

# ST. JOSEPH'S COLLEGE MAGAZINE



TIRUCHIRAPALLI



MARCH 1955

# CONTENTS

	PAGE		PAGE
EDITORIAL	I	A BOTANICAL TOUR	... 57
மேவ : (Sanskrit)	... 5	T. R. Sethuraman, IV B.Sc.	
V. Gopala Iyengar		A. DEBATE IN RETROSPECT	... 58
OUR MARIAN MITE	... 7	S. Natarajan, IV Hons.	
Francis J. Lanithottam, IV U.C.		TEXTTOOLS	... 60
THE QUEEN'S PROBLEM	... 9	L. Arulsamy, IV B.A. Hons.	
E. S. Rajagopal, IV B.Sc. Hons.		A PEEP INTO PONDICHERRY	... 63
RED-CHINA'S ADMISSION		J. Stanislaus, I U.C.	
TO THE U.N.O.	... 13	அப்ரதீஜித் பாரிதோஷிகம் (Sanskrit)	... 65
George James, V B.A. Hons.		SOCIAL SERVICE EXCURSION	... 70
L'AMBITION (French)	... 15	S. Baskaran, III Hons.	
N. Vittal, II U.C.		CHEMISTRY AT ALWAYE	... 72
THERMIONIC EMISSION	... 17	U. Harinarayana Rao, III B.Sc. (Chem.)	
P. S. Santhanam, V B.Sc. Hons.		THE OPPORTUNIST	... 77
and R. Rajan, V B.Sc. Hons.		S. Mahadevan, II U.C.	
MY TRIP TO KASHMIR	... 29	FIFTY YEARS OF CO-OPERATION	... 80
G. Kittu Rao, IV B.Sc.		P. Chandrasekar, Post-graduate	
प्यारे वचन (Hindi)	... 32	A CENTURY AFTER	... 82
K. Jayaraman, II U.C.		T. N. Seetharaman, IV Hons.	
இயற்கை ஓவியன்	... 33	INDIA AND THE WELFARE STATE	... 87
R. Gurunadhan, III B.Sc.		P. T. Kuriakose, V Hons.	
துயரச் சங்கிளி	... 34	नास्तिकता (Hindi)	... 90
P. Subramaniam, II U.C.		B. Raj, II U. C.	
காய்கதிரச் செவ்வனும், தண்கதிரச் செவ்வியும்	... 38	BOOK REVIEW	... 93
L. P. Kandasamy, II U.C.		CLIVE'S CALLING	... 94
பாரியும், பறம்பு நாடும்	... 40	NEW HOSTEL NOTES	... 96
K. Rajavelu, IV Hons.		SACRED HEART HOSTEL DIARY	... 98
புலவன் தொண்டு	... 44	GAMES AND SPORTS	... 101
S. Natarajan, III B.Sc.		COLLEGE SODALITIES	... 105
திருக்குறட் களஞ்சியம்	... 49	C. S. U. REPORT	... 106
K. V. Lakshminarayanan, III U.C.		SOCIAL SERVICE LEAGUE REPORT	... 107
THE BADAGAS OF THE NILGIRIS	... 52	INSTITUTE OF SOCIAL SERVICE	... 108
K. K. Sirangi, IV U.C.		N. C. C. NOTES	... 110
UNE BONNE SOIRÉE (French)	... 54	COLLEGE SOCIETIES	... 112
Ambroise Prosper, II U.C.		EXCHANGES	... 129
IN MEMORIAM B.B.	... 56		
T. K. Subramanian, II U.C.			
MALAYALAM ARTICLES	...		

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# EDITORIAL

## 1. *Learning to Write*

**I**N one respect the Editor of St. Joseph's College Magazine is singularly blessed: he need not worry about how to fill its pages. He need not ask Old Boys or present teachers for long and laboured articles describing the great days that were. As soon as the magazine is announced on the Notice-Board, poems, stories, essays pour in, and the difficulty is not what to put in but what to leave out. . .

This, however, does not mean that all these youthful contributions are of literary or scientific value or that they are all original. Touchstone's humble 'A poor thing, sir, but my own,' might with slight adaptation be a motto for writers in college magazines no less than in 'learned' journals. But what is even more necessary is to convince them that writing is not so easy as they think, just as teaching is not as easy as it looks to students. They would do well to ponder what, not to speak of Pater and Stevenson and Newman, a living writer like Charles Morgan has to say about Learning to Write: 'Only the little men with nothing to say can afford not to learn to write.'

## 2. *The Marian Year*

December 8, 1953 to December 8, 1954 was the Marian Year celebrated by Catholics all over the world with special prayers and penances to show their devotion and gratitude to the Mother of Christ. It was intended by the Holy Father, Pope Pius XII, to intensify spiritual life and combat materialism and thus draw down the mercy of God on a restless and God-forgetting world.

The Catholics of this College took their share in this universal celebration of the centenary of the definition of the Immaculate Conception of Mary. A detailed account appears elsewhere

in this magazine. Some of them, students as well as teachers, went to Bombay early in December last to take part in the Marian Congress which was the whole nation's celebration of the end of the Marian Year. They were unanimous in saying that the Congress was a triumph of forethought and organization and a credit to Catholic India, to Bombay, and especially to its Cardinal-Archbishop.

### 3. *Educational Changes*

Though this Magazine is primarily meant for students and changes in the educational system are neither planned nor executed by them, still they cannot help taking, and indeed should take, an interest in them as the budding leaders of India. The decision of both Academic Council and Senate to introduce a three-year course for the first degree in Madras University and replace the two-year Intermediate by a one-year pre-university course to be later on added to the High School, has led to universal discussion whether it will be an improvement or a worsening of the present standards.

No one can question either the sincerity or the competence of those who have decided on this change. A greater variety of subjects in the multi-purpose high school will reduce the number of those who knock at the door of the University without a clear aptitude or desire for its characteristic training. The transition from the mother-tongue medium to English has of late years become more painful and inevitably resulted in lowering the standard of the Intermediate course. Since university education is not meant for all those who come out of the high school, its standard of admission and achievement should be raised, not lowered, and its duration lengthened, not shortened. It is not by the label that a country's graduates are judged, but by their value. Every lover of India must be anxious that our graduates be worthy of their title.

### 4. *Andhra Loyola College*

Since this is the first number of St. Joseph's Magazine since the birth of Andhra Loyola College, it is fitting that we should welcome this youngest member of the family of Jesuit colleges in India. Started shortly after the inauguration of the new Andhra State, it marks the return of the Society of Jesus after more than



a hundred and fifty years to the scene of its glorious labours in the eighteenth century. And the same feature distinguishes Andhra Loyola College from other Jesuit colleges as distinguished the old Andhra college long ago—enthusiastic support from the Andhras. The only difference is that while it was a Rajah who financed its predecessor, it is the people who have given the land and much of the money for Andhra Loyola College. Indeed, it may be called a people's college (not, of course, in the Russian or Chinese sense), so much have the Andhra people made it their own and so enthusiastic are they about it.

### 5. *Rajkumari Amrit Kaur*

Rajkumari Amrit Kaur's presiding over the first 'Convocation' of our Social Service Institute was a source of great joy and encouragement to the whole College. Not that she is a Minister at the Centre or even that she is the only woman Minister there—but because of her entire background: birth, education, apprenticeship, and lifelong, unwavering service of the country combined with an independence of thought and speech which is rare even in male Ministers. Her stay here was just an hour, but it was packed with a full programme (which is described elsewhere in this Magazine) and made a lasting impression.

Our Institute of Social Service, under Rev. Fr. J. Adisayam, had finished a year of useful work and its diploma had to be given to last year's students. In giving away these certificates Rajkumari spoke fluently and faultlessly of her own experience of social service under Gandhiji both at Wardha and in the Bangi colony in Delhi. And she wished our students to acquire the *spirit* of social service which is much more than most so-called social workers can grasp.

This is the primary object of our Institute, which gives the intellectual training necessary for social service, and our League (under Rev. Fr. A. Fournier) which goes into the *cheris* (or *bustis*) of the town and cleans the traditional rubbish-heap, cuts drains for the dirty water, scrubs the children, while the parents look on in stolid unconcern not unmixed with amusement. These students see for themselves, what they may have read in books and heard in lectures, that the majority of their own countrymen are still far

behind them ; and the patriotism which Independence has sharpened will prompt them to *lift* their poor brothers and sisters up. This lifting up from above is, however, not social *service* (it may be social condescension or even help) ; to deserve this name it must be help *from below*, as a servant to his master.

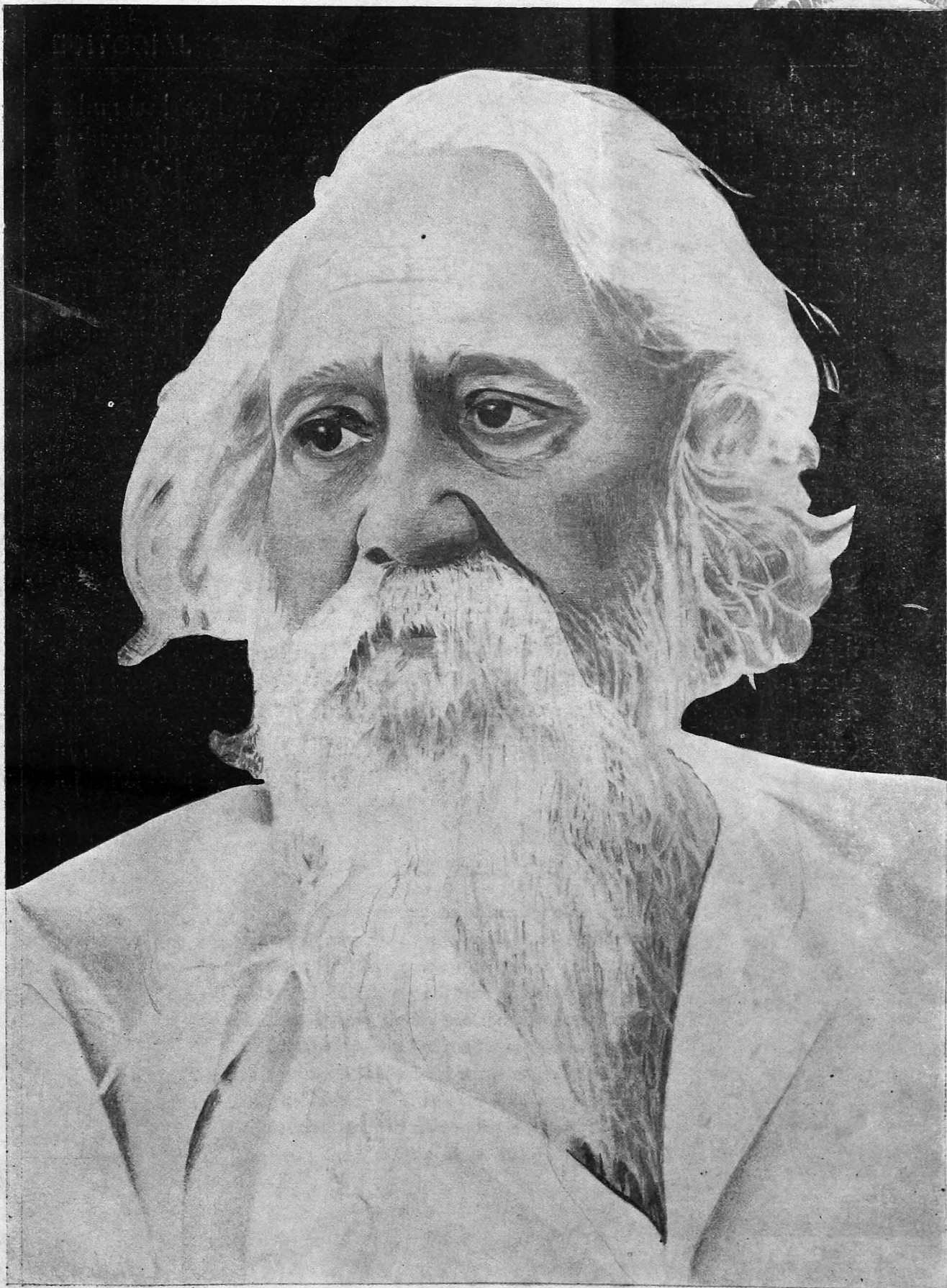
This is true service—to see God in the person we serve and love him in spite of repelling appearances and even rebuffs. If we can teach our students this, we shall have done the service India needs most.

---

### The Art of Writing

‘It is always easier to say in twenty words what should be said in ten. . . . Every man who understands the art of writing and has tried to write well, is aware that the process of composition is commonly not the simple transference of thought into language but the laborious attempt to work into coherent shape ideas which have been in his mind but which have still to be clarified and arranged ; and the temptation to gloss over weak places by deliberate ambiguity is unmistakable.’

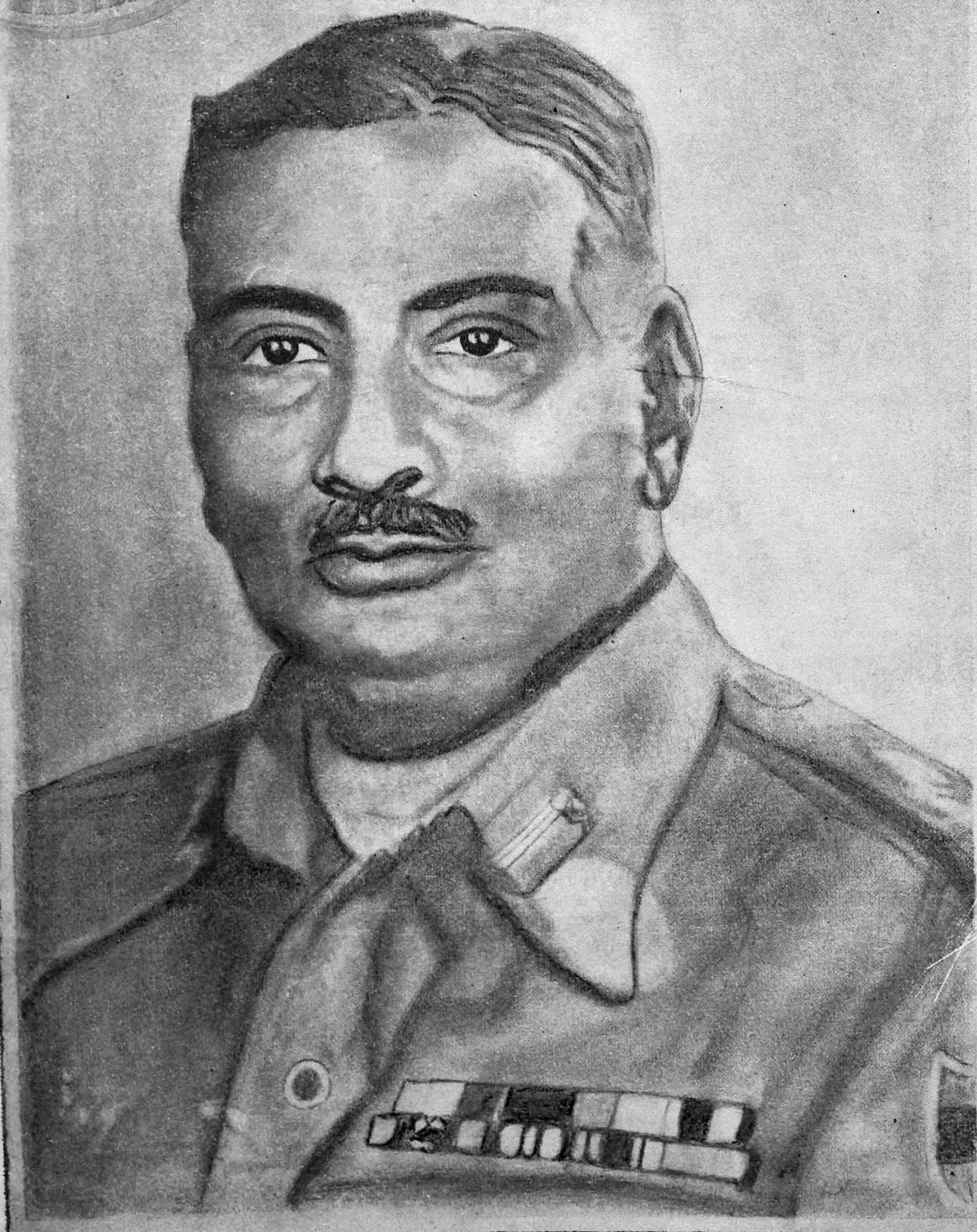
R. W. CHAPMAN



**Rabindranath Tagore**

*(by C. Ranganathan, IV B.Sc.)*

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**Rajendrasinji**

(by T. A. Ganesan, I U. C.)

# मेघः<sup>\*</sup>

By V. Gopala Iyengar

1. तृष्यत्कुसुमकुलेभ्यो  
वहामि वर्षं सरित्समुद्रेभ्यः ।  
छायां स्वप्नरतेभ्यो  
दिनस्य मध्ये ददामि पर्णेभ्यः ॥
2. रविमभि नृत्यज्जननी<sup>1</sup>—  
वक्षस्यान्दोलनेन सुप्तानि ।  
तुहिनैर्मत्पक्षधुतै—  
मञ्जुलमुकुलानि वीतनिद्राणि ॥
3. करकावृष्ट्यभिघातैः  
श्वेतीकरोमि हरितशाद्वलानि ।  
विद्राव्य पुनर्वर्षै—  
गर्जितमुखरो विहस्य गच्छामि ॥
4. मय्यद्रिषु तुहिनमुचि  
वृक्षाः क्रोशन्ति हिमभराक्रान्ताः ।  
श्वेतोपधानमेत<sup>2</sup>—  
न्नक्तं मे वातहस्तयोः स्वपतः ॥
5. तुङ्गाम्बरकुञ्जस्थो  
विद्युत्सूतोऽस्ति मार्गदर्शी मे ।  
कन्दरनिगडनिबद्धं  
गर्जत्युद्विग्नचेष्टितं स्तनितम् ॥

\* A rendering of the first few lines of "The Cloud" by Shelley.

<sup>1</sup> वृक्षस्य शाखा अत्र मुकुलानां जननीत्वेन उल्लिख्यते । <sup>2</sup> एतत् — तुहिनम् ।

6. अब्धेरवनेश्चोपरि

सूतोऽसौ मन्दमेव मां नुदति ।

धूम्रार्णवतलविलस-

त्प्रकृतिश्री<sup>1</sup>बद्धकामसंमुग्धः ॥

7. निर्झरभृगुगिरिभूतल-

कासाराद्येषु यत्रकुत्रापि ।

चरतस्तस्य स्वप्ने

सर्वत्राभाति कामिनीह्येषा ॥

8. वर्षासारनिपातै-

र्विलयं गच्छति सहैव सूतेऽस्मिन् ।

गगनश्रीवदनोद्य-

न्नीलोज्ज्वलमन्दहासमासेवे ॥

9. रक्तोदयः स भास्वा-

नुल्कानेत्रः प्रदीप्तनिजवर्हः ।

मन्दद्युतौ च शुके

विचरन्मत्पृष्ठपोतमारूढ्य ॥

10. वहति गरुडस्य शोभां

रम्यां प्रदीप्तहेमपक्षस्य ।

भूकंपेनान्दोलित-

दन्तुरकूटे क्षणं निषण्णस्य ॥

<sup>1</sup> प्रकृतिश्री :—प्रकृत्यां सर्वत्र विद्यमाना सौन्दर्याधिदेवता ।



# Our Marian Mite

*By Francis J. Lanithottam, IV U.C.*

**T**HE Encyclical "Fulgens Corona" of Pope Pius XII, proclaiming 1954 as the Marian Year for the centenary of the definition of the Immaculate Conception, made an earnest appeal to all Catholics to strengthen their faith in the Immaculate Conception of Mary the Mother of God and to implore her help to heal the ills of the aching world of today. That Encyclical, unique perhaps in the history of the Marian cult, called upon the faithful to celebrate this centenary with extraordinary marks of devotion to her, such as processions, pilgrimages to her shrines, and similar external manifestations of our love and reverence for the Immaculate Mother of God.

The response of Catholics throughout the world showed itself in a spontaneous outburst of devotions and celebrations. The shrines of our Lady were thronged with pilgrims in their thousands. Churches and cathedrals dedicated to her resounded with humble supplications and sweet hymns. Our own contribution to the worldwide celebration of the Marian Year was only a drop in this mighty ocean. Yet we were up and ready with our humble offerings to our Mother, however imperfect they were bound to be.

With solemn High Mass in the College Church on 8 Dec., 1953, we opened the Marian Year on the very day of its proclamation in the Eternal City. The programme of our celebrations was prepared during our Christmas holidays and announced on 22 Jan. 1954. According to it, special Masses were to be said both in the College Church and in the Sodality Chapel every Saturday. Five decades of the Rosary were to be said in common during this Mass and the Litany of our Lady was to be sung after the Elevation. After Mass the priest would deliver a sermon on Our Lady and all would end with the Benediction of the Blessed Sacrament. As our academic year was drawing to its close and examinations were fast approaching, we were compelled to postpone all the extraordinary functions in honour of Our Lady to the ensuing academic year.

We had our hectic days at the very commencement of the new academic year. The Adoration day, the Corpus Christi procession, and finally the annual retreat, all combined to put us in the best dispositions of the Marian Year. Our pilgrimage to Vailankani was to take place a fortnight after our annual retreat, and the days intervening were absorbed in all the necessary preparations for it.

The morning of 6 August dawned. Every event of the day was out of the usual routine—early Mass and Communion, breakfast at an

earlier hour, and dinner at 10 a.m. Each of us meanwhile stuffed his bag or suit-case in feverish excitement with the necessaries for a day's journey. The College Band struck up "Onward Christians" at 11 a.m. and the pilgrims moved to the College Church in solemn procession, with fluttering banners escorting each group. After the blessing of the banners, the next thing was to rush pell-mell to the Trichy Junction in the heat of the midday sun.

At the bugle call at 1 p.m. the pilgrim train slowly but majestically moved out of the platform with a prayerful and pensive atmosphere pervading all the ten compartments. Wreaths of rosaries and bouquets of hymns on the way were our little gifts to be placed at the feet of our Mother. On arriving at the spot at 8 p.m. the solemn procession along the shores of the Bay of Bengal filled us with reverential awe. Turning our eyes to the gleaming star on the distant horizon of the sea, we tasted with all our senses the significance of Mary's titles: "the Ocean Star," "Star of the Sea", etc. The light shining on the steeple of the shrine looked like a veritable beacon directing the wandering sailors of the sea.

After solemn Benediction of the Blessed Sacrament, the hum and murmur of the place put us in mind of old Jerusalem on the eve of the enrolment according to the edict of Augustus Caesar. Every one was in quest of the most comfortable corner to stretch his worn-out limbs for the night. All the sheds and corridors available were filled with our student pilgrims, and those who had no place inside resorted to the soft sand of the sea-shore to be lulled to sleep by the agreeable music of the night waves, while the stout of limb and heart, despite the fatigue of the journey, kept a night vigil at the shrine. Even Abu Ben Adham might have envied the quiet sleep and peaceful dreams of our pilgrims that night.

The cool sea-breeze of the early morning was felt like the tender touch of our Mother to awake and invite us to her presence. At the bugle call one and all assembled in the imposing church of Our Lady for solemn High Mass sung in her honour. Personal petitions and parting gifts were offered to our Mother when we had refreshed ourselves with a delicious breakfast. Finally, it was time for our departure from the place and we came away with our minds replete with sweet memories of Vailankani.

Our pilgrimage was only a ceremony of purification in view of the Triduum, the Exhibition, the Marian Academy, the Candle-light Procession which were to take place on the 20th, 21st, and 22nd August. The Triduum consisted of daily sermons on the virtues and privileges of Mary and her role in the redemption of the world. The Exhibition, which coincided with the Triduum, was devoted to the representation of



Mary's singular life on earth and her assumption into Heaven, from where she still communes with the world by her apparitions and messages. The two thousand years' Marian history was artistically synthesized and the entire Marian world was compressed within the four walls of an ordinary class-room and a small library by the organizers of the exhibition. On 22 Aug. with the Candle-light Procession and Benediction of the Blessed Sacrament at the College museum façade our celebration of the Marian Year came to a solemn conclusion.

Still the Saturday devotions were continued to preserve us in the spirit of the year until its conclusion on 8 Dec., 1954. The first issue of "Our Life" for the academic year was dedicated to Our Lady of Lourdes as a souvenir of our Marian Year celebrations. May Our Lady shower her heavenly graces abundantly on the staff and students of this College to whose kind and cordial cooperation our celebrations owe their unusual success!

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## The Queen's Problem

*By E. S. Rajagopal, IV B.Sc. Hons.*

THE layman probably has more serious misconceptions about Mathematics than about any other science. To him, mathematics is a complex jargon of unintelligible formulae; the mathematician, an eerie being—all brains and nothing else. He would be very surprised to hear that almost all the abstract concepts of the mathematician,  $n$ -dimensional geometry, complex variables, non-commutable algebra, to quote a few examples, have been applied, in one form or another, to interpret the nature of the physical world around us. In fact, abstruse mathematical analysis can be of help in solving some of the daily-life problems, such as recreational puzzles. This article is an attempt to show how a common recreational problem can be elegantly solved by rigorous and purely mathematical methods.




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\* This was the subject of a prize-winning talk before the Mathematics Association. The author is indebted to the Vice-President of the Association for permission to use the matter.

The problem is a famous one in chess, that is, to arrange eight queens on an ordinary chessboard of 64 cells so that no queen can take any other queen, or simply, so that no two queens may be on the same column or the same row or a diagonal of the chessboard. In diagram 1, the queens marked (1) and (2) lie on a diagonal. To find all the solutions is not an easy matter; and if the reader sits down with a piece of paper and a pencil to work it out, I am afraid, even after hours of patient trial, he will not be in possession of the complete answer to the proposed problem. In fact the problem can be generalised to the case of  $n$  queens on a chessboard

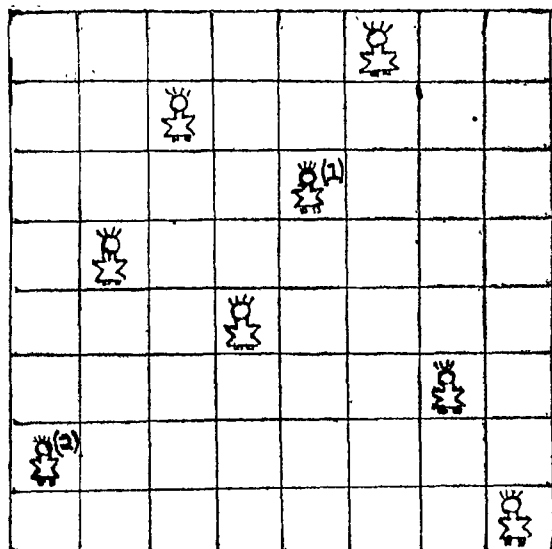


FIG. 1

of  $n^2$  cells. The problem was proposed in this form by Nauck in 1850.

In 1874, a method of solution based on the use of determinants [determinants are just rows of figures arranged and expanded in a particular way, which we shall see presently] was suggested by S. Günther. The idea is as follows: It will be seen (fig. 1) that every cell is completely determined if the row (horizontal array) and the column (vertical array) in which the cell occurs are mentioned. The cell occupied by queen 1 occurs in the 3rd row and 5th column and can be represented as  $A_5^3$  where the superscript refers to the row and the subscripts to the column. Similarly  $A_1^7$  will represent the cell occupied by queen 2. Günther said that the only solution, if any, are given by those terms of the determinant (fig. 2) in which no letter or index appears more than once.

The reason is obvious. Every term of the determinant contains one and only one element from each row and each column. Hence any term will indicate the positions (corresponding to the A's) on the board, in which the queens cannot take one another by rook's moves. Further, the letters and indices are so arranged that similar ones lie along bishop's paths (diagonals). Hence if

we have the terms in which all the letters and all the indices are different, then it will correspond to a set of positions on the chessboard where no queen can take any other queen by rook's moves or bishop's moves.

$$\begin{vmatrix}
 a_1 & b_2 & c_3 & d_4 & \cdot & \cdot & \cdot & \cdot \\
 \beta_2 & a_3 & b_4 & c_5 & \cdot & \cdot & \cdot & \cdot \\
 \gamma_3 & \beta_4 & a_5 & b_6 & \cdot & \cdot & \cdot & \cdot \\
 \delta_4 & \gamma_5 & \beta_6 & a_7 & \cdot & \cdot & \cdot & \cdot \\
 \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
 \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot & \cdot \\
 \cdot & \cdot & \cdot & \cdot & a_{2n-3} & b_{2n-2} & \cdot & \cdot \\
 \cdot & \cdot & \cdot & \cdot & \beta_{2n-2} & a_{2n-1} & \cdot & \cdot
 \end{vmatrix}$$

FIG. 2

In an ordinary chessboard, the determinant is of the eighth order and so contains  $8!=40,320$  terms. It would be out of the question to use this method for the ordinary chessboard or for a larger board unless some way of picking up the required terms could be developed.

Fortunately, a way of effecting this was discovered by J. W. L. Glaisher in 1874. He showed that if the solution for  $(n-1)$  queens on a board of  $(n-1)^2$  cells is known, all the solutions for  $n$  queens on a  $n^2$  cell-board could be deduced. The method will be sufficiently illustrated by one application.

It is easily seen that there are no solutions for the cases  $n=2$  and  $n=3$ . For  $n=4$ , there are two solutions, viz. 2413 and 3142 [the notation is easily deciphered: the second cell of the first row, the fourth cell of the second row, the first cell of the third row and the third cell of the fourth row are condensed as 2413.] In the form of the terms of the determinant (fig. 3) this is  $b_2 c_5 r_3 \beta_6$  and  $c_3 \beta_2 b_6 r_5$ . To find the solutions, if any, for a board of 25 cells, Glaisher proceeds like this.

$a_1$	$b_2$	$c_3$	$d_4$	$e_5$
$\beta_2$	$a_3$	$b_4$	$c_5$	$d_6$
$r_3$	$\beta_4$	$a_5$	$b_6$	$c_7$
$\delta_4$	$r_5$	$\beta_6$	$a_7$	$b_8$
$\epsilon_5$	$\delta_6$	$r_7$	$\beta_8$	$a_9$

FIG. 3

Those solutions involving  $a_9$  are obtained by adding  $a_9$  to solutions of the 16 cells-board which do not involve  $a$  or  $9$ . For any term which does not involve any letter or suffix more than once is a solution. In our case both solutions do not involve  $a$  or  $9$  and hence we get as two solutions for the 25 cells-board  $b_2 c_5 r_3 \beta_6 a_9$  and  $c_3 \beta_2 b_6 r_5 a_9$ . By rotating the board through  $90^\circ$  successively, six more solutions can be obtained.

In general, from any one solution, seven others can be deduced, three by rotation through  $90^\circ$ ,  $180^\circ$ ,  $270^\circ$ ; the other four being the mirror images of the first four. However, in our case only four solutions are possible from one primary solution. These eight solutions involving the corner cells are called *solutions of the first order*.

To get the *solutions of the second order* the corner cells must be neglected. The determinant is hence as shown in (fig. 4). The second order solution involves  $b_2$  and takes the cofactor of  $b_2$ . In it (fig. 5) put zero all elements involving  $b$  or 2 as they are not needed.

Further the required term should not contain any letter or index more than once. Then we are left with the term  $d_6 a_5 \delta_4 \beta_3$  only. So the solution involving  $b_2$  is

0	$b_2$	$c_3$	$d_4$	0
$\beta_2$	$a_3$	$b_4$	$c_5$	$d_6$
$r_3$	$\beta_4$	$a_5$	$b_6$	$c_7$
$\delta_4$	$r_5$	$\beta_6$	$a_7$	$b_8$
0	$\delta_6$	$r_7$	$\beta_8$	0

FIG. 4

0	0	$c_5$	$d_6$
$r_3$	$a_5$	0	$c_7$
$\delta_4$	$\beta_6$	$a_7$	0
0	$r_7$	$\beta_8$	0

FIG. 5

$b_2, d_6, a_5, d_4, \beta_8$ . The solutions which involve  $d_4, d_6, b_8$  etc. can be written down at once by symmetry. But it is easy to see that only two solutions will be distinct (as they form a square within the board). Thus there are two solutions of the second order.

To evaluate the solutions of the third order, the required determinant is fig. 5. If in it we take the cofactor of  $c_3$  and replace all terms involving  $c$  or  $3$  by zero, the determinant vanishes. The conclusion is that there are no solutions of the third order for our problem.

$$\begin{vmatrix} 0 & 0 & c_3 & 0 & 0 \\ 0 & a_3 & b_4 & c_5 & 0 \\ \gamma_3 & \beta_4 & a_5 & b_6 & c_7 \\ 0 & \gamma_5 & \beta_6 & a_7 & 0 \\ 0 & 0 & \gamma_7 & 0 & 0 \end{vmatrix}$$

Thus there are ten and only ten solutions, eight of the first order and two of the second order. Of these, there are two essentially fundamental solutions 14253 and 25314.

FIG. 6

Proceeding on the same lines, we can very easily solve the puzzle for any value of  $n$ . But I will content myself with giving a table of the various fundamental solutions up to say  $n=8$ . The fundamental solutions which give only four solutions are indicated by an asterisk. If it gives only two solutions, then there will be two asterisks.

$n =$	fundamental solutions
4	3142**
5	14253; 25314**
6	246135*
7	1357246; 3572461; 4613572; 3162574; 5724613*; 2574136*;
8	25713864; 57138642; 71386425; 68241753; 82417536; 36824175; 64713528; 36814752; 36815724; 72418536; 26831475; 64718253*

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“To act is so easy;  
to think is so hard.”

—GOETHE

# Red-China's Admission to the U.N.O.

*By George James, V B.A. Hons.*



WITH rhetorical sarcasm the U. S. Secretary of State, Mr. John Foster Dulles, asked at Berlin: "Who is this Chou En-Lai?" But however much one may try to belittle the significance of Red-China which has succeeded in uniting the whole of China with blood and iron and can claim the obedience, if not the allegiance, of a fourth of the world's population on a seventh of the world's land-surface, it is a fact that no one can deny. At present the Chinese leaders are engaged in the massive mobilisation of China's four million square miles and five hundred million people into a modern industrial State.

In the international field China is yearning for recognition and she wants to be seated in the U.N.O. on an equal footing with the other major powers of the world. China wanted to get U.N. membership before the beginning of the present session on September 23, 1954. Some countries like India and Britain (not to speak of Russia) have recognised the Peking regime as the true and only Government of China and so they support the admission of Red-China into the U.N. On the other hand, some other countries like the U.S.A. oppose China's admission. What is the reason for these contradictory views?

China is one of the founding nations of the U.N. and hence there is no doubt that she is entitled to membership of the U.N. But when the U.N.O. was instituted China was under the Nationalist government; Chiang Kai-shek and his Nationalist government was later ousted from power and transferred their capital to Formosa. Now Formosa is under the Nationalists and the mainland under the Communists. Nationalist China is now represented in the U.N. as one of its founding members, and Red-China is unrepresented. Both the Chinas cannot be represented in the U.N. at the same time, because there is only one China. Hence the problem is: who really represents the Chinese people? America holds that the real government of China is the Nationalist government and so they deny U.N. membership to Communist China.

Can the Peking Government get seated in the U.N. in the face of American opposition? The U.N. Charter stipulates that the admission of a new member requires the unanimous approval of the Security Council. Hence the American veto is enough to bar the admission of the Peking government into the U.N. Russia has barred the admission of Japan, Italy, and a dozen other countries by means of her veto. But

the difficulty is that in the admission of Red-China there is no problem of the admission of a new member, as China is already in the U.N.

Thus taking it for granted that America cannot veto China's admission, what are the prospects of her U.N. membership? According to the U.N. Charter, the approval of any important matter requires a two-thirds majority in the General Assembly. In the U.N. now there are sixty members. Hence the adverse vote of 21 members is enough to defeat any motion. The U.S. together with the American Republics have 21 votes among themselves and this is sufficient to keep Red-China out of the U.N.

Another loop-hole in technicality pointed out by the pro-China nations is that the question, who represents China—a Communist government from Peking or a non-Communist government from Taipeh—is a matter of no real importance. Hence only a majority vote is enough to seat Red-China in the U.N. But who is to decide whether this is a matter of real importance? This is to be decided by a majority vote as stipulated by the Charter.

Why is it that the U.S. Government is dead against the admission of Communist China into the U.N.? The Americans, as Eisenhower points out, believe that a moral problem is involved in the recognition of the Peking regime. When the Charter of the U.N. was drawn up in 1945 at San Francisco, there was a very considerable argument on whether the U.N. should be a universal body which would represent all the Governments of the world—good, bad or indifferent—or membership should be on a selective basis. This was strongly argued and the proponents of selectivity won. This is reflected by the provision in the U.N. Charter that members should be peace-loving, able and willing to discharge their obligations under the Charter.

