr. George V. P. Lobo IV (Hons) presided. This is a happy instance of a Physics (Hons). student addressing the Mathematics association, rather unique in the annals of the Association.

The explanation and importance of "Lorent transformation" in the general progress of the theory of relativity were fully discussed by Mr.

## COLLEGE SOCIETIES

B. K. Gopinath IV (Hons.) on the 1st of Feb. when Sri T. Totadri Iyengar M.A., presided. The lecture despite being highly mathematical was interesting.

"Addition and multiplication combined" was the topic of the address at the extraordinary meeting delivered by Mr. M. I. Francis Raj M.A., on 4th Feb. 1944. He proved with rigour the existence theorems on the fundamental concepts of Algebra.

Physics and Mathematics pooled their resources once again this year when our Vice-President, Sri T. Totadri Iyengar M.A., delivered under the auspices of both the associations on the 8th Feb. 1944 a lecture on the theory of relativity. Sri K. S. Mandalam Iyer M.A., L.T., Prof. of Physics presided. The lecturer proved that Mathematics formed the warp and woof of the theory of relativity. The lecture was interesting, instructive and highly humorous.

The Valedictory Address of the Association, marking the end of this year of successful activity was delivered by Sri R. N. Subrahmanyam M.A., L.T., Head of the Department of Mathematics, Madras Christian College, Tambaram on 26th Feb. The topic of the address, was "Statics, Probability and Truth."

Our annual written and elocution contests were held this year also as usual on the 14th and 16th of Feb. and the total aggregate in both the tests was taken into consideration for the prizes. Mr. M. Srinivasan V (Hons.) stood first, Mr. A. R. Krishnamurti second and Mr. T. K. Guruswamy II U. C. third. We heartily congratulate them.

R. HANUMANTHA RAO

V. KRISHNAMURTI

*Secretaries, Mathematics Association.*

## The Chess Club

Fr. Pruvot S.J. the President of the club and Sri S. Suryanarayana Iyer, the Vice-President, are the founders of this club started two years ago with a view to helping latent chess talent among the staff and students. Mr. S. Srinivasan was nominated Secretary for the year 1942-43. In the chess competition held that year the staff and students took part and Messrs. Srinivasan and Annamalai got the first and second prizes respectively.

## COLLEGE SOCIETIES

By the kind courtesy of Rev. Fr. Principal to whom our thanks are due, two chess sets were provided. This year, daily in the evenings, the chess players could be seen racking their heads in Room No. 18, Lawley Hall buildings and it was a pleasant sight. This year the competitions were held as usual. Mr. S. Srinivasan V Hons. got the first prize and Mr. Narayanan II U. C. the second.

I thank all the members of the staff and students who have contributed much to the successful working of the club.

R. HANUMANTHA RAO,  
*Secretary.*

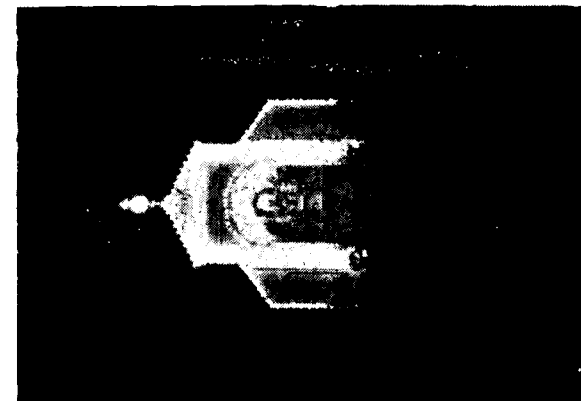
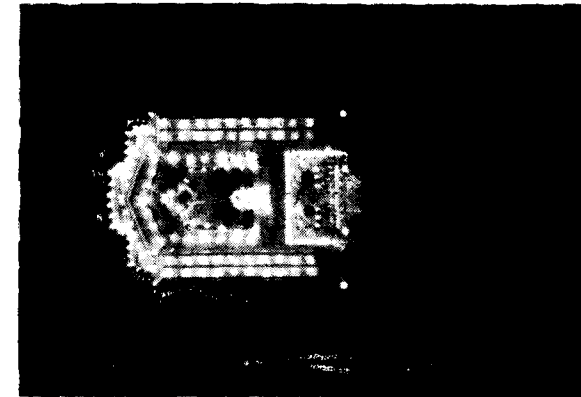
## Anniversary of the College Societies

The Anniversary of the College Societies was celebrated on Monday, the 28th of February, 1944, with Mr. J. F. C. Reynolds, C. I. E., Agent and General Manager, S. I. Ry., in the chair. The President was introduced to the members by Mr. T. Srinivasan, after which the Secretaries of the various Associations read the annual reports. Mr. Reynolds distributed the prizes to the winners in the different academic and athletic competitions. In the course of the Presidential address, Mr. Reynolds emphasized the value of education as a means of equipping oneself for success in life. The man who lives for himself is not only a burden to society but useless to himself. We find our fulfilment in the service of others. Unless education is re-oriented to this purpose, the new order that we all dream about is bound to remain a dream.