America strongly believes that the Communist regime is disqualified from U.N. membership by its consistent record of opposition to the U.N. and flagrant violation of its principles. Red-China was at war with the U.N. in Korea, and the U.N. declared Communist China an aggressor, and this situation has not yet changed. Again, in Indo-China Red-China waged a bloody warfare. How can the U.N. admit among its members a nation which has been at war with itself?

However, the question of Red-China's admission into the U.N. has lost its currency at present because the General Assembly of the U.N. passed a resolution sponsored by America not to take up the problem of China's admission into the U.N. in the present session of the assembly.

To conclude, it may be pointed out that there is a growing demand among the allies of America to establish better relations with China for various reasons. In continuing its "fraternal aid" to China Russia knows

that it risks creating in Asia a rival colossus whose rulers may some day become a stumbling-block in their effort to gain control over their Slavic comrades, whom they publicly flatter but with traditional disdain for "alien barbarians" privately despise. This is the real reason why, quite apart from China's tempting potentialities as a market, many of America's allies believe it advisable to have accredited envoys in Peking keeping a watch on this growing giant and ready to pounce on any opportunity to slip a wedge between China and the USSR. They fear that to isolate China from the world community is only to help the Kremlin to tighten its hold on China.

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# L'AMBITION

*By N. Vittal, II U.C.*

**D**ANS la Nature, toutes les choses ont but, un objet. On voit la petite plante, qui croît en un gros arbre et les animaux qui croissent, se multiplient et meurent. Celui-ci est tout le but de leur vie. En vérité, il n'y a guère quelque chose qui n'ait pas un but certain à remplir.

Et l'homme, la plus curieuse et la plus noble des créatures? Voici la réponse: il doit faire quelque chose de grand dans cette courte durée de la vie. Ce but, cet objet s'appelle l'ambition.

Voici les mots stimulants et encourageants de Vivekananda, un des grands Indiens: "Réveillez-vous! et mettez votre épaule à la roue! Combien de temps dure cette vie? Puisque vous êtes venu dans ce monde, laissez quelque signe derrière. Ou bien où est la différence entre vous et les arbres et les pierres? Eux aussi reçoivent l'existence, tombent en décadence et meurent."

Il est clair donc que l'homme a été créé pour accomplir de grandes actions. Laisser une trace derrière lui dans ce monde, voilà son ambition.

En effet, les mots sont insuffisants pour montrer la grandeur de l'ambition. Car, l'ambition évidemment est une chose très noble. C'est un sentiment à apprécier. Sans lui, la vie serait un bateau sans matelot ou sans gouvernail. L'homme serait aveugle, tâtant sa route dans l'ombre.

Young, un poète anglais, dit:

The true ambition there alone resides  
Where justice vindicates and wisdom guides,  
Where public blessings public praise attend,  
Where glory is our motive, not our end.

Toute faculté humaine est faible, à moins que d'être concentrée. Les facultés de l'homme sans ambition sont divergentes comme les dards pris séparément. L'ambition les joint ensemble et les cimente. Elle les illumine.

L'histoire confirme cet effet universel. La source, la fondation de toutes les actions est cette flamme brillante qui stimule l'homme. En chacun des champs de la science et des arts, les noms des hommes qui se sont surpassés par leur ambition, sont écrits en lettres d'or. L'ancre des victoires de Napoléon, les expériences de Pasteur, les poèmes de Rousseau avaient ce feu-là.

Mais l'ambition doit être basée sur une forte fondation, de caractère, de courage et d'optimisme. Ou bien elle sera une maison bâtie sur les sables glissants.

Le caractère est la première qualité requise. Avec votre cerveau vous choisissez votre route; vous fixez votre ambition. C'est le caractère qui vous conduit.

Quel sera l'effet de l'ambition sans caractère? Eh bien! ce sera de courir en de mauvais ruisseaux: de prendre la forme d'égoïsme, d'envie, de haine et de mécontentement. Car, comme toutes les belles choses il faut qu'on la contrôle. Un poète anglais dit:

Ambition is the dropsy of the soul,  
Whose thirst we must not yield to, but control.

L'effet d'une telle ambition est redoutable. Macbeth, par exemple, fit naufrage par son ambition. La soif du trône devint son but. Comme les jours roulaient, l'ambition gagnait en lui plus de pouvoir. Cela amena sa fin. Tels sont les fruits de l'ambition sans contrôle. "Le coeur" est aussi important que le caractère. Sans courage, l'ambition ne sera pas complète. Si l'ambition est une plante, le courage est son noyau; si elle est une tour, le courage est sa fondation; si elle est un mot, le courage est sa signification. Les muscles de fer et les veines d'acier sont essentiels pour réaliser l'ambition. Les gens peureux ne seront jamais de héros, parce qu'ils meurent beaucoup de fois avant leur mort.

Le dernière chose, mais qui n'est pas la moindre chose pour qu'une ambition réussisse, est l'optimisme. C'est l'engrais sur lequel l'ambition fleurit.

Cependant, la plus haute ambition a un danger possible. Plus haut est l'ambition, plus grave est le danger. La Fontaine lui-même dit: "Il n'est pas toujours bon d'avoir un haut emploi." Un autre auteur anglais écrit: "The tallest trees are most in the power of the winds, and ambitious men of the blasts of fortune."

Mais, le plus souvent nous voyons que peu seulement arrivent à leur but. Pour le reste, l'ambition est un mirage. Cependant, elle fait surgir l'espoir dans leur coeur et les fait marcher dans le long voyage de la vie.

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# Thermionic Emission

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and

R. Rajan, V B.Sc. Hons.

## INTRODUCTION



SOME important modern inventions, such as the cathode ray oscillograph, the electron microscope, the radio, radar, and the microwave spectroscopy, owe their origin to thermionic emission. In this essay an attempt is made to study the basic facts, both experimental and theoretical, of such a fruitful phenomenon.

It has been known since the eighteenth century that air in the neighbourhood of an incandescent metal loses its insulating properties. That this is due to the emission of ions by the hot body was proved by Elster and Geitel towards the end of the nineteenth century. This phenomenon of emission of electrically charged particles from a heated conductor is known as "Thermionic Emission." The particles may be either negative or positive ions depending on the nature of the emitter and other surface conditions; but only the emission of negatively charged particles is of great theoretical interest and practical importance. Edison, in 1883, clearly demonstrated that filaments heated to a high temperature in low pressure emitted electrons mostly. A thorough investigation into this phenomenon was conducted by O. W. Richardson who, though a pioneer in the field, was able to obtain interesting results. He was followed up by workers such as Langmuir, Schottky, Wehnelt and others who extended the researches to phenomena closely related to thermionic emission.

## RICHARDSON'S RESEARCHES

**Experimental Study:** His experimental arrangement consists of a wire F of platinum or tungsten, stretched along the axis of a hollow metal cylinder C. (Fig. 1). The wire and the cylinder are enclosed in a glass jacket J which can be evacuated by connecting it to a pump through an outlet T. The wire F is heated by means of a current from a battery  $B_1$ , the value of which is known by an ammeter A. A voltmeter V is connected in parallel to this circuit. From the readings of the ammeter A and the voltmeter V the resistance

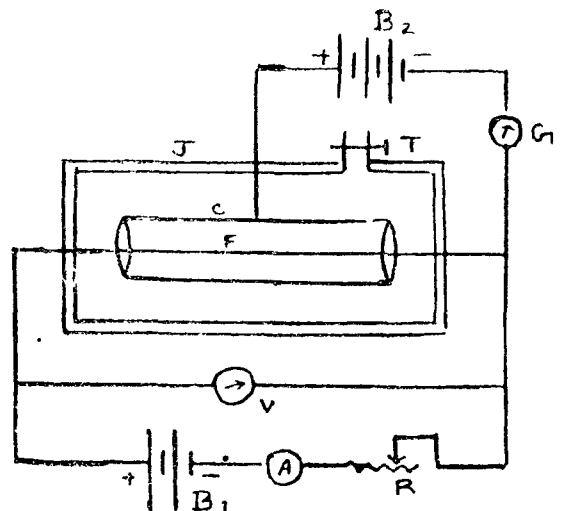


FIG. 1

of the wire is evaluated. Since resistance is a function of temperature, the temperature of the wire at any moment can be determined by measuring its resistance at that instant. A potential difference can be applied between the cylinder and the wire by another battery  $B_2$ , in series with a sensitive galvanometer  $G$ .

If the cylinder is made positive relative to the wire, a thermionic current flows across the space between the cylinder  $C$  and the wire  $F$ , which can be measured by the galvanometer  $G$ . If the potential is reversed the current ceases, clearly proving that the thermions are negatively charged. Richardson studied the following points in connection with these negative thermions:—

(a) *Nature of the thermions*:—If a magnetic field  $H$  is applied at right angles to the electrostatic field and parallel to the wire  $F$ , each particle experiences a force  $Hev$  and so travels along a curved path of radius  $R$ , given by  $Hev = mv^2/R$ . If  $V$  is the potential difference between  $C$  and  $F$ ,

$$eV = \frac{1}{2} mv^2; \quad R = \frac{mv}{He}; \quad \therefore \frac{e}{m} = \frac{2V}{R^2 H^2}$$

So the specific charge  $e/m$  can be measured and it is found to be identical with that of the electron, thus establishing that the negatively charged particles which are emitted are electrons.

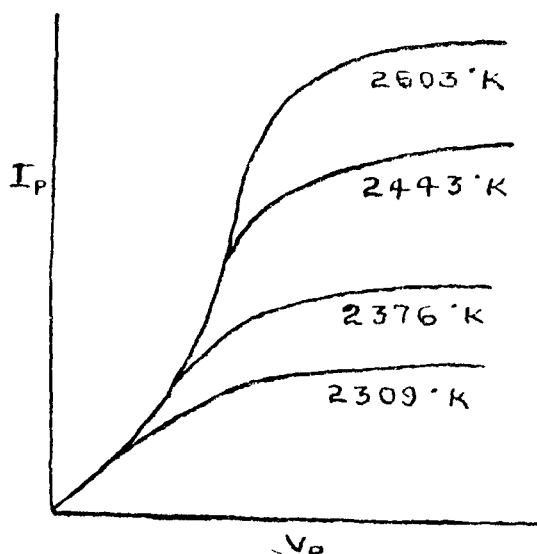


FIG. 2

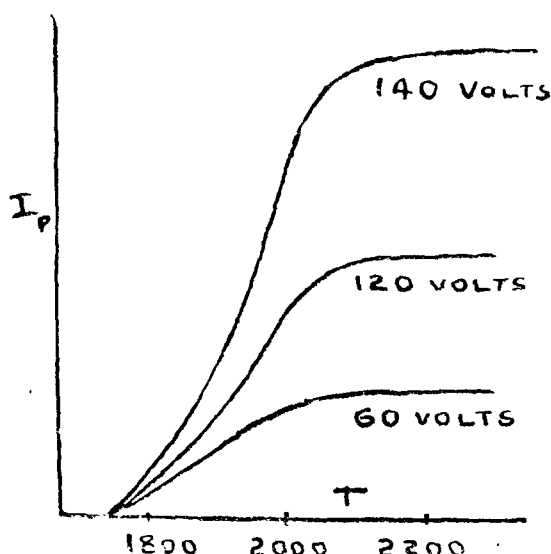


FIG. 3

(b) *Influence of the applied voltage on the thermionic current*:—If the temperature of the wire is maintained constant, the thermionic current varies when the applied voltage ( $V_p$ ) is altered. The current does not obey Ohm's law, rising at first with the increasing potential difference but quickly reaching a maximum saturation value. The potential required to produce saturation increases with rise of temperature as also the saturation current. These are represented in figure 2.

(c) *Variation of the thermionic current with temperature:* When the potential difference between the hot wire and the anode is maintained constant, and the variation of the thermionic current ( $I_p$ ) with the temperature of the wire ( $T$ ) represented graphically, curves of the type as shown in figure 3 are obtained. In each case, a maximum value of the current is reached, depending on the potential difference. If  $I$  is the value of the constant current corresponding to the applied voltage  $V$ , it is found that  $I = KV^{3/2}$  where  $K$  is a constant, the relation being known as "Langmuir's law."

(d) *Effect of temperature on emission:* To study the effect of temperature upon the thermionic emission, sufficient voltage is applied to produce saturation for the range of temperature used. The filament temperature ( $T$ ) is gradually increased and the corresponding values of the saturation current ( $I_s$ ) are measured. The variation of  $I_s$  with  $T$  is represented graphically. From the curve obtained it is seen that  $I_s$  and  $T$  are related to each other in a regular manner (Fig. 4).

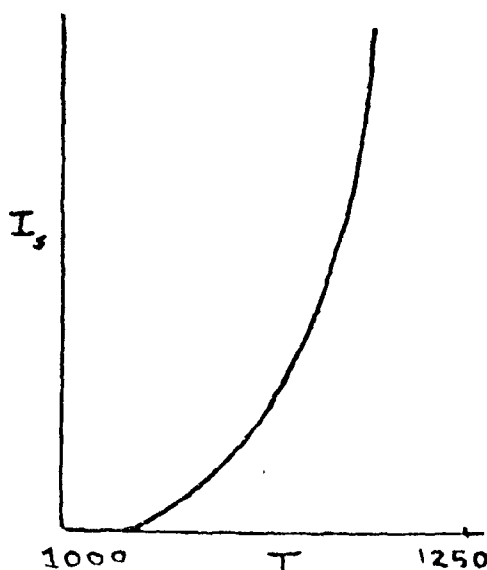


FIG. 4

**Theoretical Explanation:** The first theoretical interpretation of thermionic emission was given by Richardson on the basis of the classical theory of electrons in metals. It is assumed that a metal contains free electrons which behave like the molecules of a perfect gas. The velocity distribution of these electrons is Maxwellian, but their velocity at any temperature is very great compared to that of the molecules in a gas because of the small mass of the electrons. That in spite of their high velocity the electrons do not ordinarily escape can only be due to the existence of a potential difference between the inside and outside of the metal, the metal being positive to free space. This potential difference is generally known as the "inner potential" of the metal.

Considering the nature of the surface forces to which the existence of the inner potential is due, each atom in the region of the surface must, by reason of the absence of similar atoms beyond, be acted upon by a system of unbalanced forces due to its neighbours. These forces must give rise to a polarisation of the surface atoms. This is equivalent to a potential discontinuity at the surface. In addition to this, when an electron is withdrawn from the surface of a metal, it induces an equal and opposite charge (its image) in the metal and the resulting attractive force tends to oppose the withdrawal of the electron. So the polarisation and image

fields can be visualised as contributing to a high potential barrier at the surface. An electron can escape only if it possesses more than a certain limiting kinetic energy in a direction normal to the surface, the limiting amount being that required to overcome the work of emission and the induced charges.

Either because of the low value of the applied voltage or the high temperature of the filament the electrons emitted by the metal accumulate in the space between the filament and the plate forming an electron cloud. This modifies the electric field and actually reverses it near the wire so that the electrons coming out have to move through this opposition. This is known as the "space charge effect."

If the positive potential of the cylinder is increased, a greater number of electrons are removed which reduces the space charge effect, with the consequent increase in the thermionic current. If the voltage is great enough, then, as soon as an electron is emitted from the filament it is pulled over to the positive cylinder. At this stage, since the rate of emission is determined by the temperature of the filament and not by the applied voltage, the current reaches a saturation value for the given constant temperature. As the temperature is increased at constant voltage more and more electrons are emitted by the metal and gathered by the cylinder. A limit sets in when the cylinder at the constant potential absorbs only a fixed number of electrons per second and the current reaches saturation.

The correctness of the above theory is confirmed as regards two points. (a) Assuming Maxwell's law, the probable fraction of electrons capable of escaping at different temperatures is plotted against the temperature. The curve obtained is identical with the experimental one (figure 4). (b) It is clear that electron emission must result in a cooling of the emitter as in the analogous case of liquid evaporation. This has been actually observed.

**Richardson's  $T^{1/2}$  formula:** A theoretical formula connecting the thermionic emission of a conductor with the potential barrier at the surface and the temperature of the emitter was first obtained by Richardson in 1901 from considerations of the close analogy between thermionic emission and liquid evaporation.

According to kinetic theory, if  $n$  is the free electron density, the probable number of electrons per unit volume having a normal component of velocity between  $u$  and  $u + du$  is given by

$$dn = \frac{n}{\alpha\sqrt{\pi}} \varepsilon^{-u^2/\alpha^2} du$$

where  $\varepsilon$  is the Napierian base and  $\alpha^2 = \frac{2kT}{m}$ ,  $k$  being the Boltzmann's constant,  $m$  the electronic mass,  $T$  is the temperature of the emitter. So,

$$dn = n \sqrt{\frac{m}{2\pi kT}} \varepsilon^{-\frac{mu^2}{2kT}} du.$$

The number of electrons that escape from unit area of the surface in unit time is

$$n_1 = \int_{u_0}^{\infty} dn \cdot u = n \sqrt{\frac{m}{2\pi kT}} \int_{u_0}^{\infty} \varepsilon^{-\frac{mu^2}{2kT}} u du,$$

since only those electrons whose velocity component normal to the surface is greater than the value  $u_0$ , given by  $\frac{1}{2}mu_0^2 = eV$ , can escape from the emitter. So,

$$\begin{aligned} n_1 &= n \sqrt{\frac{m}{2\pi kT}} \left[ -\frac{kT}{m} \varepsilon^{-\frac{mu^2}{2kT}} \right]_{u_0}^{\infty} \\ &= n \sqrt{\frac{m}{2\pi kT}} \cdot \frac{kT}{m} \varepsilon^{-\frac{mu_0^2}{2kT}} \\ &= n \sqrt{\frac{k}{2\pi m}} \cdot T^{1/2} \varepsilon^{-\frac{eV}{kT}} \end{aligned}$$

The thermionic current  $i$  is therefore given by

$$i = n_1 e = ne \sqrt{\frac{k}{2\pi m}} \cdot T^{1/2} \varepsilon^{-\frac{eV}{kT}}$$

which can be written as  $i = a T^{1/2} \varepsilon^{-b/T}$  where  $a = ne \sqrt{\frac{k}{2\pi m}}$  and  $b = \frac{eV}{k}$

This formula agrees fairly well with experimental results when 'a' and 'b' are given suitable values. Using experimental data, when a graph is plotted with  $[\log i - \frac{1}{2} \log T]$  on the Y axis and  $1/T$  on the X axis, a straight line is obtained, the slope of which will give  $-b$ , and the intercept on the Y axis, 'log a'. But the values of 'a' and 'b' thus obtained do not agree with those given by theory.

**$T^2$  emission formula:** Shortly after Richardson had derived the above formula, another emission formula was obtained by a thermodynamical method involving the use of Clapeyron's equation. If we assume that the escaping electrons form a monatomic gas or vapour at a definite pressure, then we can apply the thermodynamical theory of evaporation to the problem and obtain a relation for the thermionic emission, without making assumptions as to the state of electrons inside the metal.

Using Clapeyron's equation we may write  $L = vT (dp/dT)$  where L represents the latent heat of vaporisation of the electrons,  $v$  the change in volume accompanying the transference i.e. practically the volume occupied by the electrons in the enclosure. It may be legitimately assumed that the electrons outside the metal have the same average kinetic energy

as the molecules of a gas. For any gas,  $p = RT/v = NkT/v = nkT$ . So, for the electron gas  $p = nkT$  where  $n$  represents the number of electrons per unit volume outside the metal.

Let  $\phi$  represent the change in energy of an electron as a result of its transference from the hot body to the enclosure. Then, change in energy due to evaporation  $= nv\phi$ .

Work is also done against the pressure, equal to  $pv$ . So, latent heat of evaporation will be

$$L = nv\phi + pv = vT \frac{dp}{dT}$$

$$\therefore n\phi + p = \frac{L}{v} = T \frac{dp}{dT} = T \frac{d}{dT} (nkT) = T \left[ kT \frac{dn}{dT} + kn \right]$$

$$\text{i.e. } n\phi = kT^2 \frac{dn}{dT} + nkT - p = kT^2 \frac{dn}{dT}$$

$$\frac{dn}{n} = \frac{\phi dT}{kT^2}$$

$$\therefore n = n' \varepsilon^{\int \frac{\phi dT}{kT^2}}, \text{ } n' \text{ being a constant.}$$

When there is equilibrium, the number of electrons which escape from the metal is equal to the number which re-enter it. Assuming that the electrons colliding with the metal are all absorbed and do not rebound, the number of electrons colliding with unit area of the metal surface in unit time and being absorbed is given by the expression

$$N' = n \sqrt{\frac{m}{2\pi kT}} \int_0^\infty \varepsilon^{-\frac{mu^2}{2kT}} u du.$$

The lower limit is zero since there is no potential barrier opposing the entry of the electrons into the metal. So,

$$N' = n \sqrt{\frac{m}{2\pi kT}} \left[ -\frac{kT}{m} \varepsilon^{-\frac{mu^2}{2kT}} \right]_0^\infty$$

$$= n \sqrt{\frac{m}{2\pi kT}} \cdot \frac{kT}{m} = n \sqrt{\frac{kT}{2\pi m}}$$

Saturation current will then be given by  $i = N'e = ne \sqrt{\frac{kT}{2\pi m}}$

Substituting for  $n$ , we get,

$$i = n' \cdot \varepsilon^{\int \frac{\phi dT}{kT^2}} \cdot e \sqrt{\frac{kT}{2\pi m}}; \text{ since } n = n' \varepsilon^{\int \frac{\phi dT}{kT^2}}$$

Richardson, by a thermodynamical reasoning, showed that  $\phi = \phi_0 + 3/2 kT$ .

$$\begin{aligned}\text{So, } \int \frac{\varphi dT}{kT^2} &= \int \frac{\varphi_0 dT}{kT^2} + \frac{3}{2} \int \frac{dT}{T} \\ &= -\frac{\varphi_0}{kT} + \frac{3}{2} \log T\end{aligned}$$

$$\therefore \int \frac{\varphi dT}{kT^2} = \epsilon^{-\frac{\varphi_0}{kT}} \cdot T^{3/2}$$

$$\text{And } i = n'e \sqrt{\frac{kT}{2\pi m}} \cdot \epsilon^{-\frac{\varphi_0}{kT}} \cdot T^{3/2}$$

which can be written as  $i = a'T^2 \epsilon^{-b'/T}$ .

Conducting experiments with tungsten and platinum at various temperatures,  $i$  was calculated and hence  $b'$  using the relation  $b' = T \log (a'T^2/i)$ . The values of  $b'$  were nearly equal proving that the above formula represents experimental data better than the previous one.

**Objection to the classical theory:** Very serious objections were soon raised against the classical theory of free electrons on which both the ' $T^{1/2}$ ' and ' $T^2$ ' formulae were derived. The fundamental assumption that the energy in the metal is distributed between the atoms of the metal and the free electrons in it, according to the principle of equipartition of energy, is against the experimental facts about the specific heat of metals. Since the specific heat of metals is not greater than that of the non conductors, the obvious conclusion is that the contribution of the electrons to the specific heat of metals is very small or nothing at all.

## MODERN THEORY OF THERMIONIC EMISSION

According to the new quantum theory, first proposed by Sommerfeld, the energy distribution law of the electrons is governed by the Fermi-Dirac quantum statistics instead of the Maxwellian statistics, since the electrons in the metal should be assimilated rather to a 'degenerate' gas, on account of their high concentration, than to a 'perfect' gas. In the present case, the electrons must be regarded as imprisoned by a discontinuity in the electric potential at the surface. On passing from a point in the interior of the metal to a point just outside the surface, the electric potential undergoes an abrupt change. The higher potential inside prevents the electrons within the metal from passing through, unless their kinetic energy is sufficient to do the work  $W_a$  necessary to carry a charge  $e$  to the exterior through a potential difference  $V_a = (1/e) W_a$ . This difference of potential is termed the 'intrinsic potential' and the corresponding work  $W_a$  the 'work function.'

The calculation of the saturation current density emitted by a metal at temperature  $T$  is got in Sommerfeld's theory in exactly the same way as in Richardson's classical theory, with the exception of substituting the Fermi-Dirac distribution law for the degenerate electron gas instead of Maxwell-Boltzmann distribution.

If  $dn$  represents the number of electrons in a unit volume having components of velocity between  $x, y, z$  and  $x+dx, y+dy$  and  $z+dz$ ,

$$dn = f(x, y, z) dx dy dz$$

where  $f$  represents the Fermi distribution function. The number of electrons having a component of velocity normal to the surface between  $x$  and  $x+dx$  in unit volume will be

$$dx \int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} f dy dz.$$

Hence the number of electrons striking unit area of the surface per second with the normal component of the velocity between  $x$  and  $x+dx$  will be

$$dN = x dx \int_{-\infty}^{+\infty} \int_{-\infty}^{+\infty} f dy dz.$$

Since of the total number of electrons that strike the surface only those whose normal component of velocity exceeds the value  $x_0$  given by  $W_a = \frac{1}{2} m x_0^2$  can escape through the barrier, the lower limit of integration should be  $x_0$ . Hence the total number of electrons emitted per second from unit area of the surface of the metal is

$$N = \int_{x_0}^{\infty} \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} x dx f dy dz.$$

Hence the current  $i$  is given by

$$i = Ne = e \int_{x_0}^{\infty} \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} x dx f dy dz.$$

But the Fermi distribution function is

$$f = 2 \left( \frac{m}{h} \right)^3 \frac{1}{\varepsilon^{(W_a - W_i)/kT} + 1} \quad \text{where } W_i = \frac{h^2}{2m} \left( \frac{3n}{8\pi} \right)^{2/3}.$$

Hence substituting for ' $f$ ' in  $i = e \int_{x_0}^{\infty} \int_{-\infty}^{\infty} \int_{-\infty}^{\infty} x dx f dy dz$ .

and integrating we get, when there is complete degeneracy,

$$i = \frac{4\pi e m}{h^3} (kT)^3 \varepsilon^{-(W_a - W_i)/kT}$$

$$\text{i.e. } i = AT^2 \varepsilon^{-b/kT}$$

where  $b = W_a - W_i$  and  $A$  is a constant independent of the particular emitting metal. The value of  $b$  is different for different metals. Thus the quantum theory decides in favour of the ' $T^2$ ' formula derived from thermodynamical considerations.

**Work function:** Richardson assumed that before an electron can escape from the metal it has to do a definite amount of work at the



surface layer. Let us denote the work by  $\omega = e\phi$  where  $\phi$  is the potential difference corresponding to the work in question. If  $\frac{1}{2} mV_1^2$  and  $\frac{1}{2} mV_2^2$  are the kinetic energies of an electron before and after escaping,  $\frac{1}{2} m(V_1^2 - V_2^2) = e\phi$ .  $\phi$  is known as the thermionic work function. In the expression for the thermionic current postulated by the quantum theory, it has been pointed out that the work function  $\phi$  equals  $(W_a - W_i)/e$ .

## EVALUATION OF THERMIONIC CONSTANTS

The thermionic constants can be evaluated by a recent elegant method due to Dr. K. S. Krishnan and S. C. Jain (1952) based on the measurement of saturated vapour pressure of the electron gas in equilibrium with the metal at different temperatures. The saturated vapour pressure is determined by measuring the rate of effusion of the electrons into a vacuum through a hole in the wall of a chamber of the given substance. The electrons emitted by the surface adjoining the effusion hole are eliminated by a thin mica sheet provided with a hole. The temperature of the chamber is measured by an optical pyrometer and the area of the effusion hole is measured indirectly by finding the rate of effusion, due to sublimation, of substances of known vapour pressure. Though originally designed for graphite, the method can be made suitable for all substances.

From considerations of the saturated vapour pressure of the electron gas in equilibrium with a metal at temperature  $T$ , it can be shown that the saturation current  $i$  is given by

$$i = AT^2 e^{-\phi/kT} \quad \text{where } A = \frac{4\pi emk^2}{h^3}$$

for a monovalent element. This expression is similar to Richardson's equation whose constants can be represented by  $A'$  and  $\phi'$ . For a pure surface,  $\phi = \phi'$  and  $A(I - R) = A'$  where  $R$  is the reflection coefficient of the surface.

The effusion from an aperture in a thin wall is analogous to the emission of electrons from an equal area of pure surface of metal maintained at the same temperature except for the transmission coefficient  $(I - R)$ . The emission per unit solid angle varies with the cosine of the angle between the direction considered and the normal to the aperture.

Experimentally, the number of electrons effusing out within a well defined cone with its axis along the normal to the hole is measured at different temperatures and so the saturation current  $i$  corresponding to

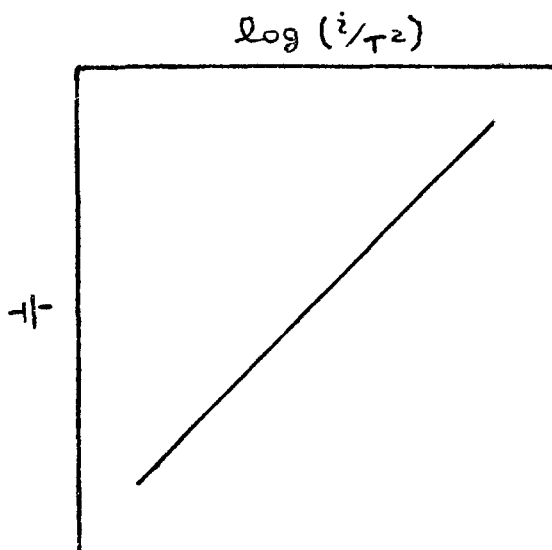


FIG. 5

effusion per unit area of the hole over the whole solid angle  $2\pi$  is known. When  $\log i/T^2$  is plotted against  $1/T$ , a straight line is obtained showing that  $A$  and  $\varphi$  are nearly independent of temperature. The slope gives  $-\varphi/k$  and the value of  $\log i/T^2$  extrapolated to  $1/T \rightarrow 0$  gives the value of  $A$ . (Fig. 5).

## DIFFERENT KINDS OF THERMIONIC EMITTERS

Thermionic emitters can be classified into three groups. 1. Clean metals. 2. Metals whose surfaces have some well defined contamination. 3. Electron emitting non-metals.

Pure metals emit electrons only when heated to a high temperature of about  $1000^\circ\text{C}$ . But in the case of metals having a molecular surface contamination, the work function of the emitter is depressed by the contamination and so the temperature at which emission starts is considerably lowered. The most important non-metallic emitters are the so called oxide cathodes which consists of a metal carrier coated with an alkaline earth oxide which has been subjected to a suitable activation treatment. These emit considerably greater number of electrons at comparatively low temperatures and low applied voltages. But their high thermionic activity is only due to the presence of free alkaline earth metal both on the surface and in a state of solution in the oxide.

**Effect of impurities on emission:** The thermionic emission can be profoundly altered by the presence of a gaseous atmosphere around the emitter. Either adsorption phenomena intervene or else ionisation by collision sets in and increases the ionic current. In the case of adsorption of atoms and molecules of the gas by the surface of the filament, an electric double layer is formed which, when electropositive, assists the electron emission.

## ALLIED PHENOMENA

Certain phenomena related to thermionic emission have been investigated by different workers. It is of great interest to study some of these.

(a) **Schottky Effect:** In direct thermionic emission an electron escapes when its thermal energy suffices to enable it to overcome the electrical image forces. If an external anode is placed close to a thermionic emitter, exerting a force which tends to draw electrons away from the hot metal, it is clear that at some distance from the hot surface the two fields balance. Any electron having sufficient thermal energy to enable it to reach this point will succeed in escaping. The greater the external field the nearer is this critical point to the hot surface. As this point moves in, less and less energetic electrons can reach it and thus escape. Effectively there is a reduction in work function because of the presence of the external field. Hence also an increase in the latter raises the thermionic emission.

This effect was first pointed out by Schottky who derived an expression for the effect which is  $i = i_0 \varepsilon^{CE^{1/2}/T}$  where  $i_0$  is the thermionic current when there is no external field,  $i$  the current when the external field strength is  $E$ ,  $T$  the absolute temperature and  $C$  a constant.

(b) **Field Emission:** A remarkable effect which was first observed by Liliensfeld is the emission of electrons from a metal at room temperature when a sufficiently intense electron-accelerating field (order of  $10^8$  volts per cm.) is applied to its surface. This was once thought to be an extreme case of Schottky effect, but it is now known to be an essentially different phenomenon called 'Field Emission.' Both theory and observation show that the current in this case is given by  $i = f(E) \varepsilon^{-\beta/E}$  where  $f$  varies less violently with  $E$  than does  $\varepsilon^{-\beta/E}$ . Attempts to explain this phenomenon on the basis of the classical electron theory have completely broken down. The strong variation of the current with the field suggests that there is still a finite residual work function, and if we assume that this is so, then the temperature independence of the emission at constant field cannot be explained on the classical basis. Recently, however, Oppenheimer has successfully worked out a wave mechanical theory of the field emission.

(c) **Shot Effect:** The so called 'Shot effect' affords an interesting support for the correctness of the atomic conception of electricity and provides us with a means for measuring the electronic charge. Owing to the atomic nature of the thermionic emission, the electron stream is not perfectly uniform. It is to be regarded as a hail of particles like small shots and therefore it exhibits statistical fluctuations in any given time. These random fluctuations are equivalent to the superposition of a small alternating current over the average direct thermionic emission. It can be shown that the average fluctuation ' $\delta$ ' in a time interval ' $t$ ' is given by  $\delta = \sqrt{i.e.t}$  where  $i$  is the mean direct current and  $e$  the electronic charge. The fluctuations producing the effect set an upper limit to the degree of amplification in thermionic valves.

(d) **Flicker effect:** A current fluctuation, somewhat analogous to that in the 'shot effect', but abnormally large at low frequencies, was obtained in 1925, by Johnson. This which has been named the 'Flicker effect', is unlike the shot effect in that its magnitude varies not only with the thermionic current but also with the nature of the emitting body, being particularly large in the case of composite cathodes. Schottky has worked out a mathematical theory of the phenomenon.

## PRACTICAL APPLICATIONS OF THERMIONS

The entire branch of electronics is due to this thermionic emission. But only the most important of the many applications can be mentioned here.

(a) **Thermionic valves:** The phenomenon of thermionic emission finds immediate application in the design of thermionic valves, which form an essential component of the modern radio or wireless communication. In all these valves, whatever be their function and use, the source of electrons is an oxide coated tungsten filament heated electrically.

(b) **Electron gun:** An arrangement giving a fine pencil of electrons known as the 'electron gun' is used in the 'cathode ray oscillograph' and the 'electron microscope,' employing the principle of thermionic emission.

The thermal electrons emitted from an oxide coated tungsten filament are accelerated by means of a high potential difference of about 500—2000 volts maintained between the anode and the cathode. The anode is in the form of a disc with a central hole. A certain amount of focusing is obtained by the use of a Wehnelt cylinder surrounding the filament and maintained at a negative potential. This concentrates the electron beam to a narrow pencil which can be subjected to electrostatic or magnetic focusing as desired.

(c) **Microwaves:** The application of thermionic emission to the production of 'microwaves' is very interesting and instructive. These waves refer to that region in the electromagnetic spectrum lying between the far infra-red and short radio waves. They have a frequency higher than 300 megacycles per second and a wavelength below one metre.

Oscillations of such high frequency were produced by Barkhausen and Kurtz by means of electronic oscillators. In the ordinary triode valve, the grid is maintained at a positive potential and the anode at zero volt. The electrons emitted by the filament are accelerated by the positive potential of the grid, pass through the meshes of the grid to the other side and are brought to rest by the retarding field between the grid and anode. They are attracted again by the grid and are brought to rest on the other side after passing through the meshes. They are then reversed and thus oscillate about a mean position. Such electronic oscillations are of high frequency and are extracted from the valve by a Lecher wire arrangement.

The '*magnetron*' is another device for producing such high frequency oscillations. This consists of a filament surrounded by a cylindrical anode. A magnetic field is applied parallel to the axis of the cylinder. The electrons emitted from the filament are deviated from their paths and the curvature of their path increases with the strength of the field. The field is so adjusted that the electrons just fail to reach the anode. Then they traverse almost circular paths producing high frequency oscillations.

By modulating the electron stream by control of its velocity, high frequency microwave oscillations can be produced as in the '*Klystron*.' These waves are transmitted by the use of 'wave guides' and received by the use of parallel feeders.

Microwaves find important application in 'radar', a device in which these waves are utilised to fix the position of any object in space, like an aircraft.

The study of microwave absorption leads us to the understanding of the nature of molecular collisions and molecular forces. This is known from the strong pressure effects observed in microwave spectra. Microwave spectroscopy, also provides a method of studying the molecular electric moment.


A 'microwave radiometer' is found useful in the study of solar radiation and in the measurement of low temperatures. The phenomenon of 'superconductivity,' namely the disappearance of the resistance of a conductor near absolute zero has been extensively studied from the effect of microwave radiation on a superconductor.

**Conclusion:** Who could have ever suspected that Edison's simple demonstration of the heating of a filament by a current with the consequent emission of electrons would grow to such dimensions, both in the theoretical and the practical field? We have now reached a stage where 'thermionics' has become an important feature of our every-day life, thanks to the patient labours of devoted scientists.

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## My Trip to Kashmir

*By G. Kittu Rao, IV B.Sc.*

AST summer a cultural and educational tour to North India and Kashmir was conducted by the Indian National Committee of the World Assembly of Youth. We were about 120 students belonging to various colleges of the six South Indian Universities. I was one of the four students from our college. We met many of our national leaders including our Prime Minister, Mr. Nehru. We stayed in Srinagar, the capital of Kashmir, for about twelve days. We went to Bombay, Delhi, Agra, Amritsar, and Kashmir, as "ambassadors of good will from the South." I shall here confine myself to Kashmir.

'A land of rivers and forests, of lakes and flower-spangled pastures, ringed round with stupendous snow-capped mountains, Kashmir is a tourist's paradise. It nestles in a valley which has been aptly described as an Emerald set in pearls.'

As the entry to Kashmir is by permit, we had obtained our permits from the Collector of our district. We travelled by train till Pathankot and from there travelled to Srinagar by comfortable tourist buses, halting the night at Jammu, the winter capital of Kashmir.

The bus passes through a series of precipitous mountain ranges and there are many sharp hair-pin bends. The road crosses the ranges through the Banihal tunnel at an altitude of 1,000 ft. Here we saw the snow for the first time. On coming out of the tunnel we can have a glimpse of the entire valley in all its glory and its green pastures and terraced rice-fields surrounded on all sides by towering snow-capped mountains.

The Kashmir valley is about 80 miles long and 20 to 25 miles broad and rises 6,000 feet above sea-level. Srinagar, its capital, lies along the banks of the Jhelum. In Srinagar there are good hotels and furnished houses. But tourists generally prefer to live in house-boats. There are hundreds of these, big and small, on the banks of the Jhelum and on the Dal and Nagin lakes. They are made of fir and cedar wood and have well furnished cabins with a kitchen boat and a shikara (small pleasure spring-boat) attached. Some of the house-boats are also equipped with modern sanitary fittings.

The people of Kashmir are mostly Muslims. They are tall and very fair with well defined features. The Kashmiri Hindus, commonly called Pandits, form a minority. It is from this class that our Prime Minister comes.

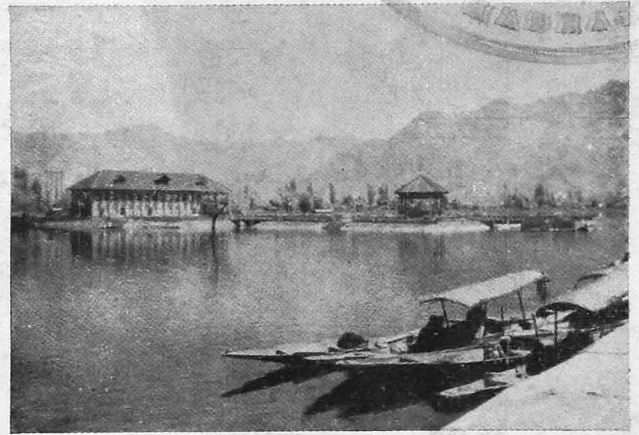
The valley is fertile; rice, wheat, and maize are the staple crops. The Kashmiris are rice-eaters and excellent rice is available in plenty in the valley. Apples, cherries, strawberries, plums, apricots and all kinds of vegetables grow in abundance. Though the people in the valley are agriculturists, Kashmiris are famous for their embroidery, woodwork, engraving, papier maché, and for weaving shawls and carpets.

Srinagar is a very ancient city with a long history. The Jhelum flows right through the heart of the city and it is crossed by seven bridges. Among the places of interest in Srinagar are the Kashmir Government Arts Emporium, the Sankaracharya temple, and the Museum. The temple is situated at the summit of a 1,000 feet high hill. From the top of the hill one can have a panoramic view of Srinagar and its environs.

Among the many beauty spots in the Kashmir valley are the Moghul Gardens and the large lakes Gulmarg, Khilanmarg, and Phalgam. Chasma Shahi (the royal spring) is the smallest of the Moghul Gardens and is situa-



Kashmiri children



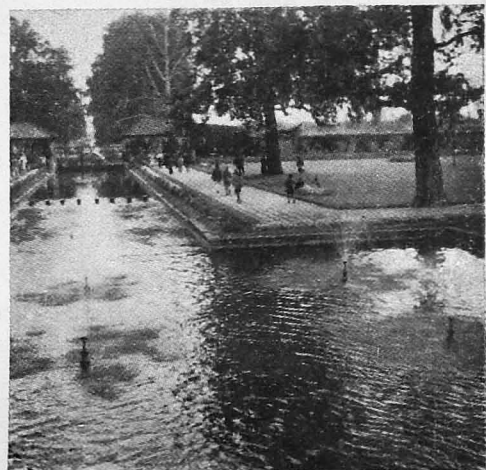
Nehru Park (Island) Srinagar

*T. N. Seetharaman, IV Hons.*

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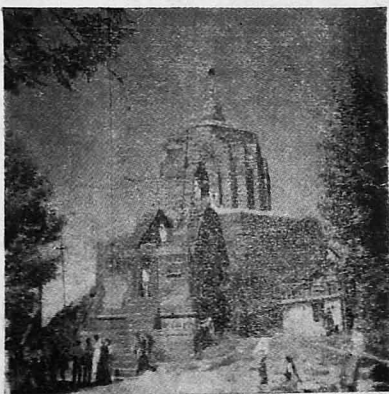


Shalimar Bagh



Nasim Bagh

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Sankaracharya temple  
Srinagar



Khilanmarg



Gulmarg

*Photos by G. Kittu Rao, IV B.Sc.*





**Mother and Child.**

(by P. M. Ganapathy, II U. C.)



**Friends**

(by E. Matthew, IV U. C.)



ted nearest the city. Nishat Bagh (pleasure garden) lies next. It is a garden laid out in ten terraces against the background of steep, bare mountains. From the highest terrace, a magnificent view of the Dal Lake can be had. A water channel runs down the centre of the garden descending from terrace to terrace in a series of cascades.

Shalimar (the abode of love) lies beyond Nishat Bagh. In its general lay-out it resembles Nishat Bagh. It has four terraces and in the middle stands a pavilion of black marble surrounded on all sides by fountains.

Nasim Bagh (the garden of breeze) lies opposite Nishat Bagh on the other side of the lake. It is an extensive park closely planted with magnificent chinar trees. Situated on an eminence above the lake, it catches the breeze after which it is named.

The most famous lakes are the Dal, Nasim and Wular. All these are fresh-water lakes. The Dal lake is spring-fed, five miles long and two wide, encircled by mountains rising to three to four thousand feet above sea-level. The interesting feature of this lake is the floating gardens made of earth and plant materials.

Gulmarg, 29 miles from Srinagar, is nearly 9,000 feet high and is one of the finest pleasure resorts in Kashmir. Cars and buses go only up to Tangmarg 25 miles from Srinagar. From Tangmarg, Gulmarg is four miles up the hill. One can go to Gulmarg from Tangmarg on pony or on foot. The uphill pathway to Gulmarg runs through dense groves of pines and cedars. Gulmarg offers excellent opportunities for winter sports on broad snowfields. The Golf-course here is one of the finest in the world.

Khilanmarg, nearly 10,500 feet above sea-level and four miles from Gulmarg, is popularly known as the Botanist's Paradise. But it is covered with snow even in the month of June.

Phalgam, the most popular of health resorts, is 60 miles from Srinagar and situated on the way to the famous cave temple of Amarnath. The snow-fed Liddar river with its icy cold waters adds to the scenic beauty of the place.

For the convenience of tourists the Government of Kashmir maintain a Visitors' Bureau and there are regular tourist buses to the various places of interest in the valley. Tourists and photographers in particular cannot resist the lure of Kashmir.

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# !!! प्यारे वचन !!!

By K. Jayaraman, II U.C.

चल चल चल रही मानों तार ही ।  
हंसी खेल तू खेल गानों सही ॥  
शिशु सी तब थी तू कैान ?  
तू सुन आज मेरे वचन ॥

जब तक अंधियारी छा जाती ।  
तब तक तू हंसी खेल खेलती ॥  
मन में सदा खुशी मनाती ।  
से कुछ सुन वचन बहुत प्रीति ॥

चल चल गये कई मधुर वसंत ।  
और भी आ गया नया वसंत ॥  
लेकिन तुम बच्ची नहीं अब भी ।  
हो गयी सब की प्यारी चन्द्रमुखी ॥

में आति जाती थी हर सायंकाल ।  
सुन्दर तराने गाती थी चिरकाल ॥  
रोज़ जाती थी तालाब की जानिब  
भरते, पूछती मानों क्या मतलब ?

तू तितलियों से बढ़कर रंगीन आती थी ।  
और रंगे झूलों पर तू लहराती थी ॥  
सर्वसमय तू तल्लीन हो बैठती थी ।  
कभी कभी—बरखा के तराने गाती थी ॥

आ गयी हार तुम्हें आज काल की भांति ।  
छा गया कितना शोक में तुम्हारी छाती ॥  
तू दूर कर न सकी उस कुकाल विपत्ति ।  
तू दूर गई कलंकित कर मेरी हृदयशांति ॥

अभी लेना आज तुम्हें एक शपथ ।  
बार बार सोचना मना ही तुम्हें जगत ॥  
हार ही सफल की है ज़रूर वाणी ।  
धैर्य मत खोना मेरी प्यारी 'कल्याणी' ॥

# இயற்கை ஓவியன்

By R. Gurunadhan, III B.Sc.

1. நீலவண்ணத் திரையினிலே நிறங்கள் கண்டேன்  
நின்றபடி சிந்தித்தேன். இயற்கை வானில்  
கோலமிது காட்சிகளை வரைந்துள் ளத்தைக்  
குளிர்விக்கும் ஓவியனை வியந்த துள்ளம்!  
பால்வேள்ளை நிறமாகத் தோன்று மாங்கே  
பைம்பொன்நிகர் வண்ணமாய் மாறும் பின்னே  
கால்கொண்டே விட்டதுபோல் நிற்பேன் வண்ணம்  
கரைந்துவிட நினைந்துருகி உள்ளம் சோர்வேன்.
2. காலையிலும் மாலையிலும் அடிவா னத்தில்  
கண்கவரும் குருதிநிறம் தன்னைப் பாய்ச்சி  
மாலையினை மருவுகின்ற இரவு நேரம்  
மகிழ்வூட்டும் விளக்கொளியை நினைக்கச் செய்வாய்.  
பாலையிலே மணல்வேளிபோல் பரந்த வானில்  
பாங்குபெறத் தீட்டிவாய் கணநே ரத்தில்  
சோலையொன்று எழுதிவிட முனைவாய் ஆனால்  
சுழலுகின்ற தூரிகையைக் காட்டா நிற்பாய்!
3. தாவுகின்ற குதிரைபோல் ஆங்கோர் காட்சி!  
தவித்திருக்க அதைமாற்றி யானை யாக்கி  
மேவுகின்ற இன்பத்தால் திளைக்கும் போழ்து,  
மீண்மூதைத் தேராக்கி, மலைபோ லாக்கிக்  
கூவுகின்ற குயிலாக்கிக் கோழி யாக்கிக்  
சுவலயத்தில் உயர்பிறவி மனித ராக்கிப்  
பூவுலக மக்கள்தமை மகிழ்ச் செய்யும்  
பொருள்வேண்டா ஓவியனே வாழ்க! வாழ்க!
4. எங்கிருந்து பெற்றாய்நின் எழில்வண் ணத்தை?  
யார்செய்தார் தூரிகையை? சோல்லா யோநீ!  
செங்கையினைக் காட்டாது தீட்டு கின்றாய்  
செயல்மறந்து வீற்றிருக்க மாற்றி மாற்றிப்  
பொங்குகின்ற இன்பத்தால் திளைக்கச் செய்து  
புறவுலகை மறந்திருக்கச் செய்கின்றாய் நீ  
தங்குபுகழ் ஓவியனே ஊனையோப் பாரில்  
தாரணியை மகிழ்விக்க வாழ்க! வாழ்க!

# துயரச் சங்கிலி

By P. Subramaniam, II U.C.

“பூ வுந் புது நீர் பொன்வளம் கொழிக்க ஓவாதுலகளிக்கும்” காவிரிக் கரையிலே ஆரம்பித்து, “பதியெழுவறியாப் பண்பு மேம்பட்ட மதுரை மூதாரிலே” உச்ச நிலையை அடைந்து, உள்ளம் தாங்கும் துன்பத்தின் எல்லையையே மீறி, “துஞ்சா முழுவின் அருவி ஓலிக்கும் மஞ்சு சூழ்சோலை மலைகள்” மிகுந்த சேர நன்னாட்டு வென்வேலோன் குன்றில் முடிவடைகிறது, நம் துயரச் சங்கிலி.

பட்டினப்பாலையிலே சிறப்புமிக்க செல்வநிலை பேசப்படுகிறதே அந்தப் பூம்புகார் நகரிலே ஒரு நாள், “மாலை வாங்குநர் சாலும் நம் கொடிக்கு” என்ற ஓலி மறுகு தோறும் கேட்கின்றது. அவ்வொலியே துயரச் சங்கிலிக்கு முதற் கண்ணி அமைக்கின்றது. கோவலன் மாலை வாங்கிவிடுகிறான்; மாதவிக் கொடி கோவலனாகிய கொழுகொம்பைச் சுற்றிக்கொள்கிறது. வீட்டிலே கண்ணகி கவினிழந்து, கருத்தழிந்து வாடுகிறாள். காலை அரும்பிப் பகலெல்லாம் போதாதி, மாலை ஏக்கமாக மலருகிறது,...துயரம்! ஆண்டுகள் உருண்டோடுகின்றன.

“பசியும் பிணியும், பகையும் நீங்கி, வசியும் வளனும் சுரக்க” நாட்டிலே இந்திர விழா கொண்டாடப்படுகிறது. சித்திரைத் திங்கள் நிறைமதி நாளில், தாழைச்சாலை மருங்கில், புன்னை மரத்தடியில், வெண்மணற் பரப்பிலே யாழிசை கேட்கின்றது. கோவலனது இசையைத் தவறாக எண்ணி வேறு கருத்துடன் இசைமாரி பொழிவதாக நடிக்கிறாள் மாதவி. அந்த இன்பநாத வெள்ளத்திலே தன் இன்ப நல்வாழ்வும் அடித்துச் செல்லப்படும் என்பதை அறிவாளா பேதை? அதன் பயன்: “மாயப்பொய் பல கூட்டும் மாயத்தாள்” என்ற எண்ணம் கோவலனது உள்ளப்பூங்காவிலே அரும்பு விடுகின்றது. வெண்மணற் பரப்பும், விரி பூஞ்சோலையும், தண்ணொளி நிலவும், கானல்வரி நாதமும் அவன் உள்ளத்தைவிட்டுப் போய்விடுகின்றன.

வீட்டிலே துயரத்தின் சின்னமாய் சோகத்தின் பிம்பமாய் இருக்கிறாள் கண்ணகி. அவள் கண்ட தீக்கனவு அவள் இருதயப் புண்ணிலே உதிரம் ஊறச் செய்துள்ளது. அப்போது உள்ளம் வாடிய நிலையில் வருகிறான் கோவலன். அவனது வாட்டம்கண்டு உள்ளம் சோருகிறாள், ‘தன்துயர் காணத்தகைசால் பூங்கொடி. “காற்சிலம்புண்டு, கவலற்க” என்கிறாள்; ‘சிலம்பு முதலாகச்சென்ற கலனோடு உலந்தபொருள் ஈட்டுதல் உற்றேன்’ என்று கூறுகிறாள் கோவலன்.

இனித்தான் துயரத்தின்பின் துயரம் சங்கிலியாகத் தொடர்ந்து வருகிறது. வான் கண்விழியா வைகறை யாமத்து.....காரிருள் நின்ற கடைநாளில் மதுரை நெடுவழி தொடருகின்றது. வழியிலேதான் எத்தனை துன்பங்கள்...! வறுமொழியாளனும் வம்பப் பரத்தையும் அழகும் இளமையும் இழைந்து விளையாடி உயிரோவியமாய்த் திகழும் இருவரையும், “உடன் வயிற்றோர்கள் ஒருங்குடன் வாழ்க்கை கடவது உண்டோ?” என எள்ளி நகையாட நேருகிறது. பஞ்சினும் மெல்லடி கொப்பளிக்க கல்லும் முள்ளும், காடும் செடியும்

கடக்கும்படி நேருகின்றது. காட்டுறை தெய்வத்தால் துன்பம் நேருகிறது... கணவனோடு, கவுந்தியடிகள் துணைகொண்டு, வழிநடக்கும் இன்பம் துன்பத்தை மறைத்து விடுகின்றது.....ஐயைக் கோட்டத்தின் வேட்டுவ வரியும், ஐயையின் பெருவிழாவையும் கண்டும் கேட்டும் செல்கின்றனர். இரவிடை வழிநடக்க ஏதமில்லை யாதலின் “படுங்கதிர் அமையம் பார்த்திருந் தோர்”, வெண்ணிலவு தோன்றியதும் வழி நடக்கத் தொடங்கி, “காண வாரணம் கதிர் வரவு இயம்ப” ஒரு ஊரில் தங்குகின்றனர். இங்குதான் மாதவியின் மாசறு தன்மையைக் கவுசிகன் மூலம் அறிகிறான் கோவலன்.

மதுரைச் செலவின் முடிவிடம் வந்துவிட்டது. இதோ, மலயத்தோங்கி, மதுரையின் வளர்ந்து புலவர் நாவில் பொருந்திய தென்றல் வந்துவிட்டது. இதோ வைகை ஓடுகிறாள் தன்போன்ற பெண்ணை கண்ணகிக்கு வரப்போகும் துயர்கண்டு தான் சிந்தும் கண்ணீரைப் பூவால் முடி மறைத்துக்கொண்டு. அதை அறியாத தம்பதிகள் “புனல்யாறு அன்று இஃது, பூம்புனல் யாறு” என்று கூறுகிறார்கள். மதுரையின் மாடங்களிலே ஊசலாடும் கொடிகள் ‘வாரற்க’ என்பது போல் ஆடுகின்றன. இயற்கைத் தாய் ‘வாராதொழிக’ என்று மௌனமாகக் கூறுகிறாள். ஆனால் இதை அறியாத தம்பதிகள் உள்ளத்தே மகிழ்ச்சிப் புனல் ஊற்றெடுக்கின்றது.

புறஞ்சேரித் தவச்சாலையிலே தங்குகிறார்கள். இங்குதான் கோவலனது பெருமை பேசப்படுகிறது, மாடலன் மூலம். நம் பத்தினித் தெய்வத்தின் துயரச் சங்கிலியின் அமைப்பாளனாக நாம் கோவலனைக் கருதுவோம். ஆனால் அவன் இயற்கையிலேயே நல்லவன்; தனக்கென வாழாப் பிறர்க்குரியாளன். ஊழின் பெருவலிதான் அதன் காரணம் என அடிகள் அறிவுறுத்துகின்றார். பிறகு நம் கற்புக்கடம் பூண்ட நம் பொற்புடைத் தெய்வத்தை, ஆகாத் தோம்பி ஆப் பயனளிக்கும் மாதரியிடம் அடைக்கலம் தருகிறார், கவுந்தியடிகள். இடைச் சேரியிலே தங்குகிறாள் கண்ணகி.

இனித்தான் துயரச் சங்கிலி முடிவிலாப் பெரு வெளிவரை நீளுகின்றது. கண்ணகியின் கையால் கடைசி உணவு உண்ணுகிறான் கோவலன். “அமுதம் உண்க அடிகள்” எனக் கண்ணகி உபசரிக்கும்போது, அவளது மனையறப் பண்பினது சிறப்பினை எண்ணிப் பெருமிதம் கொள்ளும் நம்முன் அவர்கள் வருங்காலக் கொடுமையே நிற்கிறது. உணவு கொண்டபின் கோவலன் தான் முன்பு கண்ணகிக்கு இழைத்த தீங்குகளை எண்ணி உள்ளம் நைகிறான். கண்ணகியும் இங்குதான் மனந்திறந்து பேசுகிறாள். பிறகு மீளாப் பிரிவு நேருகிறது. கூற்றத் தூதனது செய்கையால் “கோயிற் சிலம்பு கொண்ட கள்வன்” என்று வாழ்வந்த விடத்திலே கொலை செய்யப்படுகிறான் கோவலன். மண்மகள் வருந்த வளையாத செங்கோல் வளைய மதுரைத் தெருவில் அனாதைப் பிணம் ஆகின்றான். அதே நேரத்தில் ஆயர் சேரியில் எண்ணிறந்த தீச் செயல்கள் உற்பாதங்களாய் நிகழுகின்றன. தங்கள் “ஆத்தலைப் பட்ட துயர் தீர்க்கக் குரவைக் கூத்து நடை பெறுகின்றது. அப்போதுதான் தங்கள் எதிர்கால நல் வாழ்வில் இன்பம் பூத்துக் குலுங்கப்போகிறது என்ற கனவுடன் நேர்மை வாழ்வை நாடிவந்த விடத்திலே,

அரசு உறைகோயில் அணியார் ஞெகிழம்  
கரையாமல் வாங்கிய கள்வனும் என்றே  
கரையாமல் வாங்கிய கள்வனும் என்றே  
குரை கழல் மாக்கள் கொலை குறித்தனரே

என்ற துயரச் செய்தி வந்து சேருகிறது. பிறகு?.....பீறிடும் துயரக் குமுறல்.....இதயத்தின் ஏக்க அழுகை.....வேதனையினின்றும் பிறந்த விம்மல்கள்.....ஒருகணம்தான் இத்தகைய பல்வேறு உணர்வு அலைகள் மறு கணம் கண்ணகியின் மென்மை வன்மை யுறுகிறது.

விரித்த கருங் குழலும், கையிற்றனிச் சிலம்பும் கண்ணீருமாய்ச் செல்லு கிறாள் கொலைக்களம் நோக்கி. மாலை படர்ந்து வருகிறது ; கதிரவன் செக்கர் நிறத்தைச் சுருக்கிக் கொள்கிறான். காரிகை கதறுகிறாள் : “தென்னவன் தவறிழைக்க அதன் பயனை நீயா ஏற்றுக்கொள்ளவேண்டும்.”

வைவாளில் தப்பிய மன்னவன் கூடலில், கொண்ட கொழுநர் உறுகுறை தாங்குறும் பெண்டிரும், ஆல வாயின் அவிர் சடைக் கடவுளை, உண்மையை நிலைநாட்ட ஏல வாதித்த இன் தமிழ்க்கீரன் போன்ற சான்றோருதித்த மதுரையில், இன்று ஈன்ற குழவி எடுத்து வளர்க்குறும் சான்றோரும் உண்டா அவர்களிருப்பின் இத்தகைய அநீதி நேருமா? பத்தினிப் பெண்டிர் உள்ள நாட்டில் நீணில வேந்தர் கொற்றம் சிதையுமா? ஆயிரமாயிரம் வேதனையலைகள் அவள் உள்ளக்கடலிலே மோதிக் கொந்தளித்து அவள் இதயக் கரையைத் தாக்குகின்றன.....கோவலன் தோன்றி மறைகிறான்.

“அறமுறை பிழைத்தோன் வாயிலோயே,” என் வரவுரை எனப் பணி கிறாள். இங்கு கண்ணகி,—பூம்புகார் நகரில் “மாசறு பொன்னே வலம்புரி முத்தே, காசறு விரையே கரும்பே தேனே” என்றும், “அலையிடைப்பிறவா அமிழ்தே யாழிடைப்பிறவா இசையே, மலையிடைப்பிறவா மணியே.” என்றும் புகழ்க் கீதம் பாடப்பட்ட அதே கண்ணகி,—வன்மையின் வடிவமாகக் காட்சி தருகிறாள், வெற்றி வேற்றடக்கை கொற்றவையாகவும், கானகமுகந்த காளியாகவும். “யார்?” எனக்கேட்ட மன்னவன் முன் பேசுகிறாள். தன்னைப் பற்றிக் கூறுமுன் தன்னாட்டினரது நீதி வழுவா நெறிமுறையைப்பற்றிப் பேசுகிறாள்.

“எள்ளறு சிறப்பின் இமையவர் வியப்பப்  
புள்ளறு புன்கண் தீர்த்தோன் அன்றியும்  
வாயிற் கடைமணி நடுநா நடுங்க  
ஆவின் கடைமணி உகுநீர் நெஞ்சுகடத் தான்தன்  
அரும் பெறற் புதல்வனை ஆழியின் மடித்தோன்.”

போன்றோர் செங்கோ லோச்சிய பொன்னாட்டைவிட்டு இங்கு வந்த காரணம், ‘வாழ்தல் வேண்டி ஊழ்வினை துரப்ப’ என்றே கூறுகிறாள். சிலம்பின் பரல் உண்மையுரைக்கின்றது. தென்னவன் உண்மையுணர்கிறான்., புரைதீர் கற்பின் தேவி தன்னாடன் அரசுக்கட்டிலிலேயே துஞ்சிவிடுகிறான்.

அரண்மனையைவிட்டு வெளிவருகிறாள் ; சிற்றம் மிகுகிறது.

‘பட்டாங்கில் யானுமோர் பத்தினியே யாமாயின்  
ஒட்டேன் அரசோ டொழிப்பேன் மதுரையையும்’

என்று வஞ்சினம் சாற்றுகிறாள். முதிரா முலை முகத்துச் செந்தி எழுகின்றது. கண்ணகி உயர் பண்பின் விளை நிலம் என்பதற்கு ஒரு சான்று : “மதுரை எரியும்போது தப்புவாருண்டோ?” என எரிக்கடவுள் கேட்கிறது. அந்நிலையிலும், துன்பத்தின் எல்லைக் கோட்டையே தாண்டிவிட்ட அந்நிலையிலும், சினமென்னும் சேர்ந்தாரைக் கொல்லி வசப்பட்ட அந்நிலையிலும், “ஆம்”, என்று அறமுரைக்கிறாள்.

“பார்ப்பார் அறவோர் பசு பத்தினிப் பெண்டிர்  
மூத்தோர் குழவி எனும் இவரைக் கைவிட்டுத்  
தீத்திறத் தார் பக்கமே சேர்க”

என்று பணிக்கிறாள். பிறகு மதுராபுரித் தெய்வத்தால் பழம் பிறப்பை உணருகிறாள். பின் எங்கும் நிற்காமல் நடந்து மதுரையின் மேலை வாயிலிலே வெளிப்போகிறாள். அப்போது, தன் கணவனுடன், தன் எதிர்கால நல் வாழ்வில் இன்பம் பூத்துக் குலுங்கப்போகிறது, என்ற எண்ணத்தோடு தான் மதுரை வாயிலில் புகுந்த காட்சி அவள் இதய அரங்கிலே நிழலிடுகிறது.

‘கீழ்த்திசை வாயில் கணவனோடு புகுத்தேன்  
மேற்றிசை வாயில் வறியேன் பெயர்கு’

என்ற சொற்களை உதிர்க்கிறது அவள் நா. ஆம்; தன் எதிர்கால வாழ்வுப் படகை, வளம் பொங்கும் இளந் தென்றல் கரைசேர்க்கும் என்றுதான் கனவு கண்டாள். ஆனால்...? அக்கனவு சிதைந்து, வெறும் பிரமையாய், வெற் றெலியாய்ச் சூனியமாய்ப் போய்விட்டதே.....

தன் துயரச் சங்கிலித் தொடரின் முடிவிடமான வென்வேலோன் குன்றை அடைகிறாள், அன்னம் தண்ணீரின் திப் பதினான்கு நாட்கள் அலைந்தபின். “மலை வேங்கை நறு நிழலில் வள்ளிபோல்வீர் மனம் நடுங்க, முலை இழந்து வந்து நின்றீர் யாவிரோ?” எனக்கேட்ட வேட்டுவ மங்கையர் களுக்குப்பதிலாக,

‘மண மதுரையோடு அரசு கேடுற வல்வினை வந்துருத்த காலையில்  
கணவனை அங்கிழந்து போந்த கடுவினையேன் யான்’

என்ற கண்ணகியின் சொற்களோடு, துயரச் சங்கிலி முடிவுறுகிறது.

துயர காவியம் முடிகிறது; இனி, நம் உள்ளத்தே பொங்கியெழும் துயர்களுக்குப் போக்கிடம் அமைக்க, வஞ்சிக் காண்டம் விரிகிறது.

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வஞ்சிக் காண்டத்திலேகூடத் துயர ஒலி கேட்கிறது. மலைவாழ் வேட்டுவர் செங்குட்டுவனிடம் கண்ணகியைப்பற்றிக் கூறும்போது “.....எந் நாட்டாள் கொல், யார் மகள் கொல்லோ.....” என்கிறார்கள் அதைக் கேட்கும்போது, திரைக்கரங்கள் அணைத்துச் செல்லும், பூம்புகார் நகரிலே அவர்களது பெருஞ் சிறப்பு, திரண்ட செல்வம், மண் தேய்த்த புகழ், வணிக வளஞ் சிறந்த பழங் குடிப் பெருமை...இவையே நம் உள்ள அரங்கிலே திரையிடப்படுகின்றன. அனாதையாகிவிட்ட இன்றைய நிலையை எண்ணும்போது, நம் இதயத்தே துயரம்தான் துளிர் விடுகிறது. பின்னும் தென் தமிழ் ஆற்றல் அறியாது மலைந்த ஆரிய மன்னர் தம் முடித்தலை நெரிக்கக் கல் கொண்டுவந்து கோயில் கட்டிக் கும்பிடும்போதும் கண்ணகிபால் அன்புகொண்ட மூவர் பேச்சும் துயர ஒலியையே எதிரொலிக்கின்றன. கண்ணகியின் தாயான சிறுமி,

‘ஏதில் நன்னாட்டு யாருமில் ஒரு தனிக்  
காதலன் தன்னோடு கடுந் துயர் உழன்றாய்’

என விளிப்பதிலும்,.....இருளிடை “தனித்துயர் உழன்று போனதற்கிரங்கி” நெஞ்சு புலம்பும் கோவலனது தாயின் சொல்லிலும்,

வருபுனல் வையை வான்துணை பெயர்ந்தேன்  
உருகெழு மூதூர் ஊர்க்குறு மாக்களின்  
வந்தேன் கேட்டேன் மனையில் கானேன்  
எந்தாய் இனையாய் எங்கொளித் தாயோ?

என்ற மாதரியின் கதறலிலும், துயரத்தின் ஓசையையே கேட்கின்றோம்.

கண்ணகிக்கு நேர்ந்த துயர், அவள் வாழ்வில் தொடர்பு கொண்டார் அனைவரையுமே பாதித்துள்ளது. கோவலனது தாயும், கண்ணகியின் தாயும், துயரம் தாங்காமல் உயிர் விடுகின்றனர். தந்தையர் துறவியாகி விடுகின்றனர். ஆம்; அவர்கள் குடும்பமே துயர ஆழியில் மூழ்கி மடிந்து விடுகின்றது. துயரின் கொடுங்கரங்களின் அணைப்புக்குத் தப்பமுடியாமல், மாதவியும் இளமையின் அழகோவியமாம் மணிமேகலையும், புத்த தேவன் திருவடையைச் சரணடைகின்றனர். மாதரி எரியிடை மூழ்கி உயிர் விடுகிறாள்; கவுந்தியடிகள் உண்ணாநோன்பிருந்து உயிர் விடுகிறார்.....அது மட்டுமா? பொற்கொல்லனது மரபே அழிக்கப்படுகிறது. கண்ணகியின் துயர் தமிழ் நாட்டின் இருதயத்திலே திராத துயரும் மாறாத சோகமும் ஊற்றெடுக்கச் செய்துள்ளது. காலத்தைக்கடந்து, தலை முறை தலை முறையாய்த் துயரச் சிலம்போசை கேட்டுக்கொண்டேயிருக்கிறது.....

சோகம் பொங்கும் துயரகாவியந்தான் உலகிலே என்றும் அழியாத அமர காவியம் ஆகின்றது. அத்தகைய அமரகாவியங்களில் தலையாயது, உலகிலேயே சிறந்தது நம் சிலம்புச் செல்வம். ஆம்; பாரதி கூறியதுபோல் நெஞ்சை அள்ளும்,—உள்ள உணர்ச்சிகளைத் தோண்டி எடுக்கும்—பெருங்காவியந்தான், நம் தேனிலே ஊறிய செந்தமிழின் சுவைதேறும் சிலப்பதிகாரம்.

## காய்கதிர்ச் செல்வனும், தண்கதிர்ச் செல்வியும்

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இருள் நங்கை நல்லாள் தன் விரிந்த குழலை அள்ளிச் செருகி, காலைக் கதிரவனின் பொற் கதிர்களைக் கண்டவிடத்து, கற்பெனும் திண்மையுடைய நற்றமிழணங்குபோல் நாணி, தன் தலைப்பைப் பேணி மறைய, அழகுமிகு கேணியிடத்தே மலர்ந்து இரவு முழுமையும் மகிழ் வெய்தியிருந்த அல்லிமலர் நல்லாள், அல்லற்காலை அடுத்துதவும் ஆன்றவிந்த அறிவுடையாரொப்ப, மனத்திடத்தே ஏக்கம்கொண்டு இதழ்களாகிய இமைகளை மூடிக்கொண்டு கண்மூடி மௌனியானாள்.

பகலின் நிழலைக் கண்டவிடத்தே நாற்றிசையும் நறுமணம் பரப்பிக் கொண்டிருந்த இருளின் தோழி மல்லிகை தன் தலைவியைக் கண்டவிடத்துத்



தன் மகிழ்வை இதழ் ஓரங்களினூடே நெளிய விட்டுக்கொண்டிருந்த தன்மையினை நீக்கி அல் அகல, அவள் தோழியாம் மல்லிகையும் தலைவியாம் இருளைப் பின்தொடர்ந்தாள்.

பரிதிவட்டம் பரந்த விண்ணில் எழுந்ததூஉம், பறவைக் கூட்டங்கள் பதிகண்ட சதியென்ன, மதிகண்ட வேலையென்ன மகிழ்வெய்தி சிலைநீங்கிய கணையொலி ஒப்ப இரைந்தன. குஞ்சுகளுக்கு இரைகொணர மஞ்சினூடே அவை மறைந்தன. தாய்தம்மைத் தமிழராக இருத்திப்போயதால் மழை காணாப் பயிர்போல சிறகு தோன்றாச் சிறு குஞ்சுகள் உளம் சாம்பின.

பங்கயமானது பகலவனைக் கண்டதும், பெடைகண்ட குயிலொப்ப, நிமிர்ந்து விரிந்து அப் பரிதிக்கு வாழ்த்தாக் கூறியது. நாணற்புற்கள் தலையசைத்துக் கட்டியங் கூறின. நீரினின் றெழுந்த அலைகள் தாளம் தடவ, சுரும்பினங்கள் முழுவின் ஏங்க, கயலினம் களிப்புடன் பன்னீர் தெளிக்கப் பகலவனும் தன் செங்கதிர்க் கைகளைப் பரப்பி உவகை பூத்தான்.

பூவார் சோலைகளில் மஞ்ஞை ஆட, அதைப் புரிந்து குயில்கள் இசை பாட, யாவர் உளத்தும் களிநடம்புரிய, வானம்பாடி விண்ணகத்தே ஏறிப் பண் இசைக்க, பண்ணகத்தே படம்விரிய, விலங்கினத்தே உவகைபூக்க காய்கதிர்ச் செல்வன் கீழ்வான் நீங்கி மேல்வான் அடைந்தான்.

ஞாயிற்றின் ஒண் கதிர்களைப் பின்புறம் கொண்டு மஞ்சு, பஞ்சின் தூவியன்ன பட்டாடை புனைந்து புறப்பட்டது அலைகடல் நோக்கி நீர்மொள்ள. விண்ணிடத்தே மிதந்த சில முகில்கள் தம்மிடத்தே சேர்ந்தாரைக் கொல்லும் சினத்தைப் பொருந்தித் தம் இனத்தைப் பொருத அதன்வழி நாகம் நடுங்க மண்திணி ஞாலத்தோர் மயங்க இடியேறு வெளியேறியது. பகை விரும்பாப் பரிதியும் அவற்றின் சினத்தி விண்ணிடம் தோன்றாது மறைத்தான்.

தாரகைகள் தண்ணிலவைக் காணாது அலர்கதிர் ஞாயிற்றின் ஒளிநிறை முகத்தினைக் கண்ணுறமாட்டாமல் மங்கி மறைந்தன. வறுமையால் மெலிவுற்றோரைக் கண்டகாலை அவர்களுக்கு கன்றொடு களிறுகளைக் கொடுக்கும் கழற்றொடி ஆய்போல் கதிரோனும் தன் கதிர்களை விரிநீர் வியன் உலகத்து விழச்செய்தான். கைம்மாறு கருதாச் செல்வன் தன் காய்கதிர்களை அள்ளி அள்ளி வீசிஞன்.