The vote of thanks was proposed by Mr. T. Totadri Iyengar.

After a musical interlude, the members of the Dramatic Society staged the "*Devil's Memoirs*", a comedy in three acts.

Our thanks are due to Rev. Fr. Coyle S.J., for directing the drama, conducting the band, and for many other things besides. The actors and the secretaries of the Associations deserve our heartiest congratulations and sincere thanks.



WORKSHOP REPOSITORY  
1943.

REPOSITORY No. I  
1943.

by Vergil R. Papali, III B.Sc.



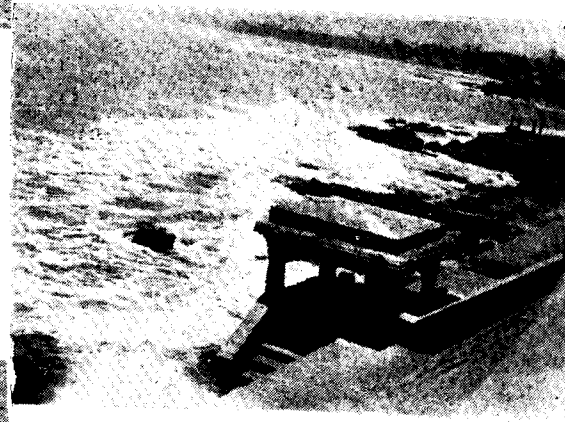
Staff: Tug-of-War, College Sports  
by J. S. Ponniah, Old Student of the St. Joseph's.



New addition to Museum: A two-headed calf  
by Vergil R. Papali, III B.Sc.



D. Natesan, IV U.C.  
College Champion 1943-44.



Cape Comorin—Northern View  
by T. A. Narayanaswamy, III B.Sc.

## College Annual Sports

**T**HE College annual sports came off with the usual enthusiasm and excitement on the Mahé Grounds on Saturday 4th September '43. S. K. Chettur Esq. M.A., I.C.S., Collector of Trichinopoly, presided and Mrs Chettur kindly gave away the prizes.

Thanks to the overnight rain which instead of disturbing our gala day provided ideal cool weather, the competitors and spectators spent a very pleasant morning witnessing the various interesting items. Though records "to be mentioned in Despatches." were not newly set up, it is gratifying to record that our athletes have kept the college high standard of proficiency. The most unexpected new find this year was Sengotvel who in the 4th year of study in the College came into the arena for the first time this year and carried off the first prize in the cross country race in almost the same high record time set up by our last year's champion, Jacob Andrews. Our sprinter D. Natesan's flight round the oval was a real delight to witness. We wish to congratulate him on his outstanding performance winning six first prizes, one second prize and the much-coveted College Championship with 33 points beating the runner-up by 19 points. The tug-of-war between the New Hostel "A" team and the Sacred Heart Hostel "A" team proved very exciting. Amidst loud cheers the New Hostellites carried off the rope though their opponents would not yield until after a really tough fight. The staff tug-of-war was thoroughly enjoyed by the spectators though it must be recorded that the College students have a big grievance that members of the College staff did not condescend to entertain them by taking part in the event in large numbers. Mr. S. Suryanarayanier, the only member of the College staff taking part, deserves special congratulations on captaining the successful team.

After Rev. Fr. Rector's welcome speech and the distribution of prizes the President delivered a short humorous address. Whilst extolling the virtues of skill at athletic games and congratulating not only the winners of this year but the prospective winners and the 1944 champion he explained how a judicious combination of athletic and academic distinction alone would contribute to success in life.

With the playing of the National Anthem and cheers to the distinguished guests the happy function came to a close.