உலகெலாம் ஒப்ப நோக்க வான மீமிசை ஊர்ந்தான். மன்பதை நடக்கும் செயல்களைக் கண்டான். “நந் கருப்பஞ் சாற்றிலே, தேன் கலந்து, செழுங்கனித் திஞ்சுவை கலந்து உவட்டாமல்” இனிக்கும் தமிழ் வழங்கும் தென் புலத்தை ஆர்வம் பெருகுங் கண்ணொடு கண்டான். மானிலமீது மன்னும் இமயம் வரை தனது புகழ் பரப்பிய செந்தமிழ் நாட்டைக் கண்டான். “பொருப்பிலே பிறந்து மூவர் புகழிலே கிடந்த” தமிழணங்கைக் கண்டான். ஆதி சிவன் பெற்றெடுத்த அருமைத் தமிழ் மொழியை, அகத்தியனார் வளர்த்த அரும் பொற் சிலையை, நாவீறு கொண்டோர் நயந்து நல்கிய நகைகளை யணிந்து நெற்றித் திலகமென விளங்கும் நற்றமிழ்த் தாயை நண்ணினான்.

நெருங்கியகாலை நெடுத்துயர் கொண்ட கோடுயர் பெருமை இலங்கும் நல்லன்னை தனைக்கண்டான். நிலமிசை நீடு வீழ்ந்தான், தொடுமணற் கேணியிலும் சுரந்து கண்ணீர் வடிக்கும் அம்மையைக் கண்டு ஆதவன் வெம்மை கொண்டதன் நெடுங் கண்களிலிருந்து நெருப்பைக் கக்கினான். உச்சிமீது நின்று

உலகெலாம் நோக்கி உயிர்ப்பதைக்க, உலகம் ஒடுங்க, மண் கொதிக்க, மாநிலம் நடுங்க வெகுளிக் கண்ணெடு நோக்கினான்.

அன்னை கண்டு அவனது சினத்தையாற்ற வெய்ய நற்கதிரோனை நோக்கி, “எம் மக்கள் எனது உயர் சிறப்பை உள்ளி, எனக்குப் பணி செய்து கிடப்பதே தம் கடமையாகக்கொண்டு என்னை ‘வள்ளியம்’ என்னும் செருக்கையுடையவ ளாக்க நெடுநீர், மறவி, மடி, துயில் அகற்றிப் பாடுபட்டு வருகின்றனர்” எனச் செப்பலும், “மக்கள் மடமை தெளிவர், தமிழ் உடைமை உள்ளுவர், மற்றைப் பாடையைத் தள்ளுவர்,” என அகமதிக்கொண்டு ஞாயிறு அமைதிக்கொண்டான்.

நாம் அறிந்த புலவர்களின், பூமிதனில் எங்கும் கண்டறியாப் பாவலர் களின் பனுவல்களில் மெய்ப்பொருளைக் காணார்—காணவிழையார் ஆகியோரைக்கண்டு கதிரவன் மனம் கவற, அவனது வெண்ணொளியாகிய திண்ணொளிமறைந்தது. ஆழியுட்கொண்ட ஏடுகளனைத்தையும் அடைய விழைந்தவன்போல மேலைக் கடலினுள் அவன் வீழ்ந்தான்.

மேலை மயங்க இவ்வாழிசூழ் உலகெலாம் இல்லுக்கு விரைந்து ஏகின. தமிழின் வரம்பு உரம்பெற, நெடுநதிகள் நீர் உயர, மருதத்தின் கண்ணே நெல்லுயர அருவர்கள் குடியுயர, அரசன் செங்கோலுயர, சூல்கொண்ட முகில்கள் புனல் சிந்தி விண்ணிருந்து மண்ணுக்கு விரைந்து இழிந்தன.

மேலை வானிலே கதிரவன் மறைதலும், கீழை வானிலே ‘தமிழர் தலை நிமிர்ந்து நிற்பர்’ எனக் கூறுவதுபோல் அமுதமய ஒளிக் கதிர்களை அள்ளிக் கொண்டு அம்புலி அல்லின் மடிமீது தவழ்ந்து வந்தாள். தண்ணொளியால் மனிதர் உள்ளொளியை ஊக்குவித்தாள் செம்முடியில் வீற்றிருக்கும் செல்வ நாயகி. தாரகைகள் மகிழ்வெய்தி விண்ணிடை விளங்கின.

காதலன் காய்கதிரச் செல்வன் சென்ற வழியிலே, காதலி தண்கதிரச் செல்வி செல்லலும் உயிரினங்கள் பாலொடு வேம்பு சேர் நிலையில் நிற்க, பரிதி வாரா நிற்க, மக்கள் விலங்கு கண்ட வேடனென இறும்புதெய்தித் தம் செயல் களை மேற்கொண்டனர்.

## பாரியும், பறம்பு நாடும்

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**வ**ரையாது வழங்கும் வள்ளல்கள் பலர் வண்டமிழ் நாட்டிலே வாழ்ந்தனர் என்பதற்குச் சான்றுகள் சங்க இலக்கியங்களில் பற்பல இடங்களில் பரக்கக் காணப்படுகின்றன. தண்டமிழ்ப்புலவன் வறுமை தீர்க்கத் தன் மண்டையைக் கொடுக்க முன்வந்த குமணன்; ஆயுளை நீடிக்கச்செய்யும் அரியதொரு நெல்லிக்கனியை ஓளவைக்கீந்த அதியமான் நெடுமானஞ்சி; கானமயிலுக்குக் கலிங்கம் போர்த்திய ஆவியர் பெருமகன் பேகன், என்று வள்ளல் பட்டியலிலே இடம் பெறுவோர் எண்ணிக்கையற்றோராவர். என்றாலும், வள்ளல் என்றவுடன் நம் உள்ளத்திரையிலே பாரிவள்ளலின்

உருவம்தான் தெரிகிறது. ‘கொடையிற் சிறந்தான் கர்னன்’ என்று கூறுகிறது பாரதம் என்றாலும், வரையாது வழங்கும் வள்ளல் என்று சங்க இலக்கியங்களுள் ஒன்றான புறநானூறு செப்புவது பாரி என்ற குறுநில மன்னனையேயாகும்.

பாரி, கடையெழு வள்ளல்களுள் ஒருவன், முந்நூறு ஊர்களைத் தன்னகத்தே கொண்ட பறம்பு நாட்டிற்கும், பறம்பு மலைக்கும் தலைவன், “பூத்தலையற அப் புண்கொடிமுல்லை நாத்தழம்பிருப்பப் பாடாதாயினுங் கறங்குமணி நெடுந்தேர் கொள்கெனக் கொடுத்த” பெருங் கொடையினன்; சுந்தரரால், ‘கொடுக்கிலாதானைப் பாரியேயென்று கூறினுங்கொடுப் பாரிலை’ என்று பாடப்பெற்றவன். கவிபாடிவந்த புலவர்கட்கும், இல்லையென்று இரந்து ஒங்கிவந்த மக்களுக்கும், ஆடலிற் சிறந்த விறலிக்கும், பாடலிற் சிறந்த பாணர்க்கும், தன்னுடைய செல்வத்தையெல்லாம் அள்ளியள்ளி அளித்து, அவர்கள் அகம் மகிழ்தலைக்கண்டு முகம் மலர்ந்தவன் பாரி. வந்தாரையெல்லாம், ‘வா, வா’ என்று தன் வண்ணமலர்க் கரங்களை நீட்டி வரவேற்கும் தீஞ்சுவை நலங்கனிந்த செந்தமிழ் நாடல்லவா இது! “இருந்தோம்பி இல்வாழ்வ தெல்லாம் விருந்தோம்பி வேளாண்மை செய்தற் பொருட்டு” என்னும் குறள் நெறி பின்பற்றுபவர்களல்லவா தமிழர்கள்! எனவேதான் பாரியும் தமிழ்ப் பண்பாட்டிற்கிணங்க வந்தவருக்கெல்லாம் தன் செல்வத்தை வாரி, வாரி, வழங்கினான்.

தன்னிடத்துள்ள செல்வத்தைப் பிறருக்கு ஈந்து, அதனால் வரும் இன்பத்தை எய்தாமலும், தானும் அச் செல்வத்தை அனுபவியாமலும் உயிர் துறந்த ஒரு உலோபியை, வள்ளுவர், ஒருவேளை, தன் வாழ்நாளில் சந்தித்திருப்பாரோ என்னவோ, “ஈத்துவக்கும் இன்பம் அறியார் கொல் தாமுடைமை வைத்திழக்கும் வன்கணவர்,” என்றொரு குறளை இயற்றி விட்டுச் சென்றுவிட்டார். ஆனால் பாரியோ, வள்ளுவன் கூறிய ‘ஈத்துவக்கும் இன்பம்’ எய்தினான்! முல்லைக் கொடியின் தொல்லை காணச் சகியாது, தன் தேரையே அது படருதற்கு ஏற்ற கொம்பாகக் கொடுத்தவனல்லவா அவன்? எனவே தன்னுடைய எல்லையில்லாச் செல்வத்தையெல்லாம், இல்லையெனக் கூறுது எல்லோர்க்கும் ஈந்தான். மெலிந்த உடலோடும், ஒட்டிய வயிற்றோடும், குழிவிழுந்த விழிகளோடும், கந்தல் உடை புனைந்து, காதல் மனைவியர் புடைசூழ, கையிலே யாழை ஏந்தி, நரம்பைமீட்டி, நாதமெழுப்பி, பண் இசைக்கும் தமிழ்ப் புலவர்தம், துயர் துடைத்தான் பாரி. அவர்களும், “வாழ்க எங்கோவே! நீவிர் பன்னெடு நாள் இப்பாரிலே வாழ்க!” வென்று வாழ்த்தினர். இவ்வாறு இரவலர்க்கு ஈந்து, அவர் போற்ற வாழ்ந்த பாரி,

“ஈதல் இசைபட வாழ்தல் அதுவல்லது  
ஊதியம் இல்லை உயிர்க்கு”

என்ற வள்ளுவன் குறளுக்கு இலக்கியமாக வாழ்ந்தான் என்றியம்புதல் தகும்.

வள்ளல்கள் அனைவரையும் கனி ஈயும் மரங்களுக்கு ஒப்பிட்டால், பாரி வள்ளலை ஒரு வாழை மரத்திற்கு ஒப்பிடலாம். இதற்குக் காரணம் என்னையெனின், வாழை மரமானது, பிறமரங்களைப்போன்று காயையோ, கனியையோ மட்டுமே ஈயாது, தண்டு, பூ, இலை மூலமாகத் “தன்னையே” நமக்கு உணவுப் பொருளாகக் கொடுக்கிறது. அதைப்போலவே பாரியும், வள்ளல்கள் அனைவரைப்போன்று தன்னிடம் இரந்துவரும் ஏழைகட்கும், புலவர்கட்கும்

தன்னுடைய நாட்டையும், செல்வத்தையும் மட்டுமே பரிசிலாகக் கொடுக்காது “தன்னையே” பரிசிலாகக் கொடுக்கும் தன்மையுடையவன் ; கரவாது ஈபவன்.

கபிலர், பாரியின் அவைக்களப் புலவர் ; ஆருயிர் நண்பர். இவ்விருவரும் உடலால் இருவரே யெனினும் உள்ளத்தால் ஒருவராயினர். ஆம்! இருவரும் அன்பெனும் நாரினால் பிணிக்கப்பட்டுவிட்டனர். நட்பின் திறத்திலே இவர்களிருவரும், கோப்பெருஞ்சோழனையும், பிசிராந்தையையும் போலவும் ; ஓளவையாரையும், அதியமானையும் போலவும், ஒன்றி வாழ்வாராயினர்.

பாரி இறந்தபின், கபிலர், பாரியைப்பற்றியும், அவனுடைய பறம்பு நாட்டைப்பற்றியும் புகழ்ந்து பாடியுள்ள பாடல்களின் வாயிலாகத்தான் நமக்குப் பறம்புநாட்டின் வளம் தெரிகிறது. கபிலர், ஒரு பாடலில் பாரியை, மாரியொடு ஒப்புமைகாட்டி விளக்குகின்றார். “பாரி, பாரி என்று சொல்லி, அவன் பலபுகழையும் வாழ்த்தி, அவன் ஒருவனையே செம்மையான நாவினையுடைய புலமை மிக்கோர் புகழ்வார். இவ்விடத்து உலகத்தைப் பாதுகாத்தற்குப் பாரியாகிய ஒருவனுமேயல்லாது மாரியும் உண்டு” என்று பாரியைப் பழித்ததுபோலப் புகழ்ந்த கபிலரின் திறம் ஈண்டு வியத்தற்குரியது. அப் பாடல் பின்வருமாறு :

“பாரி பாரி யென்றுபல வேத்தி  
யொருவற் புகழ்வார் செந்நாப்புலவர்  
பாரி யொருவனுமல்லன்  
மாரியு முண்டென்கு புரப்பதுவே.”

பாரியை மற்றொரு பாடலில் கபிலர் எப்படிச் சிறப்பிக்கின்றார் என்பதைப் பாருங்கள் : காய்கதிர்ச் செல்வனும் கதிரவனின் கொடுமையினால், மேனியை வியர்வை குளிப்பாட்ட, மெல்உடல் வாடிக் களைத்துப்போக, நிழலில்லாத நீண்ட தனி வழியிலே நடந்து வந்துகொண்டிருக்கிறான் ஒருவன். அவன் கண்களுக்குச் சேய்மையில் ஒருசில மரங்கள் நிற்பது தெரிகிறது. பரவச மெய்துகிறான் பாலைவனத்தில் பசுஞ் சோலையைக் கண்டவனைப்போல. ஓடுகிறான் மரத்தைநாடி. ஆனால் வாடிய அவனது உடலின் களைப்பை நீக்க முடியவில்லை அந்த மரங்களால். ஏனென்றால் அங்கே நின்றுகொண்டிருந்த மூன்று மரங்களும், நிழல் அதிகம் தராத பனைமரங்கள். எனவே மேலும் நடக்கலுற்றான் அவன். வெகுதூரம் நடந்துவந்துவிட்டான் அவன். அண்மையில் ஒரு நிழல்தரும் ஆலமரம் அவனை ‘வா, வா’ என வரவேற்றது. லோகமாக நடந்தான் ; மரநிழலில்வந்து தங்கினான். வியர்வையெல்லாம் சிறிது சிறிதாக மறைய ஆரம்பித்தது அவன் உடலிலிருந்து. அவன் களைப்பு நீங்கியது. அவன் உள்ளத்தில் களி கொஞ்சியது. அவன் வேறு யாருமல்ல. ஒரு புலவன் ; இரந்து வாழ்தலையே தொழிலாகக் கொண்ட ஏழை. அவனை வாட்டிய வறுமையாகிய வெய்யிலின் கொடுமை தாளாது, பொருளாகிய நிழலை நாடிச்சென்றான். பனைமரத்தைப்போன்று, முடியுடைவேந்தர்களாம் சேர, சோழ, பாண்டியர்களால் அவனுடைய வறுமையாகிய வெய்யிலின் கொடுமையைப் போக்கமுடியவில்லை. ஆனால் பாரியோ ஆலமரத்தைப் போன்று மிகுதியாக, செல்வமாகிய நிழலை ஈந்து, அவனுடைய வறுமையாகிய வெய்யிலினின்றும் அவனைக் காப்பாற்றினான். மேலே சொல்லப்பட்ட நிகழ்ச்சி, “நிழலினிளிடத் தனிமரம்போலப் பனைகெழு வேந்தரையிறந்து மிரவலர்க்கீயும் வள்ளியோன்”, என்று பாரியை, கபிலர் சிறப்பிக்கும் கூற்றிற்கு விளக்கமேதவிர வேறொன்றுமில்லை.

இவ்வாறெல்லாம் பாரி, தன்னிடம் பரிசில் பெற வந்தவர்களுக்கு, அவர் தம் தகுதி நோக்காது, அவர் யாரென ஆராயாது, “கொடைமடம்” கொண்டு அவர்கள் வேண்டிய பலவற்றைக் கொடுக்கிறானே, ஏது இவனுக்கு இத்துணை செல்வம்? இவனுடைய கருவூலத்தில் செல்வம், “தொட்டனைத் தூறும் மணற் கேணி” போல எடுக்க, எடுக்க வளர்ந்துகொண்டே வருகிறதா? என்ற ஐயப்பாடு ஒவ்வொருவர் உள்ளத்திலும் எழுதல் இயற்கை.

இவற்றிற்கெல்லாம் காரணம் பறம்பு நாட்டின் இயற்கை வளமேயாகும். இயற்கையன்னையின் இன்னருளால் பாரியின் பறம்பு நாடு உழவர் உழுது விளைவிக்காமலேயே நான்குவித விளைபொருள்களை நல்கியது. சிறிய இலைகளை யுடைய மூங்கில் நெல்; இனிய சளைகளையுடைய பலாவின் பழம்; கொழுமையான கொடியையுடைய வள்ளிக் கிழங்கு; இவையேயல்லாது, தேன் முற்றி யிருத்தலால் நீல நிறமான ஓரிபெற்று, மேற்புறம் அழிந்து அவனுடைய கனத்த நெடியமலை வழியே தேன் பொழியும். “மைம்மீன் புகையினுந் தூமந் தோன்றினும், தென்றிசை மருங்கின் லெள்ளியோடினும்” பாரியின் பறம்பு நாட்டில் வயலிடமெல்லாம் விளைவு மிகுந்து இருக்கும்; புதரிடத்துப் பூக்கள் மலரும்; வீடுகள்தோறும் உள்ள கன்று ஈந்த காட்டுப் பசுக்களின் கூட்டம் நல்ல புல்லை மேயும்; மழை பொய்த்துப் போகாத புன்செய் நிலத்திலே, காட்டுப் பூனைக் குட்டியின் கூரிய பற்களையொத்த, பசுமையான இலைகளையுடைய முல்லைப் பூ மலரும். இவை மட்டுமா! “மட்டுவாய் திறப்பவு மைவிடை வீழ்ப்பவு மட்டானருளாக் கொழுந்துவை யூன் சேறும் பெட்டாங்கியும் பெருவளம்” கொண்டது பாரியது பறம்பு நாடு. யானை மென்று சிந்திய கவளத்தினது சக்கைபோலத் தேனைப் பிழிந்து பயனற்றது என்று போடப்பட்ட சிதறிய பொருள்களிலிருந்து பெருகிய மதுச் சேறு ஒழுகும் முற்றத்தையுடைய, தேர்வழங்கும் இருப்பிடத்தையும் கொண்டது அவனுடைய பறம்புமலை. ஆம்! செந்நெலும், கரும்பும், தீஞ்சுவைக் கணிகளும் வண்ணமுற வழங்கி, பொன்னும், மணியும் கொழிக்கும் நாடு பாரியின் பறம்பு நாடு. அழகும், செல்வமும் ஒருங்கமைந்தது அவன் தன் திருநாடு.

இத்தகைய வளம் கொழிக்கும் நாட்டைக் கண்டார்கள் முடியுடை வேந்தர்களான சேர, சோழ, பாண்டியர்கள். எங்கும் மக்கள் பாரியின் வள்ளற்றன்மையைப் போற்றிப் பரவுவாராயினர். இதைக் கண்ட மூவேந்தர்களும், ‘பேரரசர்களாகப் பெருமையுடன் திகழ்கின்ற நமக்கில்லாத புகழ் ஒரு சிற்றரசுக்கா? அதிலும் முந்தாறு ஊர்களின் தலைவனுக்கா?; என்று பாரியின்மாட்டுப் பொருமைகொண்டனர். அவர்கள் உள்ளத்திலே ஏற்பட்ட பொருமைப் புகையானது, விரோதத் தீயை மூட்டிவிட மூவேந்தரும் ஒன்று சேர்ந்து பாரியைச் சூழ்ச்சியால் கொன்றனர். ஆம்! வரையாது வழங்கிய கையனை—வான்புகழ் வாழ்ந்த அந்த வள்ளற் பெருந்தகையை—ஏழைபங்களனை—உயர்ந்தோர்க்குப் புகலிடமாக விளங்கிய அந்த உத்தமனை, சூழ்ச்சியால் கொன்றனர் சூதுமதி படைத்தோர். மூவேந்தரும் பெண் பொருட்டுப் பாரியொடு போரிட்டனர் என்று கூறுதல் பொருத்தமுடைத்தன்று. ஏனெனில் பாரி மகளிராகிய அங்கவை, சங்கவை ஆகிய இருவர் பொருட்டு மூவேந்தரும் போரிட்டனர் என்பது முரண்பாடுடையது. பாரியின் புகழையும், அவன் நாட்டின் வளத்தையும் கண்டு, பொருமை கொண்டு, சூழ்ச்சியால் பாரியைக் கொன்றனர் என்று கூறுவதே பொருத்தமுடையதாகும்.

பாரி இறந்தான். கபிலரும் உடன் உயிர்துறக்கத் துணிந்தார். நண்பன் இறந்தபின் தான்மட்டும் இந்த நானிலத்தில் தனித்து வாழ்வதை விரும்ப

வில்லை அவர். என்றாலும் பாரி பெற்றெடுத்த இரு பைந்தமிழ்ச் செல்வங்கள் அங்கவை, சங்கவையைப் பேணும் கடமை யேற்பட்டுவிட்டது கபிலருக்கு. அவர்களிருவரையும் உரியதொரு கணவன் கையில் சேர்ப்பிக்கும் பொருட்டு, அவர்களையும் உடன் அழைத்துக்கொண்டு காடு, மலைகளையெல்லாம் கடந்தார் கபிலர். தந்தையைப் பிரிந்த தாங்கொணாத துயரத்தால் பாரி மகளிர்,

“அற்றைத் திங்களவ் வெண்ணிலவில்  
எந்தையு முடையே யெங்குன்றும் பிறர்கொளார்  
இற்றைத் திங்களில் வெண்ணிலவின்  
வென்றெறி முரசின் வேந்தரெங்  
குன்றுங் கொண்டார் யாமெந்தையுமில்மே”

என்று கையற்று, கண்ணீருகுத்துப் புலம்புவராயினர். பாவம்! கபிலர் என்ன செய்வார்? அவர்களைத் தேற்றுவதைத் தவிர அவரால் வேறு என்ன ஆற்றமுடியும். “பாரியின் ஆட்சியின் மாட்சிமையாலும், அதன் காரணமாக சான்றோரைத் தன்னகத்தே கொண்டிருத்தலாலும், மாதம் மும்மாரி மழை பொழிய, காடு, கழனிகளிலெல்லாம் விளைவுமிக, செல்வம் கொழித்த திருநாடு இனிச் சீரழிந்துவிடுமே; புலவர் போற்றிய பொன்னாடெனத் திகழ்ந்த நன்னாடு, பாரி இறந்துபட்டதனால் இனிப் பொலிவிழந்துவிடுமே; நாட்டின் நீர்வளம் கெடுமே நிலவளம் அழியுமே; மலைவளம் குன்றிப்போமே” என்று அவரும் மனமொடிந்து புலம்புவராயினர். என்றாலும் மனதைத் தேற்றிக்கொண்டு, பாரி மகளிரையும் உடன் அழைத்துக்கொண்டு மேலும் நடக்கலுற்றார். விச்சிக்கோ, இருங்கோவேள் என்ற இரு சிற்றரசர்களிடம் சென்று பாரி மகளிரை மணந்துகொள்ளுமாறு வேண்டினார். இருவரும், ‘இயலாது’ என இயம்பிவிட்டனர். என்செய்வார் கபிலர்! இதயம் சோர்ந்தார்! பாரி மகளிரிரு வரையும், தன்குலத்தாரிடம் அடைக்கலப் பொருளாக விட்டுவிட்டு வடக் கிருக்கச் சென்றுவிட்டார். அவ்விருவரையும் ‘மலையமான்’ மணந்துகொண் டான் என்பது ஒரு சாசனத்தால் அறியக்கிடக்கின்றது என்பர்.

# புலவன் தொண்டு

By S. Natarajan, III B.Sc.

## காட்சி 1

இடம் : ஆலூர்—நலங்கிள்ளியின் அரகிருக்கை.

உரையோர் : சோழன் நலங்கிள்ளி, புலவர் இளந்தத்தர், அமைச்சர்.

நலங்கிள்ளி : புலவர் பெருந்தகையே! தங்கள் வருகையால் யாம் தாய் கண்ட சேய்போலவும், மதிகண்ட மலர்போலவும் மகிழ்ச்சியடைகின்றோம். தங்கள் கவிமலர்கள் ஆயிரமாயிரம் ஆண்டும் வாடாத தன்மை பெற்றவை; மணமாறு மாண்புடையவை. எம்போன்ற வேந்தர்களின் வீரம் தங்களது

கவிதையினால் எழுந்தவையே! நீதிதவறிய வேந்தனை நேர்மை நெறியில் நடக்கச்செய்து நாட்டின் நற்கலைகட்கு ஆக்கம் அளித்து, வாழ்வை வளமுறச் செய்பவை தங்களது பைந்தமிழ்ப் பாடல்கள். இவனுள்ள இருக்கையில் அமருங்கள்.

**இளந்தத்தன் :** (அமர்ந்து) வெற்றி வேந்தே! நும் கொற்றம் வாழ்க! “யாதும் ஊரே யாவரும் கேளிர்” என்ற பரந்த மனப்பான்மையுடைய புலவன் ஒரு நாட்டிற்கு, ஒரு மன்னனுக்கு மட்டிலும் உரியனல்லன். இப் பாரினில் பதைத்துவாழும் பாமர மக்களுக்கே அவன் சிறப்பாக உரியவன். கைம்மாறு கருதாது கடப்படும் தன்மையன்; ஆதலின் புகழைக் கருதும் புன்மையனல்லன்.

**அமைச்சன் :** கவிஞர்க்கரசே! வேந்தர் பெருமான் கல்வியில் சிறந்து கன்னித் தமிழின் பெருமையை நன்குணர்ந்தவன். ஆதலின் தமிழன்னையின் தகைசான்ற மைந்தராம் நுமக்கு நன்மதிப்பிடுகிறார். ஆளத் திறமையற்றோ னிடம் அடிமைப்பட்ட அரசும், கல்வியற்ற மூடரிடம் சென்ற புலவன் நிலையும் குழந்தைகைக் கொடுத்த கண்ணாடிபோலவாம். எம்வேந்தர் புலவோர் சொல் அமிழ்தம் எனக் கைக்கொண்டு தாம் செய்யும் அரசியல் அலுவல்களைத் தங்களைப்போன்ற உயர்தனிக் கவிஞர்களை உசாவிச் செய்வதால்தான் நாட்டு மக்கள் நலிவின்றி நல்வாழ்வொய்துகின்றனர்.

**இளந்தத்தன் :** மாண்புசால் மன்ன! கருத்தறிந்து கருமம் முடிக்கும் அமைச்சரே! “மன்னனுயிர்த்தே மலர்தலை உலகம்” என்ற கொள்கை கொண்ட வேந்தனும், முறைபடச் சூழ்ந்து முடிக்கும் அமைச்சரும் பொருந்தி யிருத்தலால், நம்நாடு முடியரசாயினும் குடியரசுபோல் வீறுபெற்று விளங்கு கின்றது. நிற்க, முரசில்லாத அரசு சிறப்பதில்லை. நம்நாட்டின் அரசிய லாக்கத்தை பிறநாடுகட்கு எடுத்தியம்புதல் பொருட்டும், பிறநாடுகளில் காணப்படும் அருமை பெருமைகளை நம்நாட்டில் புகுத்தும்பொருட்டும் யாம் நம் நாட்டைவிட்டுப் பிரியவேண்டியுள்ளது. விடையளிப்பின் விரைவில் சென்றுவருவாம்.

**நலங்கிள்ளி :** (இருக்கையினின்றெழுந்து முகவாட்டத்துடன்) புலவர் பெருமானே! தாங்கள் எப்பொழுதும் என்னருகில் இருந்தால் தானையும், அமைச்சும், தகைசான்ற அரசன்களும்கூடத் தேவையில்லை. தங்களது பைந் தமிழ்ப் பாடல்கள் பகைவானது நெஞ்சில் பண்பட்ட தன்மையினை உண்டாக்கு விடுகின்றன. எதிர்த்தவன் ஏமாற்றமுறுகின்றான்; மமதைகொண்டவன் மண்டியிட்டு நிற்கின்றான். இன்று யான் ஆளும் ஆட்சி தங்களுடையதே என்று கூறுவதில் பிழையொன்றுமில்லை. இந்நிலையில் தங்களது பிரிவு எனது வலக்காய் வெட்டுண்டு துண்டித்துப்போனதையொக்கும். வழிதிசை யறியாது பகைவார்களாகிய குன்றுகள் நிறைந்துள்ள கடலின்கண்ணே செல்லும் நாவாய்போன்ற காவலர்கட்குத் தாங்கள் கலங்கரை விளக்கம் போல்வீர். நீந்தத் தெரியாதவனுக்கு மிதவை தேவை. எம்போன்றவருக்கு, வருமுன் காக்கும் வன்மையற்றோர்க்குத் தங்களது நற்கருத்துகள் இன்றியமை யாதவை. ஆகவே தாங்கள் பிரிந்துசென்று நாட்டின் பெருமை பேசுவதிலும், அதன் அரசியலைக் காக்கும் நற்பணி சிறந்ததென என் எண்ணத்தில் படுகின்றது. [காவலன் மனம் கலங்குகின்றது]

**அமைச்சன் :** கவிக்கரசே! கன்று, பிறர்செய்யும் வசதிகளால் தாய்ப் பசுவை மறத்தலும் கூடும். ஆனால் தங்களனைய கவிக்கொண்டல்களை யாம்

மறப்பின், ஆட்சியென்னும் பைங்கூழ் பகைவர்களாகிய கதிரவன் கொடுமையினால் வாடி வதங்கிவிடும். தங்கள் பிரிரால் எமது மன்னனும், மக்களும் ஒளியவிந்த இடத்தில் இருள் புகுவதுபோல் அல்லலுறுவோம். வேண்டாம்! தங்கள் எண்ணத்தைத் தவிருங்கள்.

**இளந்தத்தன் :** யாம் எவ்விடம் செல்லினும் எமது மனமும், சிந்தையும் எப்பொழுதும் இம்மாண்புறு நாட்டின்மீதே மையலுற்று நிற்கும். யாம் செல்லும் இடங்களை அவ்வப்பொழுது அறிவிக்கின்றோம். தேவை நேர்ந்த போது தெரிவித்தால் தேடிவரத் தடையில்லை. வருந்தற்க.

[மன்னவன் பிரியாநிலையில் புலவரை வழிபடும்புகுறள்]

## காட்சி 2

**இடம் :** உறக்கை—நெடுங்கின்னியின் இருக்கை.

**உரியோர் :** நெடுங்கின்னி, கோலூர்கிழார், அமைச்சன், ஒற்றர் தலைவன்.

**வாயில் காப்போன் :** அரசரேறே! அவைக்களப் புலவர் கோலூர்கிழார் தங்களைக் காண வாயிலில் காத்துள்ளனர்.

**நெடுங்கின்னி :** அதற்கென்ன தடை? அவைக்குரியவர், ஆட்சிக்குரியவரை அனுமதிப்பதற்குத் தாமதமேன்?

[வாயிலோன் கோலூர்கிழாரை அனுப்ப, மன்னன் எழுந்து பணிந்து இருக்கையவிக்கிறான்]

**நெடுங்கின்னி :** கவிஞர்க்கரசே! யாம் வாழும் பெருவாழ்வு நும்மால் ஆயது. நாட்டை விரிவடையச் செய்யவேண்டும் என்ற பேராசை காரணத்தினால் இரத்தவெறிகொண்டு ஆயிரக்கணக்கான மக்களை அழிக்கத் துடித்தகாலே, அன்புருவாகிய தாங்கள் எனது மாறுகொண்ட சீற்றத்தைத் தணித்து அமைதியை எங்கும் நாட்டினீர். அற்றகுளத்து அருநீர்ப்பறவை போலல்லாமல் யாம் அலமந்த காலத்தும் எம்முடனிருந்து எமக்குறு துணையாய் விளங்கினீர். ஆகவே தாங்கள் எமக்குச் சேயைப் புரக்கும் தாய் போலவும், கண்மணியைக் காக்கும் இமைபோலவும் ஆவீர். அங்ஙனமிருப்ப இவ்வுலகில் தாய் வருகையைத் தடுத்துநிற்கும் சேயுமுளதோ? அனுமதிக்காக அடைத்து நின்ற வாயில்காப்போன் செய்கை பெரிதும் வருந்தத்தக்கதே.

**கோலூர்கிழார் :** வேந்தர் வேந்தே! எச்செய்கையும் ஒரு கட்டுப்பாட்டில், ஒரு நியதியில் நடைபெறுதல் வரவேற்கத்தக்கது. கட்டுப்பாட்டின்றிப் புயலில் அடித்துச் செல்லப்படும் கலம் பார்தாக்கி உடைவதும், நியதியின்றும் நீங்கிய மதயானை மக்களால் கொல்லப்படுவதும் கண்கூடு. பகலுக்குப் பின் இரவும், இரவுக்குப்பின் பகலும் மாறிமாறிக் கட்டுப்பாட்டின் வழி நடக்கும் இயற்கையை எண்ணுவீராக. ஆதலின் நாளோலக்கத்துக்குரிய கட்டுப்பாட்டுக்கு யாமும் கடமைப்பட்டிருப்பது கண்டு வருந்தற்க.

**அமைச்சன் :** மன்னர் பெருந்தகையே! அயல்நாட்டு ஒற்றர்களின் நடமாட்டம் நாளுக்குநாள் பெருகி வருகின்றது. அவர்களின் நடமாட்டம் யானையைக் காண்பதற்குமுன் அதன் மணியொலி செவிப்படுதல் போன்றும், மன்னனைப் பார்க்குமுன் அரச சின்னங்கள் சில காட்சியளித்தல் போன்றும் அயல்நாட்டு மன்னர்களுது போர்விருப்பத்தை நமக்குணர்த்துவனவாம்.

**நெடுங்கின்னி :** அது குறித்து வருமுன் காக்கும் எல்லமை வாய்ந்த நீவீர் தக்க நடவடிக்கை மேற்கொள்வது கூறாமலே அமையும். முட்பகையை



முனையிலேயே கிள்ளியெறிவது சாலச்சிறந்ததாம். அத்தகைய அழிகாரரைக் கண்டுபிடித்து ஒருத்தலில் தயங்கவேண்டுவதில்லை.

[காவலன் ஒருவன் பரபரப்புடன் ஓடிவருகின்றான்]

**காவற்காரன் :** வீரம் கெழுமிய வேந்தே! வணக்கம். நமது ஒற்றர் தலைவன் தங்களைக் காண விழைகின்றார்.

**நெடுங்கிள்ளி :** அப்படியே ஆகு. உடனே உள்ளே புகவிடுக.

[ஒற்றர் தலைவர் வந்து வணங்குகின்றார்]

**நெடுங்கிள்ளி :** ஒற்றர் தலைவரே! இவண் நம் உயிரனைய புலவரும், உளமறிந்து ஆவன செய்யும் அமைச்சருமன்றிப் பிறிதொருவர் இல்லை. ஆதலின் நீவீர் உள்ள செய்தியை உணர்ந்தவாறு உரைக்கலாம்.

**ஒற்றர் தலைவன் :** இறைவ! நாம் கொற்றம் வாழ்க. இன்று வைகறை யாமத்தில் யான் இவ்வூர் மதிற்புறத்தின்கண்ணே புதுவது புனைந்தாயும் ஒருவனைக் கண்டேன். அவன்தான் ஆலூரினின்றும் வருவதாகக் கூறினான். அவனது தோற்றத்தையும், மக்களிடம் பழகும் விதத்தையும் ஆராயின் நமது பகைவராகிய நலங்கிள்ளியினிடமிருந்து வந்த ஒற்றன் என ஐயுற வேண்டியிருக்கிறது.

**நெடுங்கிள்ளி :** (சொ மிக்கவனாய்) அமைச்சர் கூறியது உண்மையாகவே ஆயிற்று. இவ்வயல்நாட்டு ஒற்றர்கள் உடனிருந்தே கொல்லும் வியாதிக்கு நிகராவர். இவர்களுக்கு மரணதண்டனையன்றி மற்றொன்றில்லை. ஆதலின் நாளைக்காலை அவனைக் கொலைக்களத்திற்கு அழைத்து வருக. இவன் மற்ற அயல்நாட்டு ஒற்றர்களுக்கு ஒரு பாடமாக அமையட்டும்.

**கோலூர்கிழார் :** ஆ அரசே! எதனையும் ஆராய்ந்து முடிவு காண்பதே அறிவறிந்த அரசன் செயலாம். எப்பொருள் யார் யார் வாய்க் கேட்பினும் அப்பொருள் மெய்ப்பொருள் காண்பது நெறிநின்ற வேந்தன் கடமையாம். ஆயின் நீ ஆராயாது அடாத காரியம் செய்கின்றனை.

**நெடுங்கிள்ளி :** புலவர் பெருமானே! வேவுகாரர் என் வலியறியாது வந்து வீணை மாய்கின்றனர். தேனைப் பருகச்செல்லும் ஈ தன் நிலை அறியாது தேனில் விழுந்து உயிரை விடுகின்றது. விட்டில்பூச்சி தனக்கு விளைய விருக்கும் இன்னலை எண்ணாது விளக்கில் விழுந்து மாய்கின்றது. அதே நிலைதான் இந்த ஒற்றனுக்கும் நேர்ந்துவிட்டது. யாவற்றையும் நாளைக் கொலைக்களத்தில் கவனிப்போம்.

[அரசவை கலைதல்]

### காட்சி 3

**இடம் :** கொலைக்களம்.

**பொழுது :** மாலான் காலை.

**உரியோர் :** நெடுங்கிள்ளி, கோலூர்கிழார், ஒற்றர் தலைவன், கொலைத்தண்டம் வீதிக்கப்பட்டோன் (இளந்தத்தன்).

**ஒற்றர் தலைவன் :** பெருவேந்தே! உரியகாலம் நெருங்குகின்றது. ஆணையிட்டால் நயவஞ்சகனை அழைத்துவரச் சித்தம்.

[அரசன் ஆணையிட்டு, ஆலூரினின்றும் வந்த ஒற்றன் கொலைத் தண்டனைக்கு அழைத்துவரப் படுகின்றான்.]

**கோலூர்கிழார் :** ஆ! இளந்தத்த. எவ்வளவு கொடிய செயல். தமிழ்த் தாயையன்றோ கொலைசெய்யத் துணிந்தான் முறைகெட்ட மன்னவன். [நெடுங்கிள்ளியை நோக்கி] தேரா மன்னா! யான் இன்று இவண் வராதிருப்பின், இமயம்வரை படையெடுத்து எல்லையற்ற புகழ்பெற்ற இவ்வரசு ஆராயாது கொன்ற அடாத பழியிலே ஆழ்ந்திருக்கும். அதோ நிற்பவர் பகைநாட்டு ஒற்றனல்லன்; தமிழ்த்தாயின் தவப்புதல்வன். புலவரது அருமை பெருமையை அறிந்திருந்தால் நீ இவ்வாறு நடக்கத் துணிவாயோ? பெரும் புலவர்கள் பழுத்த மரத்தைத் தேடிச்செல்லும் பறவைகளைப்போல், கடப்பதற்கரிய வழி பலவற்றையும் கடந்து வள்ளல்களை நாடிச் செல்வர். தமது வடியா நாவால் அவர்களைப் பலவாறு புகழ்ந்துபாடி மிக்க பரிசில் பெறுவர். அவற்றை “யாம் பெற்ற இன்பம் பெறுக இவ்வையகம்” என்ற பரந்த மனப்பான்மையுடன் பலருக்கும் கரவாது அளித்து மகிழ்வார். இத்தகைய பெருமைபடைத்த மனம் பிறர்க்கு இன்னாவினைத்தலை அறியுமோ?

**நீலிர் புவிக்கரசர்.** அவர் கவிக்கரசர். நீர் பெற்ற செல்வம் ஆற்றலாலே அனைவரையும் அடிபணியவைத்து நேர்மையற்றமுறையில் உண்டாயது. தங்கள் உள்ளத்துதிக்கும் உண்மைக் கருத்துக்களால் கலைக்கோவிலை அமைத்துக் கவினுறும் கலைச்செல்வத்தை உண்டாக்கும் பெற்றியர் அப்புலவர். இம் மன்னா உலகத்து நும் வாழ்வு மங்கி மறையும். ஆனால் அருங்கவிஞர் களின் வாழ்வு அவர்கள் அமைத்த சொல்லோவியங்களின் வாயிலாக ஆயிரக் கணக்கான ஆண்டுகட்கும் நின்று நிலவும். இந்நிலையில் மாண்புறு புலவனாகிய இளந்தத்தனை விசாரணை செய்யாது கொல்ல உத்திரவளித்தனை.

**நெடுங்கிள்ளி :** ஒப்பற்ற புலவர் பெருந்தகையே! சினத்தின் மிகுதியினால் கண்முடித்தனமாய்க் கருத்திழந்த யான் தங்களது நல்லுரையால் தெளிவுபெற்றேன். எம் குலத்திற்கு நேரவிருந்த கொடும்பழியைத் தங்களுதவியால் தவிர்க்கும் பேறுபெற்றேன். தாங்களும் தங்கள் குழுவினரும் வானத்தினின்றும் பெய்யும் மழைத்துளியினும் பல்லாழி காலம் வாழ்ந்து எம்போன்ற வேந்தர்களைக் காப்பாற்றுவீர்களாக! தாங்கள் எமக்கு அறிவுரை புகட்டிய உரைகள் எக்காலத்தும் பயன்படுவவாதலால், அவற்றை எமக்கு ஓர் அழியாச் சொல்லோவியத்தில் அமைத்துத் தருவீராக.

**கோலூர்கிழார் :** அங்ஙனமே யாகுக.

வள்ளியோர்ப் படர்ந்து புள்ளிற் போகி  
நெடிய வென்னாது சுரம்பல கடந்து  
வடியா நாவின் வல்லாங்குப் பாடிப்  
பெற்றது மகிழ்ந்து சுற்ற மருத்தி  
ஓம்பா துண்டு கூம்பாது வீசி  
வரிசைக்கு வருந்துமிப் பரிசில் வாழ்க்கை  
பிறர்க்குத் தீதறிந்தன்றோ வின்றே திறப்பட  
நண்ணார் நாண வண்ணந் தேகி  
ஆங்கினி தொழுகி னல்ல தோங்குபுகழ்  
மண்ணாள் செல்வ மெய்திய  
நும்மோரன்ன செம்மலு முடைத்தே.

[புறம்: 47]

[இளந்தத்தனை விடுவிகின்றனர். இளந்தத்தனும் கோலூர்கிழாரும் ஒரு உரையொருவர் தழுவிக்கொள்கின்றனர்.]

# திருக்குறட் களஞ்சியம்

By K. V. Lakshminarayanan, III U.C.

‘தேவர் குறஞ் திருநான் மறைமுடிவும்  
மூவர் தமிழும் முனிமொழியுங்—கோவை  
திருவா சகமும் திருமூலர் சொல்லும்  
ஒருவா சகமென் றுணர்’

என்ற வெண்பாவிற் கிணங்க திருக்குறள் புனிதத்தன்மை பெற்றே மிளிர்கின்றது. வள்ளுவனார், அறம், பொருள், இன்பம் ஆய இம்மூன்றின் திறம் தெரிந்து செப்பிய தேவராகப் புகழப்பெறுகின்றார். மற்றும் தெய்வப் புலவர் தந்துள்ள தீஞ்சுவைத் திருக்குறள் ஒரு தமிழ்க்களஞ்சியமாகத் திகழ்கின்றது. அஃதோர் அறிவுக் களஞ்சியமாக விளங்குந் தன்மையும் எடுத்துரைக்கவேண்டியதில்லை. அதுமட்டுமன்றி

‘சமயக்கணக்கர் மதிவழிகூருது  
உலகியல் கூறிப்பொருளிதுவென்ற’

வள்ளுவன் வாய்மொழி எக்காலத்தவர்க்கும் எச்சமயத்தவர்க்கும் இயைவா தாயுள்ளது. “சிலப்பதிகாரச் செய்யுளைக் கருதியும், திருக்குறளுறுதியும் தெளிவும் பொருளின் ஆழமும் அழகும் கருதியும்.....எனதுள்ளம் கலங்கிடாதிருந்தேன்” என்று அமரகவிபாரதி குறளின் ஆழத்தைப்பற்றிப் பேசுகின்றான். எனவே நாமும் வள்ளுவன் தரும் இன்பவாரிதியில் சிறிதளவு திளைத்து எழுவோம்.

வள்ளுவனது உள்ளமோ அன்றிக்கருத்தோ அளவிடற்கரிய ஆழமுடைய தாய் விளங்குவதனால் சிற்சில குறட்பாக்கட்கு வள்ளுவன் கருதிய பொருள் யாதோ என்று ஐயம் எழுகின்றது.

“இலன் என்னும் எவ்வம் உரையாமை ஈதல்  
குலனுடையான் கண்ணே உள்.”

என்ற குறளுக்கு அறிஞர்கள் பல்வேறுவிதமாய்ப் பொருளுரைக்கின்றனர். அவர்கள் என்செய்வர்? படிக்குந்தோறும் புதுப்புதுப் பொருட்கள் பொதிந்து கிடக்க அவர்தம் அறிவு காண்கின்றது. அக்குறளின் எளிய பொருள் ‘நான் வறியவன் என்று கூறிவந்து இரப்போனுக்கு இல்லையென்னுது ஈபவனே குலனுடையான்’ என்பதாம். அடுத்து “இரப்பவன் ‘தான் இலன்’ என்ற தரித்திர வார்த்தையை உரைக்குமுன்னமே ஈதலே உயர்குடி மகனது பண்பாம்” என்றும் அறிஞர் பொருளுரைக்கின்றனர். அதுமட்டுமன்றி “‘நீஇலன்’ என்று அவனைப் பழித்துத் தூற்றாமல் கொள் எனக்கொடுத்தல் நற்குடி மகனது நல்லியல்பாகும்” என்றும் பொருளுரைக்கலாமன்றோ? அத் துடன் நின்றதா! ‘தன்னிடம் இரந்து செல்பவன் பிறிதோர்முறை மற்றை யொருவரிடமும் சென்று இரக்காதிருக்கும்வண்ணம் கைநிறையப் பொருள் கொடுத்தல் வேண்டும் நற்குடிமகன்’ என்றவிதமாயும் விரித்துரைக்கும் வண்ணம் வள்ளுவனது வான் இன்பம் விளங்குவது வியப்பிற்குரியதன்றோ! திருக்குறள் ‘ஓதற்கெளிதாய் உணர்தற்கரிதாய் விளங்குந்தன்மை தெளிவாக மேற்கூறியதனின்று தெரியக் கிடக்கின்றது.

எக்காலத்தவர்க்கும் இயையும் வண்ணம் குறள் எங்ஙனம் விளங்குகின்றது என்பதைக் காண்போம்.

“தெய்வம்தொழாஅள் கொழுநன்தொழுதெழுவாள்  
பெய்யெனப் பெய்யும்மழை”

என்ற குறளின் கருத்து “தெய்வத்தைக்கூடத் தொழாமல் தனது கணவனையே கனவிலும் கருதித் தொழுது எழும் பத்தினிப்பெண்டிர் ‘பெய்’ என்று கூறினால் உடனே வான்பெய்யும்” என்பதேயாம். இன்றைய நிலையை ஒத்துநோக்கின் “தெய்வம் தொழாஅள் கொழுநன்தொழுதெழுவாள்” ஆய பத்தினிப் பெண்டிர் யாம் பெய்யவேண்டும் என்று விரும்புந்தருணம் பெய்யும் மழையே என்று சாலநலம் பயப்பவளாயும் விரும்பத்தக்கவளாயும் விளங்குபவள்” என்னும் பொருள் கூறலாம். குறளது நீள்வுத்தன்மையைமட்டும் காணும் ‘சூயக்திகள்’ சில ‘தெய்வத்தைத் தொழாமல் தான் துயிலெழும் போதே தன் கணவன் படுக்கையின் பக்கலில் தொழுதுகொண்டேநிற்க எழும் மகளிரே ‘பெய்யெனப்பெய்யும் மழை’ என்று பொருளுரைக்கின்றன. ‘பின்னூங்கி முன்னெழும் பேதையே போதியோ’ என்று பாடிய வள்ளுவனார இங்ஙனம் பொருளுரைக்க இடம் விட்டிருப்பார் என்பது சிந்தித்துணர்தற்குரியது. அங்ஙனமேதான் ‘பைப்பொறுக்கிகள்’ ‘தொக்கொக்க கூம்பும் பருவத்து மற்றதன் குத்தொக்க சீர்த்த இடத்து’ என்ற குறளை தங்கட்கியைய ‘அனர்த்தம்’ செய்துகொள்கின்றனர்.

அடுத்து வள்ளுவன் மற்றைய பின்வந்த புலவர்க்கும் சமகாலத்தவர்க்கும் வழிகாட்டியாய் விளங்கியதைச் சிறிது நோக்குவம்.

“வானம் பெய்யாது வளம் பிழைப்பறியாது  
நீணில வேந்தன் கொற்றம் சிதையாது  
பத்தினிப்பெண்டிர் இருந்த நாடு”

என்று பத்தினிப் பெண்டிர் வாழ்நாட்டில் வானம் பெய்யாது என்று இளங்கோவடிகள் கூறியுள்ளமை ‘தெய்வம்தொழாஅள் கொழுநன் தொழுதெழுவாள் பெய்யெனப் பெய்யும் மழை’ என்ற குறட்கருத்தேயன்றி வேறில்லை. இறைவன் ஐம்புலன்கட்கும் இவ்விக்கும் வண்ணம் விளங்குந்தன்மையை நாவுக்கரசர்

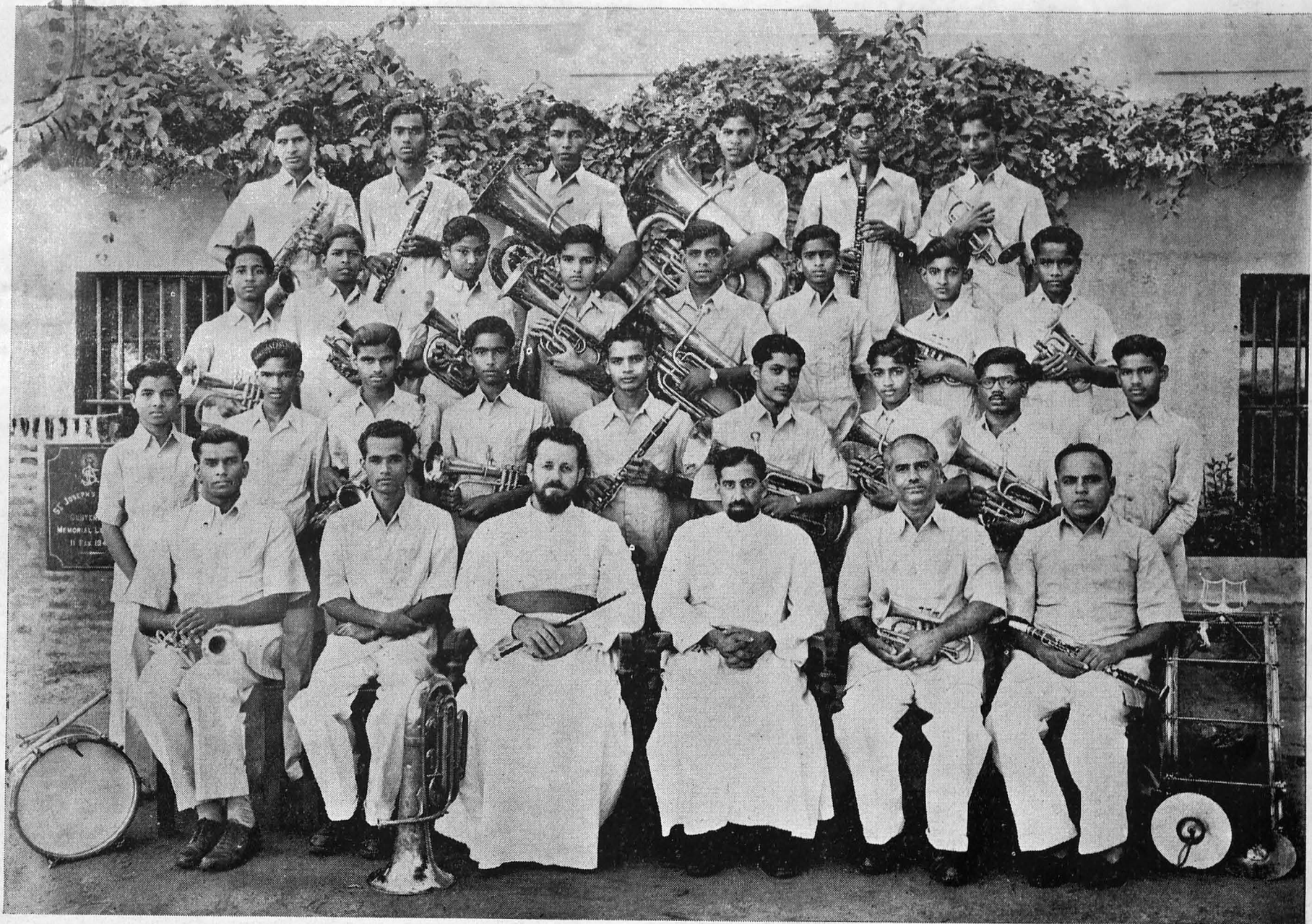
‘மாசில் வீணையும், மாலைமதியும்  
விசுதென்றலும் விங்கிள வேனிலும்  
மூசுவண்டை பொய்கையும் போன்றதே  
ஈசன் எந்தை இணையடிநிலே’

என்ற கருத்தை ஒட்டி

“கண்டுகேட்டு உண்டு உயிர்த்து உற்றுஅறியும் ஐம்புலனும்  
ஒண்டொடி கண்ணே உள”

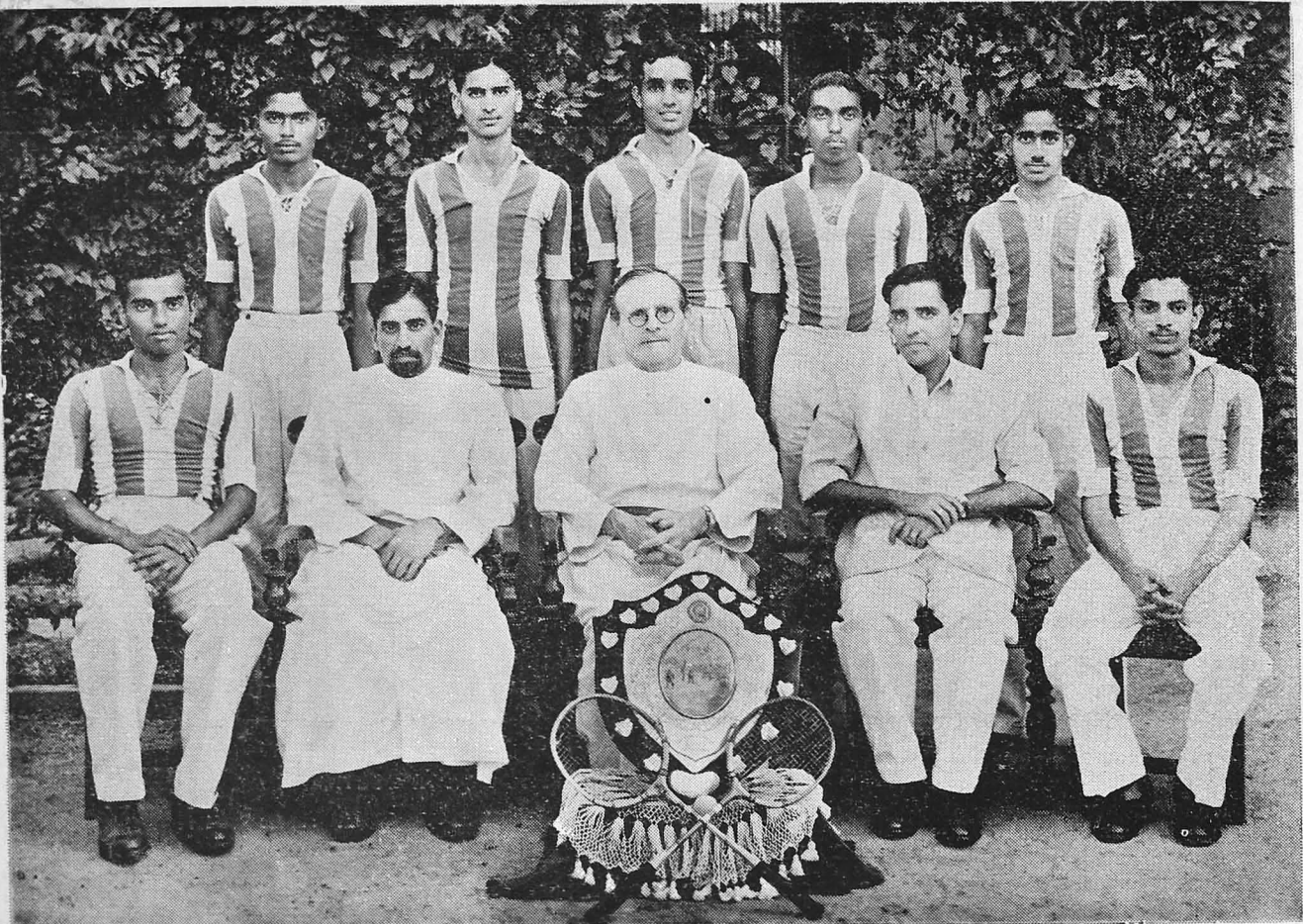
என்ற குறள் பரிணமித்து நிற்பதுகாண்க. ‘உலகெலாம் உணர்ந்து ஒதற்கரியவன்’ ஆன அலகில்சோதியன் அம்பலத்து ஆடுவானே அடியெடுத்துக் கொடுக்கப் பெரியபுராணம் பாடிய சேக்கிழார் மட்டும் குறளை எடுத்தாளாமல் இருப்பாரா?

“பொறிவாயில் ஐந்தவித்தான் பொய்தீர் ஒழுக்க  
நெறிநின்றார் நீடுவாழ்வார்”



THE COLLEGE BAND 1954—55





**THE COLLEGE BADMINTON TEAM 1954—'55**

Winners of the T.D.A.A. Open Badminton Tournament



**THE COLLEGE CRICKET TEAM 1954—55**

என்ற குறளே சம்பந்தர் சரிதையிலே ‘புலன்களைந்துஞ் செற்றவர் மூக்கிச்சரம் பணிந்து’ என்றுமாற்றப்பட்டு நிற்பது காண்கின்றோம். அங்ஙனமே

“பொய்யாமை பொய்யாமைபாற்றின் அறம்பிற  
செய்யாமை செய்யாமை நன்று”

என்ற குறளின் கருத்து பெரிய புராணத்திலே திருநீலகண்டர் வரலாற்றிலே ‘பொய்கடிந்து அறத்தின்வாழ்வார்’ என்ற அடியிலே வெளியாகக் காண்கின்றோம்.

“ஆட்டின் கழுத்தையறுத்துப் பொசுக்கீ நீர்  
ஆக்கிய யாகத் தவிரணவை  
ஈட்டும் கருணை இறையவர் கைகளில்  
ஏந்திப் புசிப்பரோ கூறுமையா”

என்பதில் அமைந்த கருத்தை ‘உற்றநோய்நோன்றல் உயிர்க்குறுகண் செய்யாமை அற்றேதவத்திற் குரு’ என்ற குறளிலும் ‘நல்லாறு எனப் படுவதியாதெனின் யாதொன்றும் கொல்லாமை சூழும் நெறி’ என்ற குறளிலும் வள்ளுவனார் தெளிவாக்கியுள்ளனர். இன்று அமரகவி பாடிய

‘தனியொருவனுக்குணவிலையெனில் ஜெகத்தினை அழித்திடுவோம்’ என்ற பொதுமைக் கருத்தினை

‘இரந்தும் உயிர் வாழ்தல் வேண்டின்  
பரந்து கெடுக உலகியற்றியான்’

என்று அதனினும் அழகுபட ஈராயிரம் ஆண்டுகட்குமுன்னரே வள்ளுவனார் கூறியுள்ளார் எனின் அவரது ‘முக்கால ஞானம்’ வியத்தற்குரியதன்றோ!

வள்ளுவனது பரந்த மனப்பான்மை, அவன் பயக்கும் இன்பவெள்ளம், நீள்வுத்தன்மை உணர்தரிதாந்தன்மை முதலியன சிறிய அளவில் இக்கட்டுரையில் வெளியாகக் காணலாம்.



# The Badagas of the Nilgiris

*By K. K. Sirangi, IV U.C.*

**T**HE Badagas live in the beautiful blue hills (Nilagiri). The region where they dwell is known as "Nakku Betta". That region is divided into four parts or 'Nadus'—'Todanadu', 'Mekkunadu', 'Kundainadu' and 'Paranginadu.' The Badagas live in small villages containing 70 to 80 houses. Their population was about 40,000 in 1950 and now there may be a small increase. The Badagas are backward in social and economic status. Their way of life is very simple and pure.

The average Badaga is not tall but fair and sturdy. The women are fair and handsome. Among the Badaga people only a few are rich. The rich man may wear gold rings on the right little finger, a gold bangle on the right wrist, and gold ear-rings set with pearls. The rich woman uses necklaces of gold and gold bangles. While the poor man may wear silver rings on his fingers and silver ear-rings, the poor woman uses silver bangles and silver necklaces. Copper and steel rings are other ornaments used by these poor people. Girls do not wear any flowers in their hair.

The mother-tongue of the Badagas is Badagu. They also speak Tamil without any foreign accent. They have no script for their language but write in Tamil, the regional language. The percentage of literacy among them is very low. The women are mostly uneducated.

The Badagas are largely agriculturists. They grow potatoes, bearded wheat, barley, keeraipori, koralisamai, onions, ragi, etc. But the Badagas are largely potato-growers and sell their potatoes in the nearest market. They cultivate English vegetables also. They do not use these vegetables themselves but try to sell them in the market. They buy knives, pickaxes, ploughs, and ropes of buffalo hide from the Kotas and Todas by exchanging provisions. Though they used to buy iron ores from the Kotas in the past, at present they buy scrap iron in the local market.

The Badaga settlement consists of detached huts arranged in rows forming streets. Built of mud, brick or stone, the house may be thatched, tiled or even terraced. Zinc sheets are also used for the roof. Each house has a front room and a sleeping room. There is a raised veranda in front with a raised seat on either side.

Marriages among Badagas are fixed by the parents of the bride and the bridegroom. The betrothal takes place when the girl is about four or five. The boy's mother comes to the girl's house and asks her parents to offer the girl to her son. As soon as the girl's parents agree



to offer the girl to the boy, the mother of the boy presents a small cotton towel to the future bride. This is called "Pattukattuthu". When the girl attains puberty a feast is held on a perai (third day of the moon after Amavasai). On that day the bridegroom pays either one or two hundred rupees as dowry. On the appointed wedding day the bridegroom leads his bride to his house. The wedding feast is held in the bridegroom's house.

Polyandry is unknown among the Badagas; a man may take another wife if he has no children by the first marriage. Widows may also marry if they like. Divorce is also allowed.

Most of the disputes among the villagers are settled by the "Gowders" or the headmen of the village. In every village there must be some Gowders whose duty is to decide cases. Cases of theft, assault etc. . . are also tried by the Gowders. Fines or other punishments may be imposed, but no sentence of imprisonment or death can be imposed by them. A case that cannot be decided by the Gowders is decided by an assembly of representatives of a *nadu*. If it cannot be resolved by them, only then is the aid of a court sought. The Badagas consider murder to be a foul act and claim that there has never been a case of murder in which a Badaga was involved.

Sowing is initiated by a ceremony among the villagers. There are two bogums, "kar" and "kadai." The sowing function comes off in both the bogums. The farmer sows wheat in kadai bogum and ragi in kar. In kar bogum (March and April) the function is held on a Tuesday or a Friday. On that day early in the morning at 4, the 'Pujari of Doddamanai' who is appointed by the villagers and who is held to be a man of pure thought sows the seeds in a small field apart from the village and sows ragi thereon. In kadai bogum also they adopt the same procedure.

In every Badaga village there is a temple of "Kali-amman" or "Ethai-amman." They celebrate the annual function every year in the temple. The annual festival of Ethai-amman is held in January and the Kali-amman festival in February or March to propitiate the deities for a good harvest and prosperity. At annual festivals every one must wear new clothes when he goes to the temple for worship. The Kali-amman festival is an elaborate celebration lasting over a week during which Badaga men dance every day and night, the kotas playing music for the Badagas on these festive occasions. Incense forms an essential part of the worship.

A Badaga funeral is a very elaborate affair. Tidings of death are dispatched to all the Badaga villages expeditiously through messengers and they gather in large numbers. The dead body is covered with a big white blanket called "Kuthana Seelai." It is taken to the burning

ground on a cot which is highly decorated with coloured cloth and flowers. Rice, grain cakes, implements, and other things used by the deceased are placed beside the body in the cot. After the funeral every male person below the age and rank (murai) of the dead man must shave off his hair, beard, and moustache. The men who are above the age and rank of the dead man must shave off only their beard and moustache. But every one must bathe in warm water after the funeral.

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## Une Bonne Soirée

*By Ambroise Prosper, II U.C.*

**U**N soir quand j'étais entrain de me balader au bord de la mer, je rencontrai par hasard Nadarajan un de mes amis. Tout en causant nous entrâmes dans une cantine et là assis devant une table servie avec des liqueurs nous continuâmes notre conversation. Tout à coup au milieu de notre entretien, Nadarajan m'interrompt en me posant une question.

*Nadarajan :* Est ce vrai, Jean, que les élèves Catholiques de "Saint Joseph's College" sont allés en pèlerinage à Vélanguanni ?

*Jean :* Oui, vers le six août.

*Nadarajan :* Qu'est ce qu'il y a d'important en cet endroit ?

*Jean :* La chapelle de Notre Dame de Santé.

*Nadarajan :* Peux tu me donner quelques détails là dessus ?

*Jean :* Bien sûr ; écoute :

L'importance de cet endroit est due à des apparitions et des miracles faits par la Bonne Sainte Vierge en faveur de ceux qui les méritaient. De toutes les apparitions je vais te raconter la plus importante. Il paraît qu'un commerçant chinois, ayant fini ses comptes dans l'Inde, retourna chez lui. Mais au cours de son voyage une tempête furieuse secoua le pauvre navire à sa fantaisie entre les écumes enragées. Le pauvre commerçant, sachant qu'il ne pouvait plus lutter contre les flots, appela la Sainte Vierge à son secours en lui promettant de construire une chapelle en Son Nom. Quand il débarqua sain et sauf sur la côte de Vélanguanni, il se hâta vers l'intérieur pour offrir son hommage. Mais à peine eut-il fait quelques pas, qu'il aperçut une vision brillante, au milieu d'un arbre. Ce fut sans doute l'apparition de la Sainte Vierge. Après avoir rendu hommage à Notre Dame, il construisit une chapelle à Sa Mémoire, qui existe encore de nos jours.

*Nadarajan :* Peux tu me décrire votre pèlerinage ?

*Jean :* Volontiers, écoute-moi.

C'était un Dimanche quand notre "General Prefect" vint nous annoncer qu'il y aurait un pèlerinage à Vélanganni le six août. Ce mot "Vélanganni" je ne sais pas comment il eut la force de nous rendre joyeux. Notre joie nous fit penser à cette belle journée que nous allions passer avec Notre Dame. Le jour arriva quand après avoir diné à dix heures du matin nous formâmes une procession devant le portique de la maison des Pères. Les drapeaux de la congrégation flottèrent si bien au vent qu'ils me donnèrent l'impression que nous étions des croisés. En effet nous étions des croisés qui allaient visiter la Sainte Vierge. La procession se dirigea lentement vers l'église du collège où les drapeaux furent bénits par le Rev. Père Recteur, pendant que le cantique "We stand for God" fut chanté. Quand la cérémonie fut achevée nous nous précipitâmes dans des autobus à la jonction de Trichi où un train spécial nous attendait pour nous conduire à Négapattam. Vers midi et demi le train s'ébranla de la gare de Trichinopoli. Arrivé à Tanjore il s'arrêta un quart d'heure. Comme on nous permit de descendre du train, nous fîmes, pendant ce quart d'heure, une si grande consommation de goyaves et d'acajoux que bientôt ils furent épuisés. Le train après avoir fait une halte à Tiruvarur, arriva à Négapattam vers cinq heures du soir. Là après avoir franchi la rivière dans de grandes barques nous cotoyâmes la mer pendant deux heures du temps vers l'église qui se trouvait à cinq milles de Négapattam. Une fois arrivé à cet endroit on entra dans l'église en procession où le Rev. Père Recteur donna le salut solennel. Quand le souper fut fini un bon nombre de nos camarades firent la veillée. Le lendemain vers six heures du matin nous entendîmes la messe solennelle chantée par le Rev. Père Recteur et visitâmes la musée de Vélanganni où les précieux ex votos sont conservés. Ensuite nous nous rendîmes à Négapattam dans le camion de notre collège. Le départ étant fixé à deux heures de l'après midi nous visitâmes la ville de Négapattam et dinâmes sur le quai de la gare avec l'impression que nous étions engagés dans un banquet. Enfin l'heure du départ étant arrivée nous nous séparâmes joyeusement du sanctuaire de la Sainte Vierge.

*Nadarajan :* Quel plaisir, Jean, d'entendre de pareilles histoires. Je te remercie beaucoup de m'avoir donné des renseignements si détaillés.

*Jean :* Il n'y a pas de quoi. Mais peux tu me dire quelle heure il est ?

*Nadarajan :* Sans doute, il est sept heures trois quarts.

*Jean :* Permits moi de rentrer chez moi car il se fait tard.

*Nadarajan :* Mais oui, moi aussi je dois rentrer chez moi.

Comme les deux sortirent de la cantine ils se séparèrent en se disant "Au revoir."

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# In Memoriam B.B.

*By T. K. Subramanian, II U.C.*

Oh ! my dear old Big Ben,  
With your nice unparalleled din  
You woke me up to go in haste  
When I slept unusually long  
With the gentle touch of a Laputan flapper  
Which was annoying to me in slumber.  
How on earth can I forget  
The timely help that I did get ?  
This untimely death of yours  
Pierces my soul with spears ;  
I think of your cruel fate  
With grief on every passing date.



To wake me up from bed you cried  
At 5 o'clock each morning grey.  
Woe to me ! who to silence thee  
While half-asleep did roll thee down.  
Instead of resting on my table  
You were in pieces on the floor.  
You might have known the hand at night  
Which swiftly rolled thee from your height ;  
But even then you rang and died,  
Leaving in my heart an unalterable void.



Wake I now at 5 o'clock  
Without anybody to knock,  
For in my heart I hear you call  
From the joyful heavenly Hall.  
Now, though I do not wind you up,  
You never fail to wake me up.  
Take from my lips my hearty thanks,  
Oh ! my dear old dead Big Ben !

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# “കണ്ണനീർ” കഥ പറയുന്നു

Jacob Zacharias, I U. C.

പകലോൻ പശ്ചിമാകാശത്തിൽ പൊന്നുംചായം പൂശിക്കൊണ്ടിരുന്നു. കഞ്ഞിക്കിളികൾ, കൂട് ചേരുന്നതായി ചിറകടിച്ചു പറന്നു. അങ്ങകലെ, പാടത്തിന്റെ നടവരമ്പിൽകൂടി, തലയിൽ പൂൽക്കെട്ടും, അരയിൽ അരിവാളും ഉള്ള പുലയസ്രീകൾ വരിവരിയായി നടന്നുപോകുന്നു. ആ കുന്നിൻപെരുവിലെ അത്തിമരത്തിന്റെ ചുളളിക്കമ്പുകളിൽ കൂടി ഒരു കൊച്ചുകിളി ചാടിച്ചാടി നടന്നു. ആ നെല്ലിൻപാടത്തിലെ നെൽച്ചെടികളുടെ പച്ചിലത്തലപ്പുകൾ, കാറ്റിന്റെ അഭാവത്തിൽ, നിശ്ചലങ്ങളായിരുന്നു. ഒരു വലിയ ശക്തരയുണ്ടുപോലെയുള്ള ആ കല്ലു ഇന്നും അവിടെ സ്ഥിതിചെയ്യുന്നുണ്ട്. പൂർവ്വകാലസ്മരണകൾ സുകവിനെ അതിന്റെ പുറത്തുനിന്നും എഴുന്നേറ്റുപോകാൻ അനുവദിച്ചില്ല.

സുകവിന്റെ ചിന്ത ഭൂതകാലത്തിന്റെ മണിയറയിലേക്ക് പറന്ന് നീങ്ങി. മധുരവും, കയ്പും അലിഞ്ഞുചേർന്ന സ്മരണയുടെ ക്രന്ധാരങ്ങൾ, ആ ചെറുകുന്നിൽ, ആ കല്ലിന്റെ ചുറ്റുമായി അങ്ങനെ തങ്ങി നിൽക്കുകയാണ്. ശ്വസിക്കുന്ന വായു, കനത്തതായി തോന്നി സുകവിന്.