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## COLLEGE ANNUAL SPORTS

### LIST OF PRIZE WINNERS :—

| EVENT.             | COMPETITORS.                                                             |
|--------------------|--------------------------------------------------------------------------|
| Long Jump          | 1. D. Natesan<br>2. Amirtharajan                                         |
| Hop, Step & Jump   | 1. N. F. Newton<br>2. D. Natesan                                         |
| Shot Put           | 1. Charles E. David<br>2. Thirumalaisami                                 |
| Discus Throw       | 1. Charles E. David<br>2. Matham                                         |
| High Jump          | 1. Selvaraj<br>2. David Raj                                              |
| Pole Vault         | 1. D. Natesan<br>2. R. C. Ramiah                                         |
| 110 Metres Hurdles | 1. D. Natesan<br>2. Kulandavel                                           |
| 100 Metres Dash    | 1. D. Natesan<br>2. N. F. Newton                                         |
| 200 Metres Race    | 1. D. Natesan<br>2. M. I. Joseph                                         |
| 400 Metres Race    | 1. D. Natesan<br>2. Beslin Pereira                                       |
| 800 Metres Race    | 1. Beslin Pereira<br>2. V. T. Sivasubramanian                            |
| 1500 Metres Race   | 1. Pushparaj<br>2. V. T. Sivasubramanian                                 |
| Cross Country      | 1. Sengotvel<br>2. Kulandavel<br>3. R. Daniel                            |
| Relay Race         | Winner : D. Natesan's team<br>Runner-up : Kulandavel's team              |
| Tug-O'War          | Winner : New Hostel 'A' team<br>Runner-up : Sacred Heart Hostel 'A' team |
| Championship Cup : | D. Natesan. Total Pts. 33                                                |
| Staff Race         | Winner : Mr. Suryanarayanier's team<br>Runner-up : Mr. Raja Dorai's team |

## The College Athletic Association Annual Report 1943-'44.

 UR College Athletic team continues to retain the highest rank of honour amongst the several outdoor activities of the College. The Annual Athletic meet on the Rector's Day early in September was a great success. Later, a few competitors took part in the Pudukkotta Dussara Tournaments and brought home a number of prizes, D. Natesan just missing the championship by one point or rather, it is reported, as a result of an afterthought decision in one of the events. Our greatest success was at the T. D. A. A. open sports meet. After a real trial of strength we carried off the Pentland Shield for the third year in succession and winning it permanently too according to the old T. D. A. A. rules. But we have just heard that we shall not retain it permanently, it is said, owing to war conditions. Yes, we on our part will sportingly accept the ruling and not open a new war front with the executive.

Football and Hockey have as usual been very popular and well encouraged, though as a whole the teams have failed to record their merit in terms of trophies won. Individual recognition we have had. Beslin Pereira had the unique distinction of being invited to play an exhibition match at Coimbatore early in August. Later, he was a member of our University team which defeated the Annamalai University team in the inter-university tournament. George Aruldass, our Hockey captain, was selected to play for the University.

Early in the year our tennis players involuntarily decided to help the war effort by not using up the rubber that may better be used against the Demon Hitler and the Wily Tojo. All the tennis courts in the College have disappeared providing a fine playground now buzzing with the shrill voices of our young school players. But let us warn our tennis enthusiasts not to throw away their rackets; let them keep them safe awhile. The War will be over shortly and more and better tennis courts will be put up for younger brothers.

While we cannot boast of extraordinary teams in volleyball and basketball as last year, our present players have greater enthusiasm, their standard being well above the average.

## THE COLLEGE ATHLETIC ASSOCIATION

Our badminton team deserves special congratulations on winning the T. D. A. A. open shield for the third year in succession.

Our Cricket club commenced its fifth year with five of our old men in, and the new entrants quite promising. With the return of J. Sydney the team has attained formidable strength.

It had a good beginning. The two practice games revealed the merit of our colts. And we scored our first victory over the Royal Air Force by 22 runs, their reply being 93 to our 115 runs, R. Perumal, our Captain, bagging 6 wickets for only 26 runs.

We are highly grateful to Fr. Principal for having sent us to Madras on a tour. Of the six games that were played at Madras, we won three, lost two, and drew one.

Our first encounter, and that a reverse, was with a strong team of the combined Medical Colleges. They had the benefit of the first knock. At one stage they had lost 7 wickets for 88 runs; but patchy fielding on our part enabled them to raise their total to 166. R. T. Parthasarathy was bowling all through the day and he returned the analysis of 8 wickets for 57 runs. Worn out as we were, we were skittled out for 46 runs.

We had an easy victory over the Law College. Sydney and Parthasarathy put on 105 runs for the first wicket, when the latter was out for 37. The high-light of the game was the fine century by Sydney. We declared at 184 for 5. The Lawyers were all out for 87, Perumal and Parthasarathy sharing the bowling honours 5 for 24 and 3 for 28 respectively.

Again, we had a reverse at the hands of the Madras Christian College at Tambaram. They crossed our total of 103 and won the match with four wickets in hand.