ശാന്ത. അവൾക്കുവേണ്ടിയാണ് അവൻ ജീവിച്ചത്. ശാന്തയെ സ്ത്രീകൾ കൊണ്ടുചെന്നാക്കുന്നതും, തിരികെ കൊണ്ടുവരുന്നതും എല്ലാം അവൻ തന്നെയായിരുന്നു. “പെമ്പിള്ളേരുടെ പള്ളിക്കൂടത്തിൽ” പോകുന്നതിന്, സുകവിനു കൂട്ടുകാരിൽനിന്നു ലഭിച്ച പരിഹാസവർഷമെല്ലാം അവന്റെ കഞ്ഞുപെങ്ങളുടെ ഒരേ ഒരു പുഞ്ചിരിയുടെമുന്നിൽ നിഷ്പ്രഭങ്ങളായി അവൻ തോന്നി. അവന്റെ കൂടപ്പിറപ്പ്. ഒരേ ചെടിത്തുമ്പിലെ രണ്ടു വാടാത്ത പുഷ്പങ്ങളായിരുന്നു അവർ—സുകവും ശാന്തയും.

സുകവിന് മുന്നരവയസ്സായിരുന്നു അവന്റെ അച്ഛൻ പട്ടാളത്തിൽപെട്ട് മരിച്ചുകാലത്ത്. അന്ന് ശാന്തക്ക് മൂന്നുമാസാപോലും പ്രായമായിരുന്നില്ല. സ്നേഹമായിരുന്ന ആ ഭാര്യ വാവിട്ടു കരഞ്ഞുപോയി, സ്വഭത്ത്വാവിന്റെ മരണവാർത്തയറിഞ്ഞപ്പോൾ. സുക പിന്നീട് പലപ്പോഴും കണ്ടിട്ടുണ്ട് അവന്റെ അമ്മ കരയുന്നത്. “എന്തിനാമ്മേ കരേണത്ത്?” “ഒന്നുമില്ല മോനേ!” പക്ഷേ ആ കണ്ണുകൾ വീണ്ടും നിറയുകയേയുള്ളൂ. സുക സ്ത്രീകൾപെട്ടറിഞ്ഞു അച്ഛന്റെ മരണകാര്യവും, അമ്മയുടെ കരച്ചിലിന്റെ കാരണവും എല്ലാം. പിന്നെ അവൻ ഒരിക്കലും അതേപ്പറ്റി അമ്മയോട് ചോദിച്ചിട്ടില്ല. അമ്മ കരഞ്ഞെങ്കിലോ?

സുകവിന്റെ വലിയച്ഛന്റെ അനുജനായിരുന്നു വല്ലഭമ്മാവൻ. അങ്ങേരില്ലായിരുന്നുവെങ്കിൽ ശാന്ത എങ്കിലുംകൂടി, കഞ്ഞി കുടിക്കുമായിരുന്നില്ല. സുക, അമ്മയോടുകൂടി പല രാത്രികളും ഒട്ടിയ വയറുമായി തള്ളിനീക്കിയിട്ടുള്ളതാണ്. ശാന്തയുടെ വയറ് നിറയുമ്പോൾതന്നെ അവരുടെ വിശപ്പും അടങ്ങിയതുപോലെ ആകും. ശാന്ത അവളുടെ കഞ്ഞിക്കൈകൾകൊണ്ട് ചോറു വാരി ഉണ്ണുന്നത് അവൻ നോക്കിക്കൊണ്ടിരിക്കും. തികഞ്ഞ ആത്മസന്തുഷ്ടിയോടെ, ശാന്തയുടെ നെരപ്പല്ലിന്റെ

കുറവുണ്ടായിരുന്ന ആ കുഞ്ഞു മോണകാണുമ്പോൾ സുകുവിന്റെ വിശപ്പടങ്ങും. “ചേട്ട, ബാ, ചോയുണ്ണാൻ” അവർ കൊഞ്ചിക്കൊണ്ടുപറയും. “വേണ്ട. മോളു് വേഗം വരിയുണ്ടല്ലോ, നമുക്കു കുന്നുപുറത്തു് പോകേണ്ട”? ശരിയാണ്, അതവരുടെ ദിനക്രിയങ്ങളിൽ ഒന്നാണ്. അവർ വേഗം കൈകഴുകി എഴുന്നേൽക്കും. അഴിഞ്ഞുപോയ മുണ്ടു് മുറുക്കി ഉടുത്തു കൊണ്ടു് സുകു അവളുടെ കൈയ്ക്കുപിടിക്കും. അനുഭവങ്ങളുടെ അമര കോശം വായിച്ചു ആ അമ്മയുടെ കണ്ണുകളിൽ ജലത്തുള്ളൽ ഉണ്ടാകും.

പെരുനാളിനു് വാങ്ങിച്ചുകൊടുത്ത ആ കുപ്പിവളകൾ പൊട്ടിക്കാതെ അവളുടെ കൈയ്ക്കു് പിടിച്ചുകൊണ്ടു് അവൻ കുന്നിൻപുറത്തേയ്ക്കു് ഓടും. ആ ഉരുണ്ട പരുക്കൻ പാറപ്പുറത്തിരുന്നുകൊണ്ടു് സുകു ഒരു നൂറുകൂട്ടം കായ്ക്കങ്ങൾ പറഞ്ഞിട്ടുണ്ടു്. “ചന്തേലെ ബഹളവും, ബോട്ടുകടവിലെ വള്ളവും, കവലേലെ പോലീസുകാരന്റെ വേഷവും, പള്ളിക്കൂടത്തിലെ സാറിന്റെ കീറിയ ഷർട്ടും,” അങ്ങനെ പലതും. കാട്ടുപൂക്കൾ പറിച്ച് മാലകെട്ടി, സുകു അവന്റെ പെങ്ങളെ മാല അണിയിച്ച് റാണിയാക്കും, അവളുടെ തലമുടിയുടെ ചുരുളുകളിൽ അവൻ പൂക്കൾ തിരുകും. ശാന്തയുടെ നണക്കുഴികൾ തെളിയുമ്പോൾ സുകുവിനു് രോമാഞ്ചം ഉണ്ടാകും. അമ്മയുടെ നീട്ടിയുള്ള “പിള്ളേരേ!!” വിളിയാണ് അവരെ തിരികെ വീട്ടിലേക്കു കയറുന്നതു്.

സുകുവിനു് പതിനാറുവയസ്സു് കഴിഞ്ഞിരുന്നു, അവന്റെ ഹൈസ്കൂൾ വിദ്യാഭ്യാസം കഴിഞ്ഞപ്പോൾ. കൗമാരത്തിന്റെ നടവരവിൽനിന്നും, യൗവനത്തിന്റെ പൂങ്കാവനത്തിലേക്കു കാലുകുത്തുവാൻ വെമ്പിനില്ക്കുന്ന ഒരു ചെറു കോരകമായിരുന്നു അവർ, ശാന്ത. സുകു, തന്റെ സഹോദരിയുടെ വിദ്യാഭ്യാസം വെറും തേഡു് ഫാറംകൊണ്ടു് നിറുത്തുവാൻ തയ്യാറായിരുന്നില്ല. അവർ പഠിച്ച് വലിയവളാകണം. എന്നിട്ടു് ഒരു നല്ല കുടുംബത്തിൽ വിവാഹം കഴിപ്പിക്കണം. സുകു, ഒരു പുരുഷന്റെ ഗൗരവത്തോടെ ചിന്തിച്ചിരുന്നു. പക്ഷെ പണം. വലിയമ്മാവന്റെ സഹായം ഇനിയും അപേക്ഷിക്കുക എന്നുള്ളതു് മയ്യാടയാണോ. അല്ലാതെ വേറെ വഴിയില്ലല്ലോ. പക്ഷെ അവന്റെ പഠിത്തം. അതു് നിറുത്തുവാൻ ശാന്ത സമ്മതിച്ചില്ല; “ചേട്ടൻ പഠിക്കുന്നില്ലെങ്കിൽ, എനിക്കും കഴിയേല”, അവർ കട്ടായംപറഞ്ഞു. അവർക്കുവേണ്ടി സുകു പഠിക്കുവാൻ പട്ടണത്തിലേക്കുപോയി വല്ലാത്തവന്റെ തണലിൽ.

സുകു, ബോധംകെട്ടുപോയി, ആ “കമ്പി” വായിച്ചപ്പോൾ. കൂട്ടുകാർ ചുറ്റുംകൂടി. ബഹളവും തിരക്കും ഉണ്ടായി.

“കറച്ച് വെള്ളം കൊണ്ടുവാ.”

“ഡാക്ടറെ വിളിക്കാം.”

“എന്നാ, എന്നാ പററി”

“ശ്ശ് മിണ്ടാതു്”

സുകു പതുക്കെ കണ്ണു തുറന്നു. “ശാന്തേ”! അവൻ ചാടിയെഴുന്നേറ്റു. അവന്റെ മുഖം വിളറിയിരുന്നു. “എനിയ്ക്കുടനെ വീട്ടിൽപോകണം. സുകു ആരോടെന്നില്ലാതെ പറഞ്ഞുകൊണ്ടു് ഒരു ഭ്രാന്തനെപ്പോ

ലെ, ഇറങ്ങി ധൂതിയിൽ നടന്നു. കൂട്ടത്തിൽ ഒരാൾ നിലത്തുകിടന്നിരുന്ന കമ്പി എടുത്ത് വായിച്ചു. “ശാന്തയ്ക്കു സുഖക്കേട്” കൂടുതൽ, വേഗം വരണം വല്ലാത്തവൻ.”

സുകു വന്നെത്തിയിരുന്നില്ല, ശാന്ത മരിച്ചുവെന്ന്. നാട്ടുകാർ കൂടി. ആ അമ്മയുടെ പതംപറഞ്ഞുള്ള കരച്ചിൽമാത്രം ഒരേ കേൾക്കാമായിരുന്നു, ശവംഎടുത്തപ്പോൾ. “ശാന്തേ! എന്റെ പൊന്നുപെങ്ങളേ!!” സുകു ഓടിയെത്തി; ശവം താഴെ വയ്ക്കപ്പെട്ടു. അമ്മയുടെ കരച്ചിലിന്റെ ശബ്ദം വർദ്ധിച്ചു. ബോധമില്ലാതിരുന്ന സുകുവിനെ തണുത്ത ജഡത്തിൽ നിന്ന് എടുത്തു മാറ്റപ്പെടുകയും, ശവം വീണ്ടും എടുക്കപ്പെടുകയും ചെയ്തു.

ആകാശം ഇടിഞ്ഞുവീണില്ല; സൂര്യൻ പ്രകാശിക്കാതിരുന്നുമില്ല. ചരിത്രം യാതൊരു വ്യത്യാസവുമില്ലാതെ അന്നും ഇന്നും ഒരുപോലെ ആ വർത്തിക്കപ്പെട്ടുകൊണ്ടിരിക്കുന്നു. പക്ഷെ, വർഷങ്ങൾ പലതുകഴിഞ്ഞെങ്കിലും, സുകുവിന്റെ ഹൃദയത്തിൽമാത്രം പുതുതായൊന്നും കണ്ടില്ല.

“സുകുവേ!!” അമ്മയുടെ നീണ്ട വിളിയാണ്, സുകുവിനെ ചിന്താസരണിയിൽനിന്നും ഉണർത്തിയത്. അവന്റെ കവിളുകളിൽ കണ്ണുനീരിന്റെ ചാലുകൾ വീണിരുന്നു. സ്മരണയുടെ മുഴുപ്പിൽനിന്നും അടുത്തി എടുക്കപ്പെട്ട സുകുവിന്റെ കണ്ണുകളിൽനിന്ന് രണ്ടു ജലകണങ്ങൾകൂടി ആ പാറപ്പറ്റത്തുവീണ് ചിന്നിച്ചിതറി, ആ കരയുന്ന ഹൃദയത്തിന്റെ കഥ പറഞ്ഞുകൊണ്ട്.

“വിനോബ”

K. Kumaran Kutty, III Hons.

പരിഭ്രമിക്കേണ്ട. ആചാര്യജിയുടെ ജീവചരിത്രമോ. ഭൂലോനയജ്ഞത്തിന്റെ മാഹാത്മ്യത്തെപ്പറ്റിയുള്ള ഒരു കീർത്തനമോ അല്ലയിത്; നിങ്ങളെപ്പോലെയും എന്നെപ്പോലെയുമുള്ള ഒരു മനുഷ്യന്റെ ചിത്രമാത്രം.

പ്രശാന്തഗംഭീരവും പുഞ്ചിരി കളിയാടുന്നതുമായ മുഖം, നീണ്ട തുഞ്ചിയ താടി, ഈ സാത്വികതപത്തിന്നു മാറുകൂട്ടുന്ന കണ്ണട, മുറിയൻ കപ്പായും, അടിവരെഞ്ഞാത്ത മുണ്ടു്, ഒടിഞ്ഞു തുഞ്ചിയ ഭേദം—ഇതെല്ലാമായാൽ “വിനോബാസാർ” ആയി. ഏതൊരാളെക്കണ്ടാലും പുഞ്ചിരിക്കൂ; ഈ രൂപത്തെ ആർ കണ്ടാലും ഒന്നു പകച്ചുനോക്കുകയും ചെയ്യും, ഒരുപക്ഷെ ഒരു പ്രേതത്തെക്കണ്ട പ്രതീതിയും ഉണ്ടായേക്കാം. എന്നാൽ കുറച്ചുകഴിഞ്ഞാൽ ഈ ദൈവപരിഭ്രമങ്ങളെല്ലാം ഒരു ഫലിതത്തിന്റെ രൂപമെടുക്കും, കാലക്രമേണ അതു സ്നേഹവും ബഹുമാനവുമായി പരിണമിക്കുകയും ചെയ്യും.

ഞങ്ങളാലുംതന്നെ മുഖത്തോടുമുഖം നോക്കിയപ്പോൾ അദ്ദേഹം എനിക്കൊരു കളിമ്മയേറിയ പുഞ്ചിരി സമ്മാനിച്ചു: അടുത്തുണ്ടായിരുന്ന സ്നേഹിതനോടു് ഞാൻ ചോദിച്ചു:

“അതാരാ?”

“അതോ? അതെല്ലെ നമ്മുടെ വിനോബാസാർ”

“ആരും, വിനോബയോ?”

“അതെ, വിനോബതന്നെ, വിനോബാസാർ”

കറച്ചുകഴിഞ്ഞപ്പോഴാണെന്നിരിക്കെ കാര്യം മനസ്സിലായത്. അതിലെ ഫലിതമോത്തു് ഞാൻ ഉറിയുറിച്ചിരിക്കുകയും ചെയ്തു. പിന്നെ ആ രൂപത്തെക്കാണുമ്പോഴെല്ലാം ഞാൻ വിചാരിക്കും “സാക്ഷാൽ വിനോബതന്നെ, വിനോബാജി”.

വിദ്യാർത്ഥികളുടെ കണ്ണിലുണിയിക്കുന്ന വിനോബാസാർ. അവരെല്ലാം തെറ്റുവരുത്തിയാലും അതൊക്കെ സഹിക്കും. അവരുടെ വാസനയെ കണ്ടറിഞ്ഞു പ്രോത്സാഹിപ്പിക്കുകയും ചെയ്യും. എല്ലാവരിലുമുപരിയായി നല്ലവണ്ണം പഠിപ്പിക്കും. അവരുടെ സുഖം തന്റെ സുഖവും അവരുടെ ദുഃഖം തന്റെ ദുഃഖവുമായിക്കരുതിവന്നു ആ “മനുഷ്യൻ”. ഫീസു കൊടുക്കാൻ കഴിയാത്തതിന്നു ക്ലാസിൽനിന്നു പുറത്തുപോവേണ്ടിവന്ന അനവധി വിദ്യാർത്ഥികളെ വിളിച്ചുവരുത്തി താൻ അവരുടെ ഫീസു കൊടുത്തുകൊള്ളാമെന്നേററിയന്നു അയാൾ.

അമ്പതു കൊല്ലം നീണ്ടുനിന്ന അദ്ദേഹത്തിന്റെ ജീവകാലത്തിൽ ഒരു ഒരു പ്രാവശ്യമേ അദ്ദേഹത്തിന്നു കോപംവന്നതായി മറ്റുള്ളവർ കണ്ടിട്ടുള്ളു. ഒരുദിവസം ഒരു വിദ്യാർത്ഥി “വഴിപാടുകഴിക്കുന്നമാതിരി ഒരു “ലീവ് ലാറർ” “മൂപ്പക്സ്” കൊണ്ടുവന്നുകൊടുത്തു, [ആ വിദ്യാലയത്തിലെ “മുറിയൻ പോക്കിരി”കളുടെ നേതാവായിരുന്ന ചങ്ങാതി. അതുകൊണ്ടു് ലീവ് ലാററിന്റെ സ്വഭാവം നിങ്ങൾ മനസ്സിലാക്കിയിരിക്കുമല്ലോ]. അതിലെ തെറ്റുകളെല്ലാം ചൂണ്ടിക്കാണിച്ചുകൊടുത്തു പിറേറദിവസം ശരിയായെഴുതിക്കൊണ്ടുവരുവാൻ പറഞ്ഞു. പിറേറദിവസം കുട്ടി വന്നില്ല. രണ്ടാംദിവസം ക്ലാസിൽ വന്നപ്പോൾ കൊണ്ടുവരാൻ മറന്നെന്നുപറഞ്ഞു. മൂന്നാംദിവസം “ലാറർ” കൊണ്ടുവന്നുകൊടുത്തു. ആദ്യത്തെ തെറ്റുകൾ തിരുത്തിയിരുന്നെങ്കിലും സഹൃദയനായ ആണ്ടി [അതായിരുന്ന കുട്ടിയുടെ പേർ] പുതിയ തെറ്റുകൾ കൂട്ടിച്ചേർത്തു. അതിനാൽ പിന്നെയും ശരിയായെഴുതിക്കൊണ്ടുവരുവാൻ സാർ കല്പിച്ചു. ഇതേസംഗതി നാലഞ്ചു ദിവസം ആവർത്തിച്ചു. സാറിന്റെ കോപം ദിവസംകൂടുംതോറും വർദ്ധിച്ചുവന്നു. ഒടുവിൽ അഞ്ചാറുദിവസം കഴിഞ്ഞപ്പോൾ “ലീവ് ലാറർ” ഒരു മംഗളപത്രത്തിന്റെ രൂപമെടുത്തു. ഇതുകണ്ടു് സാർ ക്രോധകലുഷനായിത്തീർന്നു. ആണ്ടിയെപിടിച്ച് പുറത്തു് അഞ്ചെട്ടു പ്രഹരിച്ചു. ആ രൂപത്തിന്റെ ഭയങ്കരത ഇപ്പോഴും ഞാനോർക്കുന്നു.

അദ്ദേഹത്തിന്നു ജീവിതത്തിൽ ചില തത്വസംഹിതകളൊക്കെയുണ്ടു്. നോവലുകളും നാടകങ്ങളുമൊന്നും വായിക്കയില്ല. ആരെങ്കിലും ഇതിന്നു കാരണം ചോദിച്ചാൽ യാതൊരു താമസവുംകൂടാതെ പറയും:

“ഈ ‘മുരിപ്രേമ’ തെപ്പറ്റി കേട്ടുകേട്ടെനിക്കു മടുത്തു”



അതിന്റെ പിന്നാലെ ചില അനശ്ചരസത്യങ്ങളും തത്ത്വപദേശരൂപത്തിലൊഴുകും.

“ജീവിതം വിലയേറിയതാണ്”, ഈമാതിരി നിസ്സാരകാര്യങ്ങളെ കുറിച്ചു ചിന്തിച്ചതിനെ വ്യത്യാസമാക്കിക്കളയരുത്”. സിനിമ എന്ന പദം തന്നെ കേട്ടുകൂട “ചെങ്ങാതി”ക്ക്. പക്ഷെ എന്തെല്ലാമായാലും മറുതളവരുടെ [അവരാരുതന്നെയായാലും] ഇഷ്ടാനിഷ്ടങ്ങളോടൊപ്പം തികഞ്ഞ അനുകമ്പയാണ് “മുപ്പക്കു”. തന്റെ പത്തുവയസ്സായ മകൻ സിനിമ കാണണമെന്നു പറയുമ്പോൾ യാതൊരു തടസ്സവും ഉന്നയിക്കാതെ അവനെ കൂട്ടിക്കൊണ്ടുപോകും. ടിക്കറ്റുവാങ്ങിക്കൊടുത്ത് ഹാളിലാക്കി താൻ പടം കഴിയുന്നതുവരെ പുറത്തു കാത്തുനില്ക്കും. കഴിഞ്ഞാൽ മടങ്ങിപ്പോരികയും ചെയ്യും.

മുപ്പരുടെ കൃത്യനിഷ്ഠ കേൾവി കേട്ടതാണ്. മഴ കോരിച്ചൊരിയുന്ന മിഥുനം, കക്കിടകം മാസങ്ങളിൽപോലും കാലത്തു കൃത്യം അഞ്ചുമണിക്കഴുന്നേറ്റു ദേഹശുദ്ധിവരുത്തും, അതിൽപിന്നെ ദിനകൃത്യങ്ങളിൽ ഏല്പെടുകയുംചെയ്യും.

സ്നേഹത്തിന്റെ മുത്തീകരണമാണ് വിനോബാജി. ആ രൂപത്തെ ഒരു പ്രാവശ്യം കണ്ടാൽ പിന്നെയും കാണണമെന്നുതോന്നും; അത്രക്കൊരു വശ്യശക്തിയുണ്ടാമുഖത്തിന്. ഒരു പ്രാവശ്യം അദ്ദേഹവുമായി സംഭാഷണത്തിലേപ്പെട്ടാൽ പിന്നെ കാണുമ്പോഴെല്ലാം സംസാരിച്ചുകൊണ്ടിരിക്കുവാൻതോന്നും; അത്ര നിമ്ബലവും ഹൃദയാവർജ്ജകവുമാണാവശ്യം, പത്തൊഴുകുന്ന ഒരു കാട്ടാറിനെപ്പോലെ. അദ്ദേഹത്തോടുകൂടെ ഏതാനും മിനിറ്റുകൾ ചെലവഴിച്ചാൽമതി, പിന്നെയെല്ലായ്പോഴും നിങ്ങളോ “മനുഷ്യന്റെ” സഹവാസം കൊതിക്കും.

“ഇതിനെല്ലാം ഒരേ ഒരു കാരണമേയുള്ളൂ”, വിനോബാസാറിനെ നേരിട്ടറിയുന്നവർ എപ്പോഴും പറയും “സ്നേഹാർദ്രമായ ഒരു ഹൃദയം, അതെ, അതൊന്നുമാത്രം.”

വിനോബാസാർ ഇന്നില്ല. “ആണ്ടിക്ക് കിട്ടിയമാതിരി” എന്നതു മിക്കവാറും ഒരു പഴഞ്ചൊല്ലായ് തീർന്നിട്ടുണ്ട്, ആ നാട്ടിൽ. അവിടങ്ങളിൽ ആക്കെങ്കിലും ഒരു ബുദ്ധിമുട്ടു നേരിട്ടാൽ, പ്രത്യേകിച്ചു ഒരു കുട്ടിയെ പഠിപ്പിക്കേണ്ട പ്രശ്നം ഉരുവിച്ചാൽ, എല്ലാവരും പറയും: “വിനോബാസാർ ഉണ്ടായിരുന്നെങ്കിൽ!”

അന്നെനിക്ക് ആ തങ്കത്തിന്റെ ശരിയായ മാറു് അറിയാൻ കഴിഞ്ഞിരുന്നില്ല. താടി നീട്ടി സമ്പ്രദായവേഷവും ധരിച്ചുവരുന്ന കപടഭക്തന്മാരെക്കാണുമ്പോൾ ഞാനോത്തുപോവും “ഇവരെല്ലാം ഓരോ വിനോബാസാറന്മാരായിരുന്നെങ്കിൽ!”. കോളേജ് ക്ലാസുകളിലെ മനഃമടുപ്പിക്കുന്ന പ്രസംഗങ്ങൾകേട്ട് മേശയെ ഉപധാനമാക്കി നിദ്രാദേവിയെ ആലിംഗനം ചെയ്യുമ്പോഴെല്ലാം ഞാൻ വിനോബാസാറിനെ സ്വപ്നം കാണാറുണ്ട്.

# പ്രകൃതി

I

P. T. Jacob, IV U. C.

പ്രകൃതി—അനശ്വരമായ ഈശ്വരൻ. ഉഷസ്സിൽ ചെമ്പടുത്ത കിഴക്കു ഭിക്ഷ. ഇലത്തുമ്പുകളിൽ ഹിമകുളങ്ങളെ റഹിക്കുന്ന പച്ചപ്പൽ തതകിടി. നവജീവനാർജ്ജിച്ച വൃക്ഷലതാദികൾ. മഞ്ഞണിഞ്ഞ മരതക പ്ലാടങ്ങൾ. നീലമലകൾ ചേർന്നൊഴുകുന്ന വെൺമേഘങ്ങൾ.....

തങ്കക്കൈകൾനീട്ടി, ഇലകളിൽ പററിനിൽക്കുന്ന മുത്തുമണി കൾ ശേഖരിച്ചുകൊണ്ടു് ഉദിച്ചുയരുന്ന ബാലഭാസ്കരൻ. പൂമണം കലൻ കൊച്ചുകാറു്. പാടിപ്പറക്കുന്ന പറവജാലം. പാടിക്കളിക്കുന്ന മൃഗപോ തങ്ങൾ. പൂ തേടിപ്പറപ്പെട്ട പൂമ്പാറകൾ.....

മരത്തണലിൽ വിശ്രമിക്കുന്ന കാലിവർഗ്ഗങ്ങൾ. പാടിത്തളർന്നു് നഗ്രശിരസ്സായി നിൽക്കുന്ന തൈച്ചെടികൾ. കളകളാരവമുതിർന്ന കൊച്ചുവടികൾ.....

ചെങ്കുതിർവീശുന്ന അസ്തമയസൂര്യൻ. കൂടുകുളങ്ങയുവാൻ ആ ണ്തടക്കുന്ന വിഹംഗങ്ങൾ. അന്ധകാരമൊളിച്ചിരിക്കുന്ന മലഞ്ചെരുവുകൾ.....

പാലൊളിപരത്തുന്ന പൂഞ്ചന്ദിക. ഉഡുക്കൾ നിറഞ്ഞ ആകാശം. നക്ഷത്രവിരാജിതമായ ജലാശയങ്ങൾ.....

ഇതുമാത്രമോ. എന്തെല്ലാം. എന്തെല്ലാം. മനംകവരുന്ന കാഴ്ചകൾ. ഇക്കിളിപ്പെടുത്തുന്ന അനുഭവങ്ങൾ.

II

V. C. John, IV U. C.

പ്രകൃതി—വിധാതാവിന്റെ മഹിമാവിനെ പാടിപ്പുകഴ്ത്തുന്ന മഹിമാമണിയാണവൾ; ആശയററ മനുഷ്യലക്ഷ്യങ്ങളെ ആശയുടെ നറു പാലുട്ടിത്താരാട്ടുന്ന അമ്മയാണവൾ; നിമ്നലതയുടെ നികേതനങ്ങളെയും, കപടതയുടെ കടീരങ്ങളെയും പൂജിച്ചുലങ്കരിക്കുന്ന ആരാധകയാണവൾ; മാരിവില്ലിന്റെ മനോഹാരിതയിലും, മിന്നലിന്റെ ക്ഷണികതയിലും, അചലങ്ങളുടെ അനിശ്ചിതാവസ്ഥയിലും, വസന്തത്തിന്റെ തരുണിമയിലും നശ്വരതപമോതുന്ന ഗുരുവരേണ്യയാണവൾ.

മനുഷ്യവർഗ്ഗത്തിന്റെ വികാരങ്ങൾ ദൈവികമായ ഭാവനയിൽ കൂടിക്കടന്നു് സാത്വികമായ രൂപംപൂണ്ടതാണീപ്രപഞ്ചം. ചിന്താരൂപന്റെ ഭാവനാസത്തയ്ക്കു യഥാർത്ഥങ്ങളുടെ പരിവേഷമേകിയതാണീ പ്രപഞ്ചം. വിധാതാവിനെ വിസ്മരിച്ചുഹംകരിക്കുന്ന നരകലത്തിന്റെ മുഖിൽ നിലകൊള്ളുന്ന ചോദ്യചിഹ്നമാണതു്.

ദൈവികസന്ദർശനത്തിന്റെ സങ്കേതമാണതു്; നിത്യശാന്തിയുടെ ഇരിപ്പിടമാണതു്; സമാധാനത്തിന്റെ സന്ദേശതപമാണതു്. അതിനെ മനുഷ്യൻ അനുകരിച്ചെങ്കിൽ!

പക്ഷികൾ പാടുകയാണ്. കൊച്ചുസൂര്യൻ പുഞ്ചിരിയോടെ കിഴക്കൻ മലകളുടെ മുകളിൽക്കൂടി എത്തിയെത്തി നോക്കുകയാണ്. പച്ചവിരിച്ച നെൽപ്പാടങ്ങളും മഞ്ഞണിഞ്ഞ പുൽമേടുകളും സുഖസുഷുപ്തിയിൽനിന്നും ഇനിയും ഉണന്നിട്ടില്ല. വള്ളിപ്പടർപ്പുകളിൽനിന്നും മഞ്ഞുരുളികൾ ഇററിററു വീഴുകയാണ്. കസുമങ്ങളും മുകളങ്ങളും പേറിനിൽക്കുന്ന ലതകളെയും ചെടികളെയും തടവിത്തടവി കഞ്ഞിക്കാറു കടന്നു പോകുന്നു. മധുപഗണങ്ങൾ മുളിപ്പാട്ടുംപാടി നാലുപാടും ഇറങ്ങിയിരിക്കുകയാണ്, വികസിതകസുമങ്ങളാണത്. കൊച്ചുരവികൾ ഇരു തീരങ്ങളെയും, അങ്ങിങ്ങു എഴുന്നിൽക്കുന്ന ചെറു പാറകളെയും ഇക്കിളിയിട്ടുകൊണ്ടു് ഷൂകിയിറങ്ങുന്നു. കുന്നുകളും മലകളും പച്ചപ്പരപ്പു് ഉയർത്തിപ്പിടിച്ച് നിലകൊള്ളുന്നു; ഇടക്കിടക്കു് ചില ഉരക്കൻ പാറക്കെട്ടുകളും. കൊച്ചുകൊച്ച് വെൺമേഘങ്ങൾ അവയെയെല്ലാം ഉരസിയുരസി ചുംബനങ്ങളർപ്പിച്ചു മെല്ലെ മെല്ലെ നീങ്ങുകയാണ്.

അതാ പടിഞ്ഞാറെ ചക്രവാളം ചുവപ്പണിഞ്ഞുടങ്ങി. ക്ഷീണിതഭാസ്കരൻ വിശ്രമത്തിനുള്ള ഒരുക്കങ്ങൾ നടത്തുകയാണ്. അലറിമറിയുന്ന അലകൾ തീരത്തിനെതിരായി ആഞ്ഞടിച്ചു് നരയും പതയുമായി മാറുകയാണ്. വെണ്മണൽ വിരിച്ച കരവക്കിൽ പലനിറത്തിലുള്ള ചിപ്പികൾ ചിതറിക്കിടക്കുന്നു. നനഞ്ഞ മണലിൽ സുഷിരങ്ങൾ നിമ്നിക്കുകയാണ്, കടൽത്തണ്ടുകൾ. അധികം അകലെയല്ലാതെ മുക്കുവരെ വഹിക്കുന്ന ചെറുതോണികൾ തീരകളുടെ താളത്തിനൊത്തു പൊങ്ങിയും താങ്ങും മുന്നോറുകയാണ്. ഇളംതണുപ്പണിഞ്ഞ കാറ്റിനെ കര സ്വാഗതംചെയ്യുന്നു. അങ്ങങ്ങു വിദൂരതയിൽ ആഴിയും ആകാശവും ആലിംഗനം ചെയ്തു രമിക്കുന്നു.

ഇരുട്ടിന്റെ പിടി മുറുകുകയായി. അംബരം നിറഞ്ഞ നീലിമ പൂണ്ടുനിന്നു. വൻതാരങ്ങൾ കട്ടകടെ ചിരിക്കുകയാണ്. ചെറുതാരങ്ങൾ തെളിഞ്ഞും തെളിയാതെയും കടക്കണ്ണുകളെറിയുകയാണ്, ധരയിലേയ്ക്കു്. വച്ചാലുകൾ ചിറകുകൾ വിരിച്ച് എന്തൊക്കെയൊ ലക്ഷ്യമാക്കി പറക്കുകയാണ്. ഏതാനും നാഴികകൾകൂടിക്കഴിഞ്ഞാൽ മതി, കൊച്ചുമ്പിളിയും ഇതൊക്കെക്കൊന്നാൻ വരികയായി. മാറ്റങ്ങൾ പലതും സംഭവിക്കും.

എല്ലാം പ്രകൃതിയുടെ ലീലകൾ! ആ അദൃശ്യകരങ്ങളുടെ വേലത്തരങ്ങൾ!!

## IV

John Kuzhiparampil, IV U. C.

അനന്തമായ ആകാശവും അഗാധമായ അലയാഴിയും നമ്മുടെ ചേതനകളെ അമ്പരപ്പിക്കുവാൻ വെമ്പൽകൊള്ളുമ്പോൾ, പൂനിലാവിന്റെ പാലാളിയും കളിർകാറ്റിന്റെ പരിമളവും ഹൃദയങ്ങളെ കിഴിളികൂട്ടുവാനെത്തുകയായി. കടുവയും കരിമ്പൂലിയും വിഹരിക്കുന്ന കരിമ്പാറക്കെട്ടുകളുടെ ഭീകരതയ്ക്കുമപ്പുറം, കളകളും പാടി പാഞ്ഞൊഴുകുന്ന കാട്ടുരുവികളുടെ തീരത്തിൽ തുളിച്ചാടുന്ന മാൻപേടകളുള്ള മധുരരംഗങ്ങൾ

കാണാം. ചീവീടിന്റെ മുളംവിളിയുള്ള മലങ്കാട്ടിലും പൂങ്കയിലിന്റെ മധുര സംഗീതമുയരുന്നതു കേൾക്കാം. സൂര്യരശ്മിക്കു മറപിടിക്കുവാൻ കാർ മേഘങ്ങളണിനിരന്നാൽ മഴവില്ലിന്റെ മധുരോദയമാണുണ്ടാവുക. പൂക്കളും പുഷ്പിരിയും നിറഞ്ഞ വസന്ത മധുരിമ, ചേതനകളെ ചുട്ടെരിക്കുന്ന വരണ്ട വേനലിന്റെ മുന്നോടിയെങ്കിൽ, കരൾ കളിർപ്പിക്കുന്ന ഒരുമുതവർഷമാണതിന്റെ പിന്നിൽ. മുറുച്ചെടികളുടെ മുടിയിൽക്കാണുന്ന കൊച്ചു കസുമം, മധുരസാന്ദ്രമായ മകരന്ദത്തിന്റെ ഒരു മൃദലചഷകമാണ്.

കനത്ത കാളമേഘങ്ങൾക്കു ചില കടുത്ത സന്ദേശങ്ങളറിയിക്കുവാനുണ്ട്. ആ സന്ദേശങ്ങളുമായി മിന്നൽപിണയകളെത്തുകയാണ് മിന്നൽവേഗത്തിൽ. രംഗം മാറിക്കഴിഞ്ഞു. ജലകണങ്ങളെക്കൊണ്ടു നെയ്തെടുത്ത യവനിക നിപതിക്കുകയായി. അണിയറയിൽ അടുത്ത രംഗസംവിധാനത്തിനുള്ള തയ്യാറെടുപ്പുകളാണ്. ഉടുത്തൊരുങ്ങിയ നക്ഷത്രകന്യകൾ നീലയവനികയുടെ വിടവുകളിൽക്കൂടി കണ്ണറിയുകയാണ്. അവർക്കു മുണ്ട്, ചില മൃകസന്ദേശങ്ങളറിയിക്കുവാൻ.

## V

Joseph Mundackal, IV Hons.

ആര്യന്മാരായിരം രഥസ്യങ്ങളുടെ നികേതനമാണ് പ്രകൃതി. ഇന്നോളം ജീവിച്ചിട്ടുള്ള എല്ലാ ശാസ്ത്രജ്ഞന്മാരും ശ്രമിച്ചിട്ടും അവരുടെ ഏറ്റവും ചെറിയ രഥസ്യംപോലും മുഴുവനായി ഗ്രഹിക്കുവാൻ കഴിഞ്ഞിട്ടില്ല. അണുബോമ്പുകളെപ്പറ്റിയും ഫൈഡ്ജൻ ബോമ്പുകളെപ്പറ്റിയും കേൾക്കുമ്പോൾ നാം ആശ്ചര്യപ്പെടുകയാണ്. പക്ഷെ നമുക്കു പ്രകൃതിയിലേക്കൊന്നുനോക്കാം. ഫൈഡ്ജൻബോമ്പുകളെ പരാജയപ്പെടുത്തുന്ന എത്ര ശക്തിവിശേഷങ്ങളാണ് അവിടെ കാണപ്പെടുന്നത്.

നമ്മൾ കാണുന്ന ഓരോ പൂവിലും എത്രയെത്ര കവിതകളാണൊളിഞ്ഞിരിക്കുന്നത്. ഉമാർചയ്യാം തുടങ്ങി പണ്ഡിതന്മാരുടെയുള്ളവർ എഴുതിയിട്ടും അവസാനിക്കാത്ത കവിതകൾ—വെള്ളത്താളുകളിൽ പകർത്താൻ ഒരിക്കലും സാധ്യമാകാത്ത കവിതകൾ. കാടുകളെയും കാട്ടാടുകളെയും തരണംചെയ്ത് പുലർകാലത്തിൽ ആ കിഴക്കൻ കാറ്റിലെ സംഗീതം എന്തുകയാണ്. ഹൃദയത്തിന്റെ ലോലതന്ത്രികളെ അതു മീട്ടുന്നില്ലെങ്കിൽ—വികാരങ്ങളെ കിഴിച്ചിയിട്ടുന്നില്ലെങ്കിൽ അതു് ആ സംഗീതത്തിന്റെ കുറുമ്പു. “മീരയും” “സൈഗാളും”മെല്ലാം ആ സംഗീതം നന്നായിരിക്കുവാൻ എത്ര ശ്രമിച്ചിട്ടും പരാജിതരായി.

കുന്ദത്തിരുണ്ട മേഘപാളികളുണ്ടല്ലോ. കാളമേഘങ്ങളെന്നാണ് കവി കൾ അവയെ വിളിക്കുക. പക്ഷെ അവ അമോഘശക്തികളുടെ നിക്ഷേപങ്ങളാണ്. ലോകത്തിലുള്ള എല്ലാ വൈദ്യുതദീപങ്ങളും ഒന്നുചേർന്നു പുറപ്പെടുവിക്കുന്ന പ്രഭാപുരം അവയിലൊന്നിൽ ഉള്ളടക്കംചെയ്തിട്ടില്ലേ? പൂന്തോപ്പിനരികിൽക്കൂടി മർമ്മരമുയർത്തിക്കൊണ്ടു് ള്കുന്ന ആ പൂഞ്ചോലയുണ്ടല്ലോ; അതിന്റെ കഴിവുകളെപ്പറ്റി ചിന്തിക്കുവാനുണ്ട്. ഒരുവേള നിറഞ്ഞുനിൽക്കുന്ന പുഷ്പാദങ്ങൾ മാരുതനിൽ ഓളമടിക്കുമ്പോൾ—സാന്ദ്രസംഗീതം മുഴക്കുമ്പോൾ നമ്മൾ ആ കാട്ടുതവിയെ മറന്നേക്കാം. ബ

ട്ടൻ അമർത്തുവോൾ ഭീകരാരവത്തോടെ പണിയാരംഭിക്കണ ആ ഫാക്ടറിയന്ത്രങ്ങൾ കാണുമ്പോൾ—നഗരത്തിന്റെ തിരക്കാൻ തെരുവുകൾ വിവിധവണ്ണത്തിൽ സന്ധ്യാസമയത്തു പ്രകാശിക്കുമ്പോൾ, നമ്മൾ ആ നീർചാലിനെപ്പറ്റി ചിന്തിക്കുവാൻ ഭ്രമിക്കാറില്ല. പക്ഷെ ഇവയെല്ലാം ആ കൊച്ചുരുവിയുടെ വിക്രിയകളാണ്.

## VI

A. Eapen Mathew, IV U. C.

ആ മഞ്ഞണിഞ്ഞ മലംചെരിവിന്റെ താഴ്വരയിൽ പാഞ്ഞൊഴുകുന്ന കഞ്ഞരുവിയുടെ തീരത്തു ആരുമാരും കാണാതെ ആ കൊച്ചുപൂവ് മെല്ലെ വിടൻവന്നു. ഇക്കിളിയിട്ട്, കളഗാനമൃതി പൂത്തുപായുന്ന കുഞ്ഞോളങ്ങളുടെ താളമേളങ്ങൾകണ്ട് ചിന്തയിലമർന്നുപോലെ അതങ്ങിനെ അനങ്ങാതെ നിന്നു. പുലരിയുടെ പുതുമയിൽ പുഞ്ചിരിതുകി, പല്ലിനെയും പൂമൊട്ടിനെയും പൊൻമണിയണിയിച്ച ദിനമണിയുടെ കരവാടവംകണ്ട് അതാനന്ദിക്കുകയായിരുന്നു. കളർമയേകുന്ന കിളികളുടെ ഗാനമധുരിമയിൽ ലയിച്ച്, പുലർകാലപൂജയിൽ മുഴുകി അതങ്ങനെ ശാന്തമായിനിന്നു. നീല വാനിടത്തിലെ മിന്നിത്തിളങ്ങുന്ന നക്ഷത്രങ്ങൾപോലെയോ, പലനിറംകലൻ തെളിഞ്ഞു മറയുന്ന മഴവില്ല്പോലെയോ ആ പൂവ് ആരെയും ആകർഷിച്ചില്ല, എങ്കിലും അരുവിയിലെ തിരകൾ ഒന്നൊന്നായിവന്ന് അതിനഭിവാദ്യമരുളി.

എങ്ങനെന്നോ പാഞ്ഞുവന്ന ഒരു കൊടുങ്കാറ്റിൽ മലകൾ വിറച്ചു ഞെടുങ്ങുന്നതും മാമരങ്ങൾ പിടഞ്ഞുവീഴുന്നതും കണ്ട് ആ പൂവൊന്നു മന്ദഹസിച്ചു. പച്ചിലകളും വൻപൂക്കളും അടൻവീണെങ്കിലും അതനങ്ങിയില്ല.

പകലിന്റെ നാനാവിധമായ കോലാഹലങ്ങളുവാസാനിച്ചു. പരിഭ്രാന്തിയാൻ കൂട്ടിലേക്കു പായുന്ന പക്ഷികളെയും ഇളകിപ്പറന്നുതുടങ്ങിയ മിന്നാമിനുങ്ങുകളെയും കണ്ട് അതിന്റെ ഭാവം മാറി. കുടിലിലേക്കുപോകുന്ന കൃഷിക്കാരുടെ കാൽപ്പെരുമാറ്റം അതിനെ പേടിപ്പിച്ചു. ആരുടെയോ കാലൊച്ചകേട്ട് ആ പൂവൊന്ന് ഞെട്ടിയതും, പെട്ടെന്നു വീശിക്കുന്നപോയ ഒരു കൊച്ചുകാറ്റേറ്റത് അതടൻതും, അരുവിയിൽ പതിച്ചതും ഒന്നിച്ചുകഴിഞ്ഞു. അങ്ങനെ വമ്പൻ കാറ്റിനെപ്പോലും അമ്പരപ്പിച്ചു ആ കൊച്ചുപൂവ് ഒരു മന്ദമാരുതന്റെ ആശ്വേഷമാണ് അരുവിയിലൂടെ ഏങ്ങോ പോയി.

## VII

George James, V. Hons.

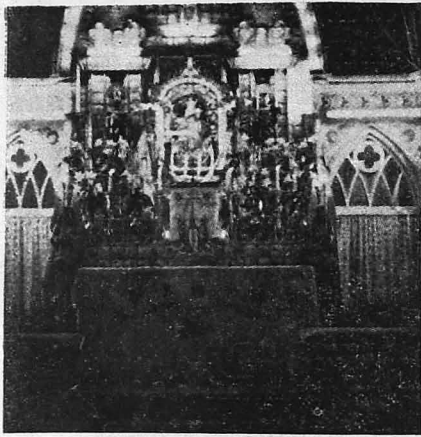
പ്രകൃതിദേവി, അവൾ പരിശുദ്ധതയുടെ പരിപൂർണ്ണതയാണ്, നിഷ്കലംഭതയുടെ നിറകടമാണ്, നൈസർ്ഗ്വികതയുടെ ഭണ്ഡാഗാരമാണ്. സൃഷ്ടിയുടെപിന്നിൽ മറഞ്ഞുനില്ക്കുന്ന പരംപൊരുളിന്റെ ശക്തി മാഹാത്മ്യത്തെ ഉച്ചൈസ്സരം കൊണ്ടാടുകയാണവൾ. ആഴിയുടെ അഗാധതയിൽ തത്തിക്കളിക്കുന്ന നൂറുനൂറായിരം മത്സ്യവർഗ്ഗങ്ങൾ, നിശയുടെ നിശ്ശബ്ദതയിൽ ആകാശത്തിന്റെ വിശാലതയിൽ വെട്ടിത്തിളങ്ങുന്ന നക്ഷത്രപരമ്പരകൾ ഇവയെല്ലാം നിന്റെ സൗന്ദര്യാരാധകരാണ്.

കവികൾ നിന്റെ സൗന്ദര്യപൂജകരാണ്. അലാപനിക്കുന്നവർക്കുശാപം നൽകുന്ന കുളിർതെന്നലും നിന്റെ സൗന്ദര്യത്തിന്റെ ബഹിർഗമനമാണ്.

ഇന്ന് ലോകത്തിന്റെ കൃത്രിമവും വിലപനിയവുമായ “പുരോഗമന”ത്തിൽ പ്രകൃതി ഹൃദയംതപിച്ച് കരയുകയാണ്. പ്രകൃതിയുടെ സൗന്ദര്യത്തെ ആരായുവാനോ അനുഭവിക്കുവാനോ അവളുടെ ആശയങ്ങളും ആദർശങ്ങളും മനസ്സിലാക്കുവാനോ ഇന്ന് മനുഷ്യൻ സമയമില്ല. ഒരു യാന്ത്രികയുഗത്തിന്റെ പുരോഗമനത്തിൽ ഇന്ന് മനുഷ്യൻ അവനെത്തന്നെ മറന്നിരിക്കുകയാണ്. ഇരുണ്ടും വെളുത്തും ഇഴഞ്ഞുപോകുന്ന മനുഷ്യജീവിതത്തിൽ പരിശുദ്ധിയുടെ പരിമളം കലർത്തുവാൻ—വിജ്ഞാനത്തിന്റെ പൊന്നൊളി പരത്തുവാൻ പ്രകൃതി “വേർഡ്സ് വർത്തി” നെപ്പോലുള്ള ഒരു സൗന്ദര്യരാധകനെ കാത്തുകാത്തിരിക്കുകയാണ്. “സ്വന്തം കാര്യം സിന്താബാദ്” എന്ന് ഉദ്ഘോഷിക്കുന്ന വ്യക്തികളുടെയും രാഷ്ട്രങ്ങളുടെയും മദ്ധ്യത്തിൽ ഐക്യത്തിന്റെയും ഒത്തൊരുമയുടെയും സന്ദേശവാഹിനിയാണ് പ്രകൃതി.

മാനവപ്രശ്നങ്ങളെപ്പറ്റി പഠിക്കുവാൻ രംഗത്തിറങ്ങിയിരിക്കുന്ന ഇന്നത്തെ പുരോഗമനവാദികൾക്ക് വിജ്ഞാനഭണ്ഡാഗാരമായ നിന്റെ അഭിപ്രായം ആരായുവാൻ സമയമില്ല. പുരോഗമനത്തിന്റെ പുരോഹിതർ നിന്നെ സമുദായമദ്ധ്യത്തിൽനിന്നും ആട്ടിപ്പായിച്ചിരിക്കുകയാണ്. എന്നാൽ ഞങ്ങൾ, മണ്ണിന്റെമക്കൾ, നിന്റെ മക്കൾ നിന്റെ വരവിനെക്കാത്തിരിക്കുകയാണ്. പ്രകൃതിദേവി, നിനക്ക് എന്റെ വിനീതമായ കൃഷ്ണകൈ.

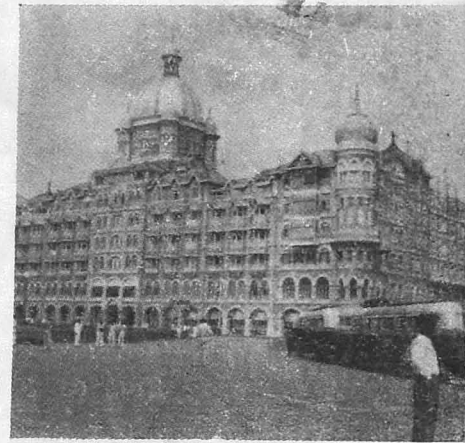
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Altar of Our Lady of Velanganni  
*A. Kanaga Rayan, II U.C.*



Kutb-Minar, Delhi  
*K. S. Ramakrishnan, III Hons.*



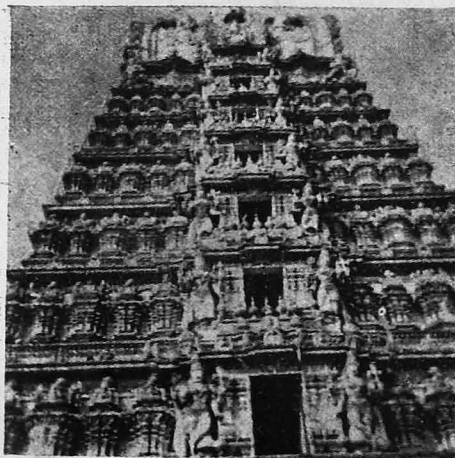
Taj Mahal Hotel, Bombay  
*G. Kittu Rao, IV B.Sc.*

GREAT

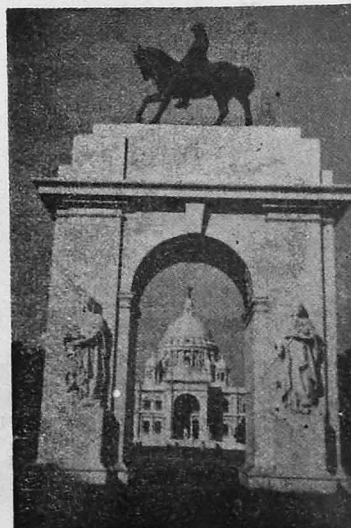


Mahabalipuram seaside temple—*R. Annamalai, II U.C.*

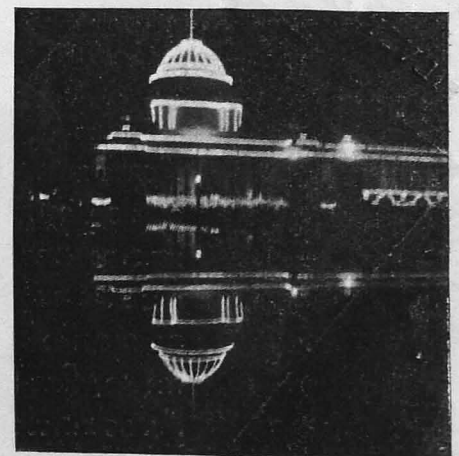
BUILDINGS



Chamundi Hill Temple  
*R. Annamalai, II U.C.*



Gateway to Victoria Mahal, Delhi  
*R. L. Narayanan, III B.Sc.*



Rashtrapathi Bhavan with its  
reflection on Republic Day  
*K. S. Ramakrishnan, III Hons.*

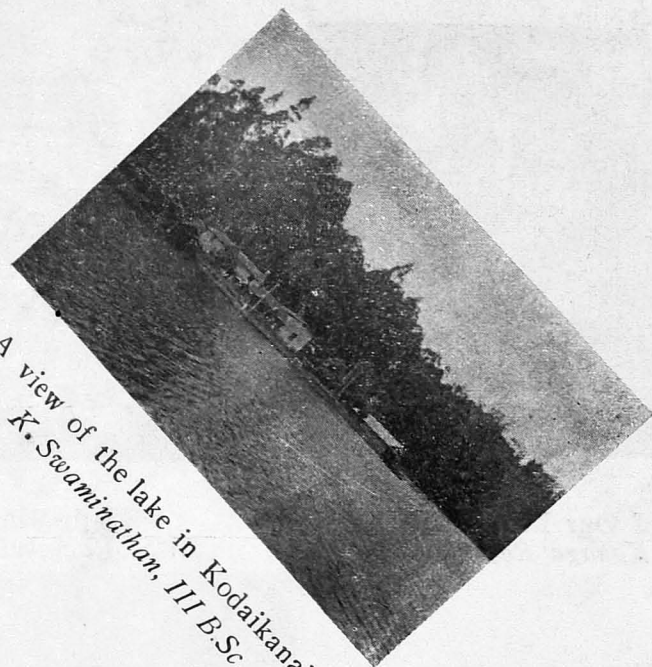


# BOTANICAL EXCURSION

11 NOV 1956



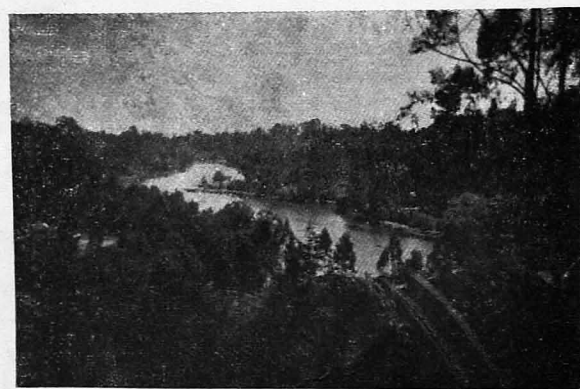
Sacred Heart College, Shembaganur  
T. R. Sethuraman, IV B.Sc.



A view of the lake in Kodaikanal  
K. Swaminathan, III B.Sc.

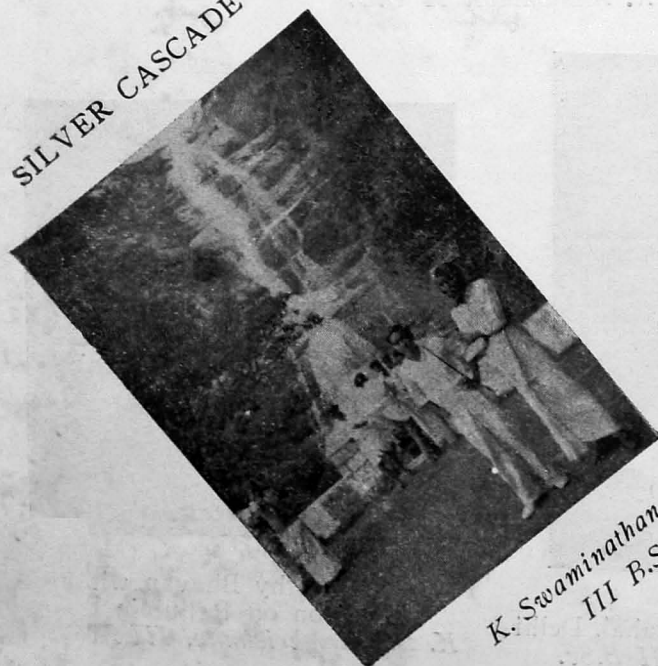


Front view of the Observatory at Kodai  
K. Swaminathan, IV B.Sc.



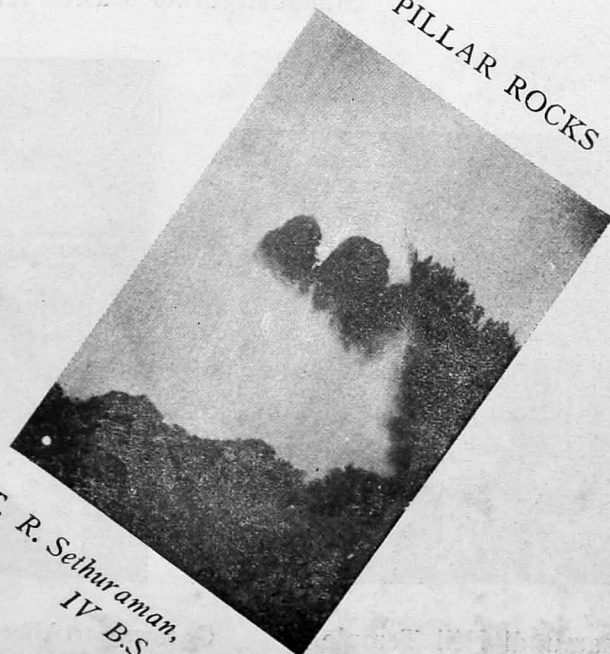
Another view of the Lake  
T. R. Sethuraman, IV B.Sc.

SILVER CASCADE



K. Swaminathan,  
III B.Sc.

PILLAR ROCKS



T. R. Sethuraman,  
IV B.Sc.



# A Botanical Tour

By T. R. Sethuraman, IV B.Sc.

It is a modern fashion for students to go on tours. They call their tours excursions or picnics or pleasure tours. We Botany students have a five-day tour every year. Generally we go to places of botanical interest. This year we toured Kodaikanal during our September holidays. A jolly motor-drive, a merry row in the lake, a nice stroll in the bazaar—all these were not, however, the main features of our tour. It is therefore not possible for us to call it a pleasure tour. On the contrary, it was a strenuous study tour.

I am not going to bore the reader with a chronological account of our tour or with a very long list of unpronounceable botanical terms. But it is my aim to remove the false impression in the minds of most of our friends that it was a pleasure tour.

It is prescribed by the University that the students of Botany, Geography, Zoology etc., should undergo a period of field-work during their course of study for which they have to submit a field-record notebook. Some people may question me: "Why is it so?" I may answer them by putting another question: "Why do the students of Chemistry and Physics submit their laboratory record books to the University?" So the tour is a part of our work and it may better be called field-work. We have to collect during our tours and submit to the University about a hundred plants representing all the 'families' prescribed for us, if we have any intention at all to get a B.Sc. degree in Botany.

With this purpose we walked miles on end in Kodai hills and climbed the steepest cliffs. Yet it was no irksome business for us; it was pleasant to be active in such a climate. We collected Dandelion, Erica, Spiranthes, Anaphalis, Gnaphalium, Ranunculus, and a host of other plants. There was friendly competition and keen enthusiasm among us in collecting plants for the herbarium.

Nevertheless, our interests were not confined to botany and botanizing. We visited the Water-Works of Kodaikanal and the Astro-Physics Observatory, where we saw something about giant telescopes, various kinds of spectra, and the effect of the sun's rays in the formation of annual-rings in plants. This observatory is one of the best high-altitude observatories in the world. We also paid a short but happy visit to Sacred Heart College at Shembaganur, where our Jesuit Fathers have their early training.

Nature too was of great interest to the tourists. The beautiful sight of Silver Cascade, which greeted us on our way to Kodai, the

majestic view of the Perumal Peak, the wonderful scene of the Pillar Rocks, and the enchanting bays of the Lake filled us with joy.

When the five days were over, though our hearts were in a hurry to go home, we could not help regretting that we had to leave such a lovely place as Kodaikanal.

The main defect of Botany tours is the complete extinction of many a rare plant like Orchid because the students in their thirst for plants harvest the whole place. Thus the botanical value of the place decreases. However, these tours are good in improving our character and personality. We are trained how to mix with others, especially with our Lecturers. In this connection I may say a word of gratitude to Rev. Fr. Balam, S.J., whose very presence was a stimulant for us. Our Lecturers, Messrs. K. R. Viswanathan and K. R. Venkateswaran, and our Demonstrators, Messrs. Sripatharajan and Pauley Joseph, also deserve our tribute for their great work in the tour. It is needless to say that all our attenders were also of great help to us.

As Rev. Fr. Balam observed, we did not go to Kodai for pleasure; but we had a pleasant time there.

## A Debate in Retrospect

*By S. Natarajan, IV Hons.*

○ some extent we can say that debates are a little like vacations: anticipated with relish, experienced with inconvenience, and remembered with nostalgia. The debate in which Mr. Boswell and Mr. Burton of Oxford figured was more or less like that. When the debate was announced, I could see a flood of enthusiasm bursting upon the students. When the day arrived, I felt a tingling in my veins, I was transported to an imaginary Oxford and I revelled in its majesty and brilliance. The evening came. Students poured into the Lawley Hall to listen to Oxford's 'intellectual voice.' My mind was whirling madly, ecstatically, while thrilling visions peopled my brain.

Boswell and Burton came, the former rather tall, the latter short and well built; both with lovable faces and humorous eyes, they differed in other things. Boswell the Englishman talked softly and with lucidity and simplicity, but Burton the Irishman was masculine, rugged and excited.

But both indulged in trivialities. Boswell's reminiscences of Johnson, the 18th century colossus, were enlivening, but I failed to see their aptness. Burton's was almost a commonplace self-advertisement. The trivial witticisms, for example that of chloroform and reform, seemed to us unworthy of Oxford. Boswell talked to the point but Burton's declamation reminded me of the saying that wisdom consists in saying the right thing at the right moment, but also in leaving unsaid the wrong thing at the wrong moment.

To say that our own debaters succeeded on that day would be an exaggeration. To say that they failed to impress may smack of prejudice. But one thing is certain. They evinced no stage-fright, betrayed no excitement in the company of Oxford graduates. To be not insincere, I have to add, with some pain, that their talk was rather like an elocution contest. Whatever we may say of Boswell and Burton, we must be unanimous in saying that though their talk had nothing of pyrotechnics, still it had a captivating charm in it. It is certainly not due to their superior argumentative skill or to their uninterrupted flow of ideas, but to something ineffable. It shows the depth of the affectionate anticipations which we had and which could not be smothered by transient impressions.

"Asia, not Europe, controls the destiny of the world for the coming half a century." So ran the proposition and certainly it shows the exuberant fancy of the man who uttered it. Alas, no justice was done to the proposition. All the speakers talked grandiloquently about the political muddle and the economic imbroglio. We could see in their talk the gigantic shadows projected by the dark phantom of Communism. Occasionally the dollar in the hand of Uncle Sam glittered. We heard all possible irrelevancies concerning the tangled skein of politics. All forgot that it was not 'Asia' or 'Europe' that mattered but that the words 'destiny' and 'coming half a century' in conjunction with 'Asia' or 'Europe' should become the points for which their swords must clash.

Neither Asia alone nor Europe alone is the "bastion of world-peace." The temple of world-destiny must be guarded by both, so that if one feels drowsy with exhaustion, the other can do the sacred duty. Can Europe alone guard world-peace? Look at Europe. She has hardly recovered from the blows of Hitler and Mussolini when the rapid Sovietization of Eastern Europe menaces her. Europe wants her Juggernaut to move unhindered. But how is it possible so long as the multitude of the colonial peoples stand before it in fetters? As Romain Rolland wanted, Europe must "raise above their blind conflicts the Arch of Alliance, the free mind, one and manifold and eternal."

Can Asia control world-destiny? She may perhaps after half a century. Now she is feeble. Her infant democracies and struggling

colonies may save the world of "armed panicky peace" when they become strong enough to hoist their flag of culture and philosophy and to save Europe, tossed about by materialistic currents. To achieve that, it may take decades.

Asia and Europe must unite. Europe, helped by Asia's culture and philosophy, can preserve peace. She must discard her colonial robes. For that Asiatic influence is essential in killing the materialistic demons haunting her. 'We must win the Spiritual Armageddon,' said Bernard Baruch. Europe is the amphitheatre, Asia the gladiator and champion, to fight for the captive, world-destiny.

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## TEXTTOOLS

*By L. Arulsamy, IV B.A. Hons.*

THE Textool Factory which is situated in Ganapathy, a suburb of Coimbatore, is by far the most important institution we, the Diploma students of Social Service, visited during our excursion in September 1954. This factory pays an unmistakable tribute to the efficiency of South Indian enterprise in the manufacturing industries, for in this plant is manufactured all the machinery required for a cotton spinning mill from blow-room to bundle-press. This organisation was registered as a public limited company in 1947 and in the short period of seven years has been able to supply 300 ring spinning frames to the various cotton mills all over India. This is indeed a unique institution which compares very favourably with the two other institutions of a like nature situated in Calcutta and Bombay.

On our arrival at the factory we were taken round by one of the engineers on duty. The factory has a very large mechanical workshop comprising several sections, from moulding to assembling and testing, all equipped with the most modern and up-to-date machinery. The special feature of this factory is the "Heat Treatment Section", because it has the latest type of electrically controlled furnaces. The most recent addition is the "High Frequency Furnace" erected by engineers from Switzerland. Annealing treatment is also a speciality of this section and the latest methods are adopted to control seasonal effects in the least

possible time. The various other sections are devoted to different operations like grinding, drilling, boring, milling, cutting, slotting, shaping, electro-plating, assembling, and testing.

The most important feature of this factory is its well-equipped "Inspection Section" with the most accurate and up-to-date mechanical and optical measuring appliances keeping up a very close tolerance to individual parts during the process of manufacture. Before a machine leaves the factory it is thoroughly tested and certified. The laboratory attached to this factory plays a special part inasmuch as all the incoming materials are chemically analysed and properly tested before being released for production.

Since this is a mass production factory, speed and precision are of paramount importance. Workers are first taken as apprentices and only after careful training are put on responsible jobs. Deftness of hand and alertness of mind are indispensable for skilled labour, and this factory selects its labourers carefully before giving them the necessary training. Experience shows that a young man even with a lower secondary qualification can be trained as an efficient worker, but the engineer who took us round said that a person with a higher educational equipment like Matriculation would grasp the principles more quickly and become a more efficient worker.

When we went round the factory we noticed that every one was keen on his job and on inquiry we were told that each one was an expert at his trade. This is due to the fact that the system of wage payment is such as to induce the worker to put forth his best endeavour. Every worker is paid his basic wage which is a time wage. He is given additional pay according to the increase of output he shows within the allotted time. Thus a judicious combination of time and piece wage is the main reason for the efficiency of the workmen in this factory.

Another special feature of this factory is the "Research Department." Its object is to approach the fundamental problems of the textile industry with a view to evolve new and improved machines. It also serves as a link between the development departments, giving assistance wherever necessary and keeping the technical staff of the company informed of the latest developments in textile technology, textile engineering, and allied branches. Thanks to the activities of the Research Department, 'Textools' have already been able to register two patents in ring frames, while some more special features are nearing completion in almost all machines. A very desirable revolution in the spinning technique is going on in this factory which will result in doubling the production within the allowed time. Every endeavour is being made to place the new "ring spinning frame" as an exhibit in the Textile Industry Exhibition.

To-day the main factory of Textools functions in an area of more than 1,25,000 sq. ft., giving employment to nearly 1000 men. The Revolving Flat Carding Engines and the Ring Spinning Frames are produced here. The Fly Frames are produced in the other plant at Singanallur, while the Draw Frames are manufactured in a branch at Big Bazaar Street, Coimbatore. The Reeling machines and the Bundling Presses are produced in associated concerns of Textools. Besides this several foundries of the city are fully engaged by this institution. Another branch at Papanayakanpalayam with well over 300 men produces Textool Diesel Engines which are put to different uses according to the various needs of the country. The entire organisation has business to its full capacity, which is to produce a complete balanced unit of 3200 spindles, from Carding Engines to Ring Spinning Frames, costing about 3½ lacs of rupees. Plans are on hand to put into operation increased production to meet the increased need of the country.

The manufacture of textile machinery is a major industry playing an essential role in our national economy, since our Cotton Mill Industry ranks third in the world, with 453 Spinning and Weaving Mills, having a capital outlay of 106.9 crores of rupees and employing 8½ lacs of workers. The Planning Commission has promised 18 yards of cloth per head per annum, and to fulfil this promise our cotton industry has to make much headway. The important step in this direction is rationalisation which means modernisation and renovation of plant and machinery with a view to increase output and reduce costs. The Planning Commission has suggested an immediate addition of 2.75 million spindles and this would cost roughly 500 million rupees. Hence the importance of developing the manufacture of textile machinery.

'Textools' occupies a very prominent place in this field and contributes much to the economic progress of our country. It is our earnest hope that this institution will grow and continue its usefulness for many years to come.

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### The Common Cold

American researchers who attended a reception given by the Common Cold Foundation in New York said :

'No known preparation of vitamins, anti-histamines, or anything else, swallowed, injected, or inhaled, has any value in treating a cold or in shortening its duration.'

# A Peep into Pondicherry

*By J. Stanislaus, I U.C.*

HEN India became independent in August 1947, tiny spots of foreign rule still existed both on the east and the west coast of the peninsula. Goa, Diu and Damaun on the west coast are even now under the Portuguese military grip. Pondicherry, Karaikal, Yanam on the Coromandel coast and Mahé on the Malabar coast have been under the French colonial regime for over two centuries.

Pondicherry itself, long the headquarters of the French pockets in India, is a neatly laid-out town about  $\frac{3}{4}$  mile in extent with rounded corners. A drainage canal running from north to south divides the town into "White" on the east and "Indian" on the west. Though primarily intended for and enjoyed by Europeans, officials and others, it has been occupied by all without any distinction. The roads are as straight as straightness could be and are parallel. Crossroads cut each other at right angles. Pondicherry stands as the symbol of the great skill of French engineers. No wonder the Government of PEPSU chose French engineers to construct their new capital, Chandigarh.

The town appears to have been built after the French settled there in 1664, for the name 'Pondicherry' of which the Tamil version is 'Puducherry' denotes that the place is a new "cheri." One may wonder how the name Puducherry was transformed into Pondicherry. In the French language in manuscript, the word 'Puducherry' must have been written as "Poudoucherry" or "Poudicherry" and the "u" after "Po" has become inverted, as happens elsewhere, into "n." Hence "pou" became "pon." While this spot is regarded as the new "cheri," the older places which were and are occupied by the 'natives' are situated around it.

Each of these old places had taken to one profession or another. For example, Kurichikuppam and Keerapalayam on the north and south coast are fishermen's hamlets; Muthialpet and Kadigamam are the homes of the weavers; while Ariankuppam and Nellitope are centres of artisan workers, like carpenters, smiths, etc. Ulavarkarai on the west had been the headquarters of the land-tillers. All these facts tend to indicate that the French European settlers had so arranged this pretty town as to keep themselves within easy reach of their essential requirements in labour and material.

The political history of the town goes beyond 1674 when the French East India Company founded a place on the east coast of S. India 100 miles south of Madras. The place first served as a godown for the commodities from the interior of the country. It became the capital of the French colonies in India. In the year 1742, Dupleix, a man of remarkable ability and unbounded ambition, was appointed Governor of Pondicherry. In his time the fame of the town spread all over India and Europe. Dupleix was succeeded by Lally who also at the beginning was very prominent but

he was captured by the English under Sir Eyre Coote and consequently Pondicherry fell into the hands of the British. But it was afterwards returned to the French. During the course of its existence it had passed under the rules of the Portugese, the Dutch, and the British. For the last two centuries it has been ruled by the French Government.

On 1st November 1954 our tricolour with Ashok Chakra was flown for the first time over Government House at Pondicherry. Maybe it was and it has been a symbol of goodwill on the part of the French people who have, though late by seven years, followed the footsteps of their colleagues, the British.

Under French rule the main subsistence of this territory was the tax collected on trade. Merchants both from inside and from outside dealt mostly in contraband goods i.e. those commodities which were either banned import into the Indian Union or which were taxed the highest percentage on import. These goods were stealthily moved into India with the prospect of enjoying unimaginably high profits. The Indian Government took active measures to stop these smuggling activities.

As regards the people, they are not very different from those living in the Indian Union. A small percentage of the population saw the fronts of one or two world wars, and have acquired some of the extravagance of the western mode of life and live as if they belonged entirely to a different category of human beings. Some have entered military and civil services in France and other Overseas French territories and consequently draw after retirement quite decent if not fat pensions. As far as education is concerned, an appreciable percentage of the urban population has benefited by the facilities granted by the French Government both in high schools and for higher studies. As regards the rural part of the area, much has to be done to raise their standard in culture and education.

Pondicherry is equipped with an up-to-date hospital with modern appliances and the entire health service is manned by experienced medical practitioners of the French Colonial Service. The French are running a college coaching students for the "Baccalauréat" examination of the Paris University, and also a High School preparing for the "Matriculation" of the Madras University. These are the components of the embryo of French culture in this place. Besides these, things worth seeing there are the Pier, half of which is now drowned in the sea owing to a recent cyclone, the Lighthouse, the Cathedral which is a standing testimony to the labours of the early Catholic missionaries there, and the Aurobindo Ashram. The town is electrified by two power-houses, one of which produces A.C., the other D.C., the former having been recently constructed by the Government.

We Pondicherrians hope that every possible measure will be taken by the Government of India to raise the standard of the people who have enjoyed great privileges under French rule.