Then we met a side, the 'Varsity Occasionals, which consisted of many Provincial and University players. Good batting, and lofty hitting by Choudry, raised their total to 223. Parthasarathy bagged 5 wickets for 71 runs, and Perumal 3 for 73. Making only 93 for 9, we just managed to avert defeat.

Our next match was with the Loyola College which ended in a big victory for us. At one stage they had lost 6 wickets for 13 runs, Sydney

## THE COLLEGE ATHLETIC ASSOCIATION

and Parthasarathy doing the mischief. But courageous batting by Krishna Rao enabled them to make 131 runs. Sydney and Perumal bowled very well, the former taking 5 wickets for 24 runs, and the latter 3 for 43. We won by 5 wickets and 62 runs. Parthasarathy contributed a valuable 85, and Sydney & Sundaram 43 & 30 respectively.

The most interesting match of the tour was with the Presidency College played on a grass wicket at the Marina. The wicket was wet owing to over-night rain, and our captain, winning the toss, cleverly put them in to bat. Soon the batsmen were found in knots. They were all skittled out for a paltry 55 runs, Parthasarathy again being responsible for 8 wickets conceding only 15 runs. A good start took our score to 43 for 3. Suddenly there was a sensational collapse. Seshagiri Rao of Presidency found the spot on the cracked wicket and caused our disaster. The end was thrilling & we snatched away the victory by one wicket & one run, thanks to our last men. On the whole, the tour was a successful one.

Here, we had an easy victory over the Trichy United Club by a hundred runs. To their 42 (Parthasarathy 4 for 17), we replied with 145 for 7, Sydney scoring 74 and Venkatraman 37.

The Bangalore United Cricket Club were on a short visit here. To their 227 for 7 wickets, we replied with 101 for 9 (Sydney 36) and drew.

The Maharaja's College, Pudukottah, played us here, the match ending in a draw. The feature of the day's game was the splendid century by Sydney, which raised our total to 198 for 8 when we declared. They had made 147 for 7 when stumps were drawn.

The last match of the season was with the Ormesby Institute. The Institute raised the huge total of 280 runs, Aruldoss scoring a century for them. Sydney returned with the best analysis of 5 for 75. M. Salauddin, the All-India player, made a useful 27 for them. Sydney's brilliant unbeaten century was responsible for our 155 for 6, Salauddin taking 2 for 59. The match ended in a draw.

The year's record was uniformly good. Out of the eleven matches played, we won 5, lost 2, and drew 4. Sydney, Perumal and Parthasarathy contributed their best for the team during the season. Mention must be made of the sincere work done by Venkataraman, Sundaram, Mani, Ramadas, Begavandas, Freedy and others. Candappan did his work

## THE COLLEGE ATHLETIC ASSOCIATION

behind the sticks remarkably well. And R. Perumal, the captain, must be congratulated on his able leadership.

Three of our players, Sydney, Parthasarathy and Perumal, were invited to play for the Madras Varsity Occasionals in a series of matches at Bangalore. They did splendidly well throughout, and it must be noted that not a match was lost in the tour. Sydney was as brilliant as ever, and he completed the tour with two fine centuries, scoring 450 runs in seven matches, while Parthasarathy ran close to him making 250 runs. Perumal's bowling was marked by variety and was excellent. It is to be noted here that in the match with the City Gymkhana, which consisted of a few Provincial players, Sydney and Parthasarathy entered into a fine century partnership, the former making 100 and the latter 72.

It should be recorded with pride that two of St. Joseph's Cricketers have received honours in the field of Big Cricket. Sydney and Perumal were selected to play for the Madras University in the Inter-University Cricket Tournament for the Rohinton Baria Trophy. And yet another honour, a greater one, was conferred upon Sydney when he was chosen to represent Madras Province in the All-India Ranji Trophy Tournament.

Our home tournaments were as usual well contested with numerous entries: 7 in hockey, 9 in Basketball, 10 in Football, 11 in Volleyball and 45 in Badminton, thus bringing 320 competitors on the arena. IV. U. C. deserve congratulations on their success in four of these tournaments.

Before concluding we have pleasure in expressing our appreciation of the excellent part played in the Athletic Realm by our veteran runner V. Kulandavel for the last SIX years. D. Natesan has been an outstanding sprinter, Beslin a real fighter in football and Parthasarathy a fine cricket all-rounder for FOUR years. George Aruldas though with us only for two years deserves special mention as a player of high order in Football. Hockey, Badminton and Volleyball in addition to his athletic attainments.

Whilst wishing these all good luck in their future career we are confident that their worthy successors will hold up the torch of triumph to the greater glory of their Alma Mater.

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[Note:— Cricket section above contributed by R. T. Parthasarathy]

## THE COLLEGE ATHLETIC ASSOCIATION

### LIST OF PRIZE WINNERS IN THE HOME TOURNAMENTS

|               | Winners               | Runners-up           |
|---------------|-----------------------|----------------------|
| 1. Football   | IV U. C.              | I. U. C.             |
| 2. Hockey     | IV U. C.              | B. Sc.               |
| 3. Volleyball | IV U. C.              | Hons.                |
| 4. Basketball | B. Sc.                | IV. U. C.            |
| 5. Badminton  | Natchimuthu & Partner | Venkatakrisnan & Pr. |

College colours for outstanding players who have represented the College at tournaments and sports for at least two years have been awarded to the following:—

|                     |                 |              |
|---------------------|-----------------|--------------|
| R. T. Parthasarathy | V. Kulandavel   | D. Natesan   |
| Beslin Pereira      | George Aruldass | K. K. Joseph |
| S. M. Arulappan     | P. S. Shankaran |              |

## EXCHANGES

THE MADRAS CHRISTIAN COLLEGE MAGAZINE.  
THE MADRAS MEDICAL COLLEGE MAGAZINE.  
THE MADURA COLLEGE MAGAZINE.  
THE MAHARAJAH'S COLLEGE MAGAZINE, ERNAKULAM.  
THE M. D. T. HINDU COLLEGE MAGAZINE, TINNEVELLY.  
THE ST. MARY'S H. S. MAGAZINE, BOMBAY.  
THE MODERN STUDENT, CALCUTTA.  
THE MUNGRET ANNUAL, LIMERICK.  
THE NATIONAL COLLEGE MAGAZINE, TRICHINOPOLY.  
THE NORTH POINT ANNUAL, ST. JOSEPH'S COLLEGE, DARJEELING.  
"THE OLD COLLEGE", THE MAHARAJA'S COLLEGE OF SCIENCE,  
TRIVANDRUM.  
THE PACHAIYAPPA'S COLLEGE MAGAZINE, MADRAS.  
PASUMALAI PROGRESS, PASUMALAI.  
THE PETRINIAN, ST. PETER'S H. SCHOOL, TANJORE.  
THE PRESIDENCY COLLEGE MAGAZINE, MADRAS.  
THE PUDUKOTTAH COLLEGE MAGAZINE.  
THE PUTHURIAN, BISHOP HEBER'S H. SCHOOL, PUTHUR.  
THE RAJAHMUNDY ARTS COLLEGE MAGAZINE.  
THE RAMAKRISHNA HOME AND SCHOOL MAGAZINE, MADRAS.  
THE RAVENSHAVIAN, CUTTACK.  
THE SAIVA BHANU KSHATRIYA H. S. MAGAZINE, ARUPPUKOTTAI.  
THE SCHOLAR, PALGHAT.  
THE ST. SEBASTIAN'S COLLEGE MAGAZINE, MORATUWA, CEYLON.  
THE SIND MEDICAL JOURNAL, KARACHI.  
ST. STANISLAUS' HIGH SCHOOL MAGAZINE, BANDRA, BOMBAY.  
THE STANLEY MEDICAL COLLEGE MAGAZINE, MADRAS.  
THE STONYHURST MAGAZINE, BLACKBURN.  
THE STUDENTS' TREASURE, K. S. HIGH SCHOOL, TANJORE.  
THE ST. TERESA'S COLLEGE MAGAZINE, ERNAKULAM.  
THE ST. THOMAS COLLEGE MAGAZINE, TRICHUR.  
THE VICTORIA COLLEGE MAGAZINE, PALGHAT.  
THE VIDYASAGAR COLLEGE MAGAZINE, CALCUTTA.  
THE VINAYA RAJA RISHI COLLEGE MAGAZINE, ALWAR.  
THE VIZAGAPATAM MEDICAL COLLEGE MAGAZINE.  
THE VOICE OF ST. ALOYSIUS H. S., JUBBULPORE.  
THE VOORHEES COLLEGE MAGAZINE, VELLORE.  
ST. XAVIER'S COLLEGE MAGAZINE, BOMBAY.  
ST. XAVIER'S HIGH SCHOOL MAGAZINE, BOMBAY.  
ST. XAVIER'S COLLEGE MAGAZINE, CALCUTTA.  
THE ST. XAVIER'S COLLEGE ANNUAL, PALAMCOTTAH.  
THE ZAMORIN'S COLLEGE MAGAZINE, CALICUT.

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