# अप्रतीक्षितं पारितोषिकम्

(काचन खण्डकथा)

“कविः अथवा रविः ?—अनयोः शब्दयोः कतरः समीचीनतरः स्यात् अस्मिन् प्रकरणे ?” इति महान् संशयः समजायत नागराजस्य । “कविः-रविः, कविः-रविः” इति शब्दद्वयमपि निरन्तरं मनसि अवर्तयन्नेव सः कलाशालायाः <sup>1</sup> माणवकावसथं प्रतिनिवृत्य स्ववेश्मनि <sup>2</sup> लेखनपीठोपरि पुस्तकानि अनादरेण प्रक्षिप्य खट्वायां अशेत । सर्वेऽपि अन्ये माणवकाः कलाशालातः स्वावासं आगत्य, किञ्चित् विश्रम्य, पश्चात् केचित् यथाभिलषितं विहर्तुं क्रीडाङ्गणं, केचित् अपेक्षितद्रव्याणि क्रेतुं विपणिवीथिं, केचित् उल्लासेन सायंकालं यापयितुं नगरोद्यानं, केचित् सुहृत्संभाषणरसं अनुभवितुं मित्रगृहाणि च, उद्दिश्य निरगच्छन् । नागराजः केवलं कवाटं किञ्चित् पिधाय अन्तरेव मञ्चे शयानः कविरविमहामन्त्रजपं कुर्वन्वर्तत ।

नागराजः मधुरानगरवास्तव्यः, विद्याधिगमार्थं त्रिशिरःपुरिं आगत्य, सेन्ट्रल जोसफ कलाशालायां वि-एस्-सि (हानर्स) कक्ष्यायां पश्चिमवर्षपाठं अधीयानः माणवकः आसीत् । तत्पिता च सुन्दरेशशर्मा, मितद्रव्यतया पित्रार्जितं परिमितं क्षेत्रादिकमपि विक्रीय, त्रयाणां पुत्राणां विद्याभ्यासे ज्येष्ठायाः दुहितुः विवाहे च व्ययितसर्वस्वः, महता क्लेशेन नागराजस्य विद्याव्ययाय प्रतिमासं किञ्चित् धनं प्रेषयन्नासीत् । तेन च तस्य ऋणं प्रतिमासं अवर्धत । आत्मनः चतुर्थपुत्रस्य नागराजस्य परीक्षायां प्राशस्त्येन उत्तरणम्, तस्य च अचिरादेव बह्वर्थसंपादयितृकां आधिकारिकपदप्राप्तिं च उत्प्रेक्षमाणः, “अयमेव चरमः संवत्सरः मत्पुत्रस्य विद्याभ्यासस्य, शीघ्रमेव ऋणेभ्यः विमोक्ष्ये पुत्रेण उपार्जितेन वित्तेन । चरमे वयसि च सुखेन वत्स्यामि ।” इति मनोरथशतैः कालं अयापयत् । नागराजश्च पितुः कष्टं दृष्ट्वां दशां जानन् प्रथमद्वितीययोः वर्षयोः सम्यक् पाठान् अधीत्य कक्ष्यायां प्रथमं स्थानं अध्यतिष्ठत् । तृतीये तु वर्षे शनैः शनैः <sup>3</sup> चतुरस्रपदप्रहेलिकायां अतीव बद्धादरः बभूव । प्रहेलिकानिष्ठैः एव सल्लापं अकरोत्, न तु सहाध्येतृभिः । तत्संबद्धान्येव पत्रिकादीनि अपठत्, न तु परीक्षोपयुक्तानि वैज्ञानिक-ग्रन्थजातानि । प्रहेलिकायाः सूचकवाक्यानां उचितानि प्रत्युत्तरपदानि निर्णेतुमेव बहुशः निघण्टून् अवैक्षत, न तु भाषायां प्रावीण्यं अवाप्तुम् । सर्वं वाङ्मयमपि प्रहेलिकादृष्ट्या एव पश्यन् स्वकर्तव्यं सर्वं व्यस्मरत् । तथापि स्वपितुः दुर्दशां अनभिजानन्

वा, तस्य सौख्यापादने अश्रद्धधानो वा स नैवं चकार । किंतु पितुः मनोरथं संपादयितुं, आत्मनश्च बहुधनावाप्तिं साधयितुं सद्यःफलप्रदं लघूपायं अमन्यत प्रहेलिकास्पर्धायां आत्मनो विजयम् । एवं द्यूतैकरसिकानां खलानां संसर्गेण, बालजनसहभुवा आपातरमणीयेषु वस्तुषु आसङ्गेन च, स्वकर्मणः प्राप्त्रश्यत नागराजः ।

नागराजः अनेकशः आत्मनि एवम् आलोचयायास, “बहुविघ्नसंरूढाः परीक्षायां सिद्धयः । अतीव असंभावनीया च परीक्षोत्तरणसमनन्तरमेव उन्नतपदावाप्तिः । यदि तु एकवारं प्रथमं पारितोषिकं मया लभ्येत, तदा उपलब्धं स्यात् मम परिश्रमफलम् । किमतः परं “बि-एस्-सि” इत्यक्षरत्रयेण वा ततोऽपि उत्कृष्टतरेण विद्याविरुदेन वा मे कार्यम् । प्रहेलिकायां विजयः न केवलया बुद्ध्या, किंतु दैवस्य आभिमुख्येन सहितया एव संपाद्यते इत्येतत् सत्यं कामम् । परीक्षाविजयेऽपि इयमवस्था तुल्या एव । ततः को विशेषः अनयोः । यद्यपि एकपदे एव महानिधिप्राप्तिः न सेत्स्यति, तथापि प्रथमं अत्यल्पं किञ्चित् पारितोषिकं, ततः किञ्चिदधिकम् इत्येवं क्रमेण यदाकदाचित् नूनं उत्तमसंभावनां अवश्यं आसादयेयम् ।” इति कृतानिश्चयः सः प्रतिसप्ताहं बहु-व्ययेन अनेकानि प्रत्युत्तरपत्राणि प्रेषयितुं आरभत । आत्मनः सर्वं कालं धनं च व्यर्थं कुर्वन् बहुशः कलाशालायां अपि असन्निहितो बभूव ।

तस्मिन् मासे निर्दिष्टायाः प्रहेलिकायाः सर्वसमीचीनं प्रत्युत्तरं यो दास्यति तस्मै प्रथमपारितोषिकत्वेन चतुर्विंशतिसहस्राणि रूप्यकाणि दीयेरन् इति सर्वासु वृत्तान्तपत्रिकासु महता आडम्बरेण प्रकाशितम् आसीत् । तत् दृष्ट्वा उन्मत्तप्रायो बभूव नागराजः । अत्मने महत् ऐश्वर्यं प्रदातुं लक्ष्म्याः करं प्रसारितं मेने । रात्रिदिवं तस्याः प्रहेलिकायाः समाधाने एव व्यग्रमानसः अभूत् । आत्यन्तिकपरीक्षायाः प्रारम्भाय द्वौ एव मासौ अवर्तेताम् । तथापि “यदि पारितोषिकं लभ्येत, ततः परीक्षायां उत्तरणेन अनुत्तरणेन वा किम् ।” इति परीक्षापराङ्मुखः एव आसीत् । अस्यां एव दशायां नागराजः माणवकावसथे खट्वायां शयानः कविरविजपं कुर्वन् आस्त ।

“नागराज, नागराज” इति उच्चैः आह्वयन् एव कश्चित् खट्वासमीपं आजगाम । न किञ्चित् शुश्राव ध्याननिमग्नः नागराजः । “कविः, उत रविः ?” इति पुनः पुनः जल्पन् एव अशेत । असहिष्णुः अभ्यागतः तं स्कन्धयोः गृहीत्वा अचालयत् । स्वप्रातः प्रतिबुद्ध इव उत्थाय सः, “अहो मित्रं चन्द्रशेखरः । स्वागतं ते, क्षम्यतां

मे अबुद्धिपूर्वकः अनादरः।” इति तं क्षमापयित्वा तस्यामेव खट्वायां स्वसमीपे समुपावेशयत्।

चन्द्रशेखरः—मित्रमणे, कोऽयं नूतनो जपविशेषः त्वया अनुष्ठीयते ‘कविः, रविः’ इति ?

नागराजः—चन्द्र ! अलं परिहासेन। प्रहेलिकासमाधाने कंचित् आतिसूक्ष्मं विषयं अधिकृत्य ध्यायन् आगतमपि त्वां अनुपलक्ष्य त्वयि अपराद्धोऽहम्।

चन्द्रशेखरः—अस्तु, मया पुनः चिन्तितं, परीक्षायाः समुपस्थितत्वात्, वागर्थप्रतिपत्तये आदिकविं वाल्मीकिं, आरोग्यप्राप्तये भगवन्तं आदित्यं च मनसि निधाय त्वं कविरविजपं करोषि इति। श्रावयतु मां भद्रः प्रश्नं उद्दिष्टं प्रत्युत्तरं च। अहमपि तावत् प्रत्युत्तरनिर्णये उपकरिष्यामि।

नागराजः—अवहितमनाः शृणु। “अनेन सर्वं प्रकाशयते” इति \* सूचकवाक्यम्। किरणजालेन सर्वं प्रकाशयति रविः, कविश्च सूक्तिजालेन। अतः द्वावपि शब्दौ अत्र समावेशं अर्हतः। त्वम् तावत् कतरं शब्दं साधु मन्यसे।

चन्द्रशेखरः—(किंचिद् इव आलोच्य) ‘प्रकाशयते’ इति पदस्य तात्पर्यपर्यालोचनायां रविरित्येव समीचीनं समाधानं प्रतिभाति, यतः रविरेव वस्तूनां नयनगोचरतां आपादयति। कविस्तु केवलं बोधयति, न प्रदर्शयति। ‘सर्वं’ इति सूचकपदं तु कविमेव निर्दिशति, यतः रविः स्थूलानां पुरोवर्तिनां च पदार्थानामेव ज्ञानमुत्पादयति, कविस्तु अतिसूक्ष्माणां, परोक्षाणां, आध्यात्मिकानामपि भावानां वैशद्यं उत्पादयति। अत एवोच्यते,

“उद्यन्तु शतमादित्या उद्यन्तु शतमिन्दवः।

न विना विदुषां वाक्यैः नश्यत्याभ्यन्तरं तमः।”

अमुमेव श्लोकं मनसि निधाय सूचकवाक्यं घटितं स्यादिति मन्ये। तस्मात् कविशब्दं विन्यस्य प्रत्युत्तरं दीयतां विजयाय।

नागराजः—सम्यगाह भवान्। “सर्वम्, प्रकाशयते” इति पदद्वयमेव परामृष्टम् भवता। विचार्यतां किंचित् ‘अनेन’ इति पदस्य प्रयोजनमपि। ‘अनेन’ इत्यत्र विद्यमानेन एकवचनेन एक एव सर्ववस्तुप्रकाशयिता निर्दिश्यते। रविरेव

एकः, कवयस्तु बहवः। एतावता रविरित्येव समीचीनं उत्तरं मे भाति। अहो अतिनिपुणाः प्रतारणपराश्च एतेषां कोटिद्वयोपेतानां सूचकवाक्यानां निर्मातारः। अस्तु, तानपि प्रतारयितुं वयं पारयामः। एवमेव संशयघटिताः पञ्चषाः शब्दाः विद्यन्ते। तेषां पर्यायपदानि आदाय यावन्ति परिवर्तनानि कर्तुं शक्यन्ते तावत्संख्याकानि प्रत्युत्तरपत्राणि प्रेषयिष्यामि। अस्मिन् विषये महानपि धनव्ययः न दोषाय। यतः सर्वेषां परिवर्तनानां विनिवेशनेन प्रथमं पारितोषिकं निश्चप्रचं लप्स्यते।

चन्द्रशेखरोऽपि भविष्यन्तं विजयमुद्दिश्य नागराजं सभाजयित्वा, तं चानुमान्य स्वगृहं जगाम। नागराजश्च सर्वाणि <sup>1</sup> उत्तरपत्राणि यथोचितं अक्षरैः पूरयामास। तेषां प्रेषणाय अपेक्षितं पञ्चदशरूप्यकम् अचिरात् प्रतिदेयं प्रतिज्ञाय मित्रेभ्यः ऋणं जग्राह। कालातिक्रमभयात् महता संभ्रमेण <sup>2</sup> लेखवाहशालां गत्वा अपेक्षितानि <sup>3</sup> धनादानपत्राणि गृहीत्वा तैः सह सर्वाणि प्रत्युत्तरपत्राणि च संघटय्य सः <sup>4</sup> प्रच्छदपुटे विन्यस्तवान्। एतावता लेखवाहशालायाः घटिकायन्त्रेण वाद्यमानः पञ्चमघटिका-समयस्य आवेदकः घण्टारवः अश्रूयत। अतिक्रान्तप्रायत्वात् कालस्य, अतीव संभ्रान्तः त्वराद्विगुणरंहसा सर्वं सज्जीकृत्य <sup>5</sup> वाह्यनामादिकं च विलिख्य <sup>6</sup> पत्रनिक्षेपपेटिकायां निक्षिप्य कृतकृत्यमात्मानं मन्यमानः स्वावासं प्रत्यगात्। समनन्तरदिने च सन्निहितपरीक्षार्थं किञ्चित् पुस्तकं सद्यः क्रेतव्यं व्यपादिश्य तदर्थं पञ्चदशरूप्यकाणां अवि-लम्बेन प्रेषणं प्रार्थयमानः स्वपितुः लेखमेकं व्यसृजत्।

ततः प्रभृति नागराजः परित्यक्तसकलेतरकर्तव्यः, अधिगतस्य ऋणस्य प्रतिया-तनार्थं पितुः सकाशान् धनागमं, वृत्तपत्रिकासु सर्वशुद्धस्य प्रहेलिकाप्रतिवचनस्य प्रकटनं च प्रतीक्षमाणः, निमेषानपि वर्षाणीव अनयत्। चिन्ताग्रस्तस्य तस्य कलाशालाग-मनमपि दुःशकमासीत्। <sup>7</sup> कलाशालाध्यक्षोऽपि बहुशः तं <sup>8</sup> कक्ष्यामण्डपे असन्निहितं विदित्वा तमुपालभत।

अतीतानि कानिचिद्दिनानि। प्रातः उत्थाय नागराजः <sup>9</sup> दैनिकवृत्तपत्रिकां आदाय महता कौतुकेन अपश्यत्। सद्यः महता प्रहर्षेण विद्योतमानं बभूव तन्मुखम्। आनन्दाश्रुधारा कपोलयोः अवहत्। कदापि अननुभूतपूर्वं निरवधिकानन्दसिन्धौ प्लवमानं आत्मानं मेने। पत्रिकायां प्रकाशितं प्रहेलिकाप्रत्युत्तरं दृष्ट्वा आत्मना प्रेषितेषु

<sup>1</sup> Solution coupons <sup>2</sup> Post-office <sup>3</sup> Postal orders <sup>4</sup> Cover <sup>5</sup> Address <sup>6</sup> Post-box  
<sup>7</sup> Principal <sup>8</sup> Class-room <sup>9</sup> Daily news-paper.

एकं प्रत्युत्तरपत्रं सर्वशुद्धं व्यजानात् । “ अचिरात् प्रथमं पारितोषिकं लब्ध्वा चतुर्विंशतिसहस्राणां रूप्यकाणां स्वामी भविष्यामि ” इति ध्यायं ध्यायं प्रमुदितो ऽभवत् । अमुं च अभ्युदयवृत्तान्तं सर्वेभ्यः प्रकटीचकार । लेखद्वारा स्वपितरमपि बोधयामास ।

अनन्तरदिने नागराजः \* लेखवाहकस्य आगमनं प्रतीक्षमाणः स्वावासद्वारा अतिष्ठत् । सार्धनवहोरासमये लेखवाहकः आगत्य नागराजस्य हस्ते पत्रमेकं अयच्छत् । तत् पारितोषिकनिवेदनं स्यात् इत्याशंसया यदा सः लेखमग्रहीत् तदा स्वपितुः सकाशान् आगतं तद्विज्ञाय भग्नमनोरथः समजायत । पत्रमुद्घाटय वाचयतः तस्य मुखे तीव्रः निर्वेदः समदृश्यत । सर्वाण्यपि हर्षचिह्नानि सुदूरं अपास्तानि । मन्दं मन्दं वेपमानेन स्वरेण पितुः सन्देशमपठत् ।

“ आयुष्मन्तं नागराजं आशीर्भिः अभिनन्द्य पिता तस्मै एवं संदिशति । चतुरस्रपदप्रहेलिकायाः प्रत्युत्तरपत्राणि तदर्थं पञ्चविंशतिरूप्यकैः क्रीतानि धनादानपत्राणि च मया उपलब्धानि । अन्यत्र प्रेषयितुं उद्दिष्टानि तानि आयुष्मता अनवधानेन, त्वरासंभ्रमेण वा मत्सकाशं प्रेषितानीति मन्ये । अनुपदमेव अत्यावश्यकपुस्तकक्रयणाय पञ्चदशरूप्यकाणि प्रार्थयमानेन त्वया लिखितं लेखान्तरमपि प्राप्तम् । अत्यासन्नायां परीक्षायां अध्ययनपराङ्मुखेन त्वया कथं कालः याप्यते, कथं च मदीयं कृच्छ्रलब्धं धनं व्यर्थीक्रियते इति इदानीं सर्वं सुस्पष्टं परिज्ञायते । अपि च कीदृशं पुस्तकं त्वया अपेक्ष्यते, यदर्थं मया रूप्यकाणि प्रेषणीयानि, इत्यपि तवैव मूर्खतया प्रकटीकृतम् । मदीयः उपालम्भ एव तव समुचितं प्रथमं पारितोषिकं भवतु । अपरं चेयं द्वितीयं पारितोषिकम् । कर्तव्येषु पराङ्मुखं, बहुशः कलाशालायां असन्निहितं च, त्वां दण्डनीयं प्रतिपाद्य त्वत्कलाशालाध्यक्षेण मह्यं लिखितः लेखश्च अत्रैव त्वदवलोकनाय प्रेषितः । स्वकर्मनिष्ठः सन् विद्यां वा सम्यक् संपादय । निष्फलं अर्थव्ययं परिहरन् गृहानेव वा प्रतिनिवर्तस्व ” ।

इत्थं वाचयत्येव नागराजे, “ किमुपलब्धं पारितोषिकम् ? अपि सफलीभूतः कविराविमहामन्त्रजपः ? आगच्छ, सर्वेभ्यः मित्रेभ्यः रुचिरान्नपानादिकं दत्त्वा संमानयामः पारितोषिकप्राप्तिमहोत्सवम् । ” इति साटोपं वदतः चन्द्रशेखरस्य स्वरसंयोगः द्वारि अश्रूयत । अत्यन्तपिहितस्य नागराजवेश्मनः कवाटस्य उपरि अभिघातेन जातः प्रतिशब्दः एव चन्द्रशेखरस्य प्रतिवचनमदात् ॥ .

# Social Service Excursion

*By S. Baskaran, III Hons.*

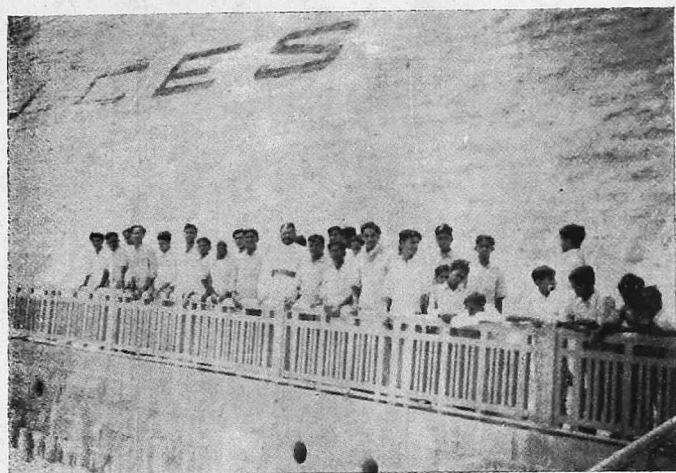


E started on an excursion to Coimbatore and Bhavanisagar on the night of 10th September '54. At about 7-30 a.m. next day we reached Coimbatore Junction. We were happy to see our Director, Rev. Fr. Adisayam, who, having reached the place the previous day, was eagerly awaiting our arrival. We then proceeded to St. Michael's High School where we had a big hall at our disposal.

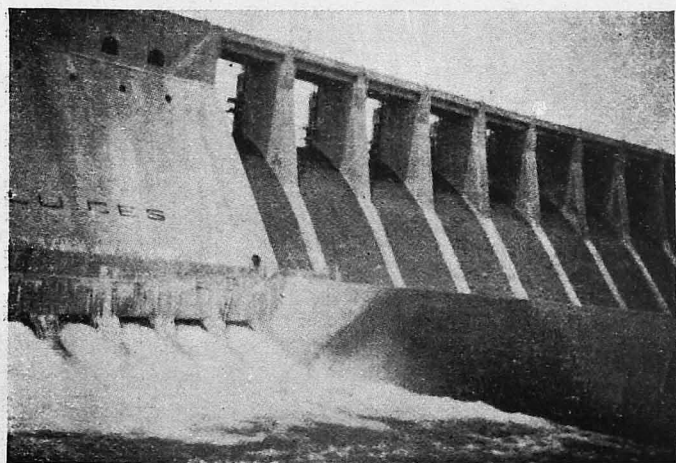
After a refreshing bath and a nice breakfast we began the actual programme of our excursion. We visited Sri Ranga Vilas Spinning and Weaving Mill. It is one of the biggest mills in the City that have augmented the reputation of Coimbatore as the Manchester of South India. As many as 60,000 spindles are installed in its operation. About 1200 labourers are working in the mill in three shifts. Scores of lorries and trucks drop down hundreds of cotton bales. The hard-pressed bales are unpacked and the cotton is loosened. By sucking the air in a tube, cotton is sent upstairs. The impurities and dust particles are got rid of by horizontal fans and again by vertical ones inside the chest of a machine. The cotton thus purified is rolled into cylinder-like shapes. The rolled cotton is fed into a machine which turns it out as fine "spray." This fine cotton is collected as a long thread. Then it is wound around small pegs, and finally yarn is spun from it by the innumerable spindles. The yarn is soaked in water, and after being dried and tested for its quality it is sent to be woven. The cloth made here is rather coarse, and we were told that they would soon produce high-quality fabrics with the installation of new machinery.

The Management have done almost everything to ensure the general welfare of the labourers employed in their mill. On an average a labourer earns Rs. 60 per month. A skilled labourer earns more than Rs. 100. In a certain department of the mill only women are employed. The job is quite suitable to them, for it requires only a little training when compared to processes carried on in other departments. There is a hospital attached to the mill. It gives free medical aid to the labourers. There is also a crèche where the babies of women-labourers are looked after by specially trained nurses. Milk is supplied free to the babies.

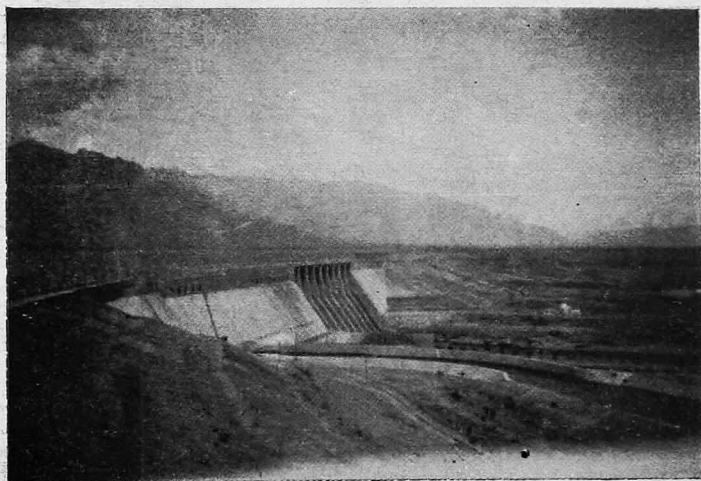
On our way back to St. Michael's we visited the Industrial Exhibition conducted by Mr. G. D. Naidu, the eminent industrial scientist. We there saw a variety of modern automobile machines. The radio-engineering department of the Exhibition was very interesting. Here they teach radio-engineering to students in an amazingly short period of six weeks. A number of radio-sets made by students themselves were



Students of the Institute of Social Service  
at Bhavani Sagar Dam



Bhavani Sagar Sluices and the Spillway



A Panoramic View of the Dam at Bhavani Sagar  
*Photos by C. Doraisamy, III B.Sc.*



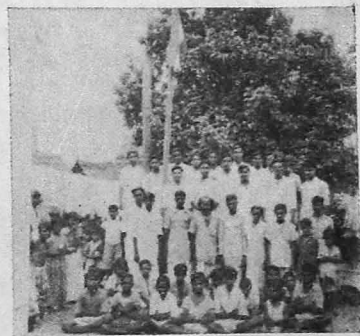
Instructing the Ignorant



Feeding the Poor on  
Independence Day



Slum Dwellers of Kuppankulam



Literacy Squad  
(Social Service)

*Photos by S. Paldano, III B.Sc.*

# SOCIAL SERVICE INSTITUTE



11 NOV 1955



**Social Service Camp at Attayampalayam**  
**27-12-54 to 10-1-55**



exhibited. One such radio had been made by a student in less than three hours.

The next day we went, via Mettupalayam, to Bhavanisagar, about 40 miles from Coimbatore, where an immense river-valley project is carried out. We started from Coimbatore at 6-30 a.m. and reached Bhavanisagar at 9 a.m. The Information Officer explained to us the salient features of the project. They are building a huge dam just near the confluence of the Bhavani and another river, the Moyar. The construction of the dam was proposed a century ago by the same engineer who planned the Mettur Dam. Since they had to construct a  $5\frac{1}{2}$  mile-long bund, the project was kept in abeyance for many years. Soon the researches made in the U. S. A. opened new avenues in dam construction. Stone and cement lost their day, and cheap earth took their place.

After explaining the principle involved in the construction, the Information Officer took us to see the dam at close quarters. The central portion of the dam is made of impervious layers. The two sides of it are made of semi-pervious layers. The sand of these two sides has been compressed so hard as to form only half of the volume it had before. By such construction it has been rendered impossible for water to percolate. The total height of the dam comes to about 130 ft. and its length  $5\frac{1}{2}$  miles. Water can be stored up to a height of 123 ft. Eleven large shutters, all made in Germany at a cost of Rs. 16 lakhs, have been installed in the central portion of the dam. The area of the reservoir is 30 square miles, and its capacity of 2746 crores cubic ft. of water comes to a third of that of the Mettur Dam. A main canal starts from the dam and flows over the land to a distance of 145 miles. At present it irrigates 120,000 acres in the taluks of Erode, Bhavani, and Gopichettipalayam. When the dam is completed, about 200,000 acres will be irrigated. Only the lands between the main canal and the river can be irrigated, the other lands being on a higher level. The site where the dam has now been constructed was full of villages and hamlets. About 6000 acres have been allotted by the Government as compensation for housing and other purposes to those who were thus ejected. The production of hydro-electric power of about 10000 kilowatts is only seasonal. A sum of Rs. 9 crores has been sanctioned for the implementation of the scheme.

On the last day of our excursion we visited the Agricultural College at Coimbatore. The research institute, the museum, the farm, and the milk dairy are very much worth seeing. In the research institute they have conducted a series of experiments on coconuts, groundnuts, and paddy. The experiments have proved successful in producing a bigger yield from these crops. There are different types of cattle-sheds in the farm, all built on hygienic principles. In the milk dairy the most modern

implements are used. A pasteurizing plant has been installed on an expensive but excellent model.

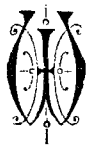
In the afternoon of that day we visited the Central Studios of Coimbatore. We were taken round the various departments by one of the officials who explained to us the devices that would make a small pond look like a lake, and a cardboard house like a mansion. Our voices were recorded for the scene of a certain film which required a great deal of shouting!

Our sojourn at Coimbatore came to an end at about 8 p.m. on that day. We left the place after receiving the blessing of His Lordship the Bishop of Coimbatore.

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## Chemistry at Alwaye

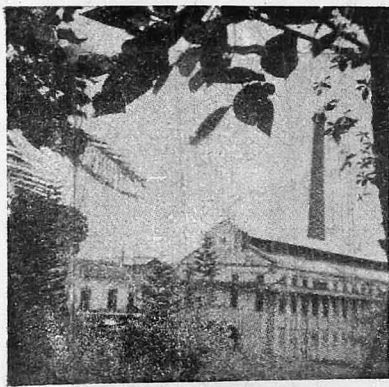
*By U. Harinarayana Rao, III B.Sc. (Chem.)*

E, B.Sc. (Chem.) students of St. Joseph's College, arranged to go on an educational excursion to Alwaye under the able guidance of two of our Demonstrators. So twenty-six of us met at Tiruchi Junction on the night of the 15th of September '54. We got into the Bangalore Express and reached Erode at 2 a.m. the following morning. After a stay of two hours at Erode we boarded the Cochin Express. We reached Alwaye at about 11 a.m. Here we stayed in a Rest-House just near the railway station.

Immediately after lunch we started sight-seeing. We found ourselves packed in a bus proceeding towards a factory at a speed of 50 miles per hour with a skilful man at the steering wheel nicely managing the dangerous turnings and not minding the ups and downs on the road.

The first factory we visited that day was "Travancore Rayons." It is usually called 'Trayons.' With the kind permission of the manager we were led into the factory and given detailed explanation of how rayons are prepared.

Rayon is the product of wood-pulp and caustic soda. Wood-pulp is got from Sweden. The mixture is first pressed to remove the moisture in it. It is preserved in iron vessels for about forty-eight hours so that the mixture may get 'matured.' It is then treated with carbon



'Ogale Glass Factory' Alway  
K. A. Srinivasan, IV B.Sc.

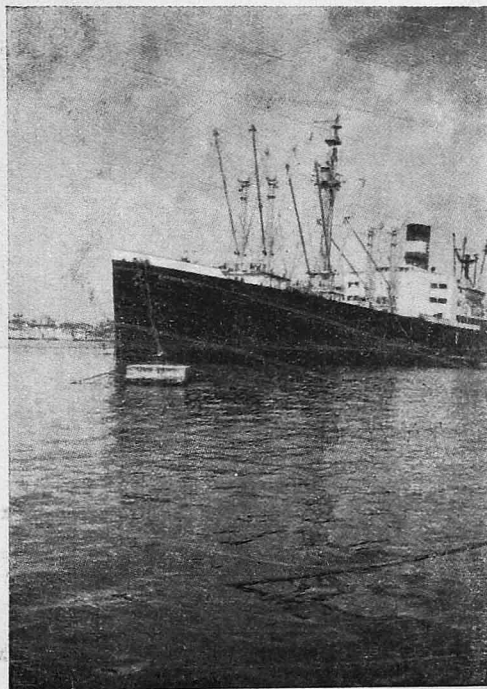


'A Panoramic View of Cochin  
Harbour'  
V. Hariharan, III B.Sc.



'Standard Pottery Works' Alway  
K. A. Srinivasan, IV B.Sc.

ALWAY



'An American boat at Cochin Port'  
V. Hariharan, III B. Sc.



'Entering Tata Oil Mills'  
Harinarayana Rao, III B.Sc.

EXCURSION



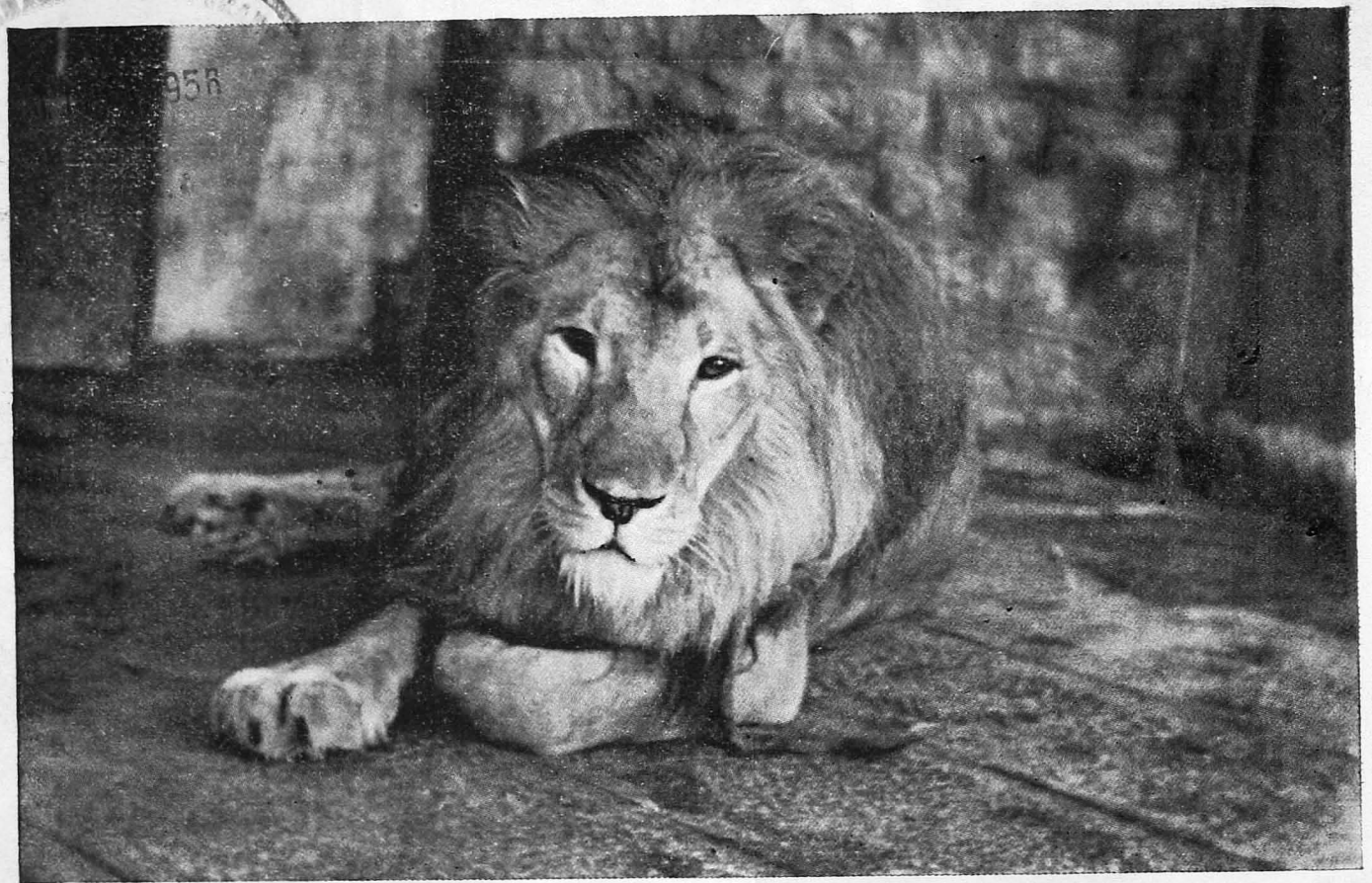
Excursionists at Alway  
Venkataraman, IV B. Sc.



St. Albert's College, Ernakulam  
V. Hariharan III B. S



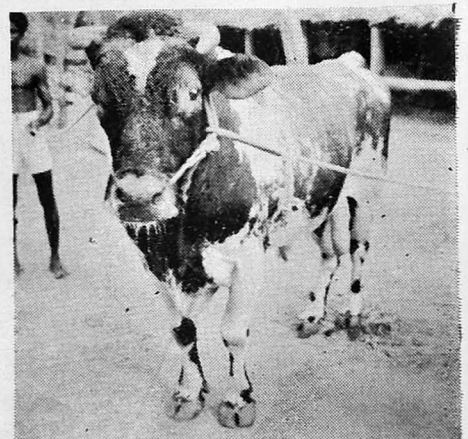
# ANIMALS



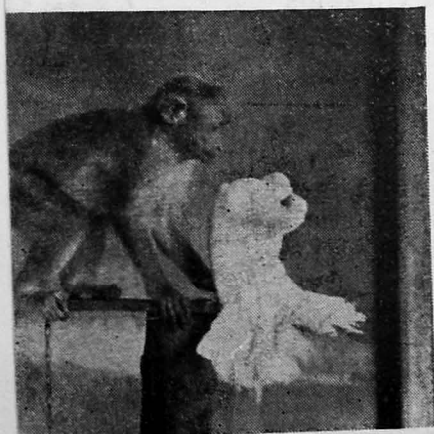
Lion in the Mysore Zoo  
*R. Annamalai, II U.C.*



Spotted deer  
*R. Annamalai, II U.C.*



College Bull  
*Md. Meeran, IV U.C.*



Monkey-pigeon co-existence  
*Md. Meeran, IV U.C.*

bisulphide, and a yellow solution, viscose, is obtained. This is hardened by the addition of sulphuric acid to it.

Viscose is projected through jets which contain small holes in a stream of sulphuric acid. The yarn, the rayon, thus obtained is bleached by various chemicals such as water, hard water, soft water, sodium carbonate, ammonium sulphide and soap solution. After bleaching, the rayon is dried by placing it on aluminium cylinders at  $80^{\circ}\text{C}$ .

That day we had no other item on our programme, since it was too late. Immediately after supper, though early, we went to bed and enjoyed a peaceful sleep.

The next day we spent in three other factories. "Prohibition" was enforced on us. What I mean is that no snapshot was allowed to be taken in any of the factories.

We all went to see "Fertilisers and Chemicals, Travancore, Limited." Large blocks of wood are burnt in big cylinders to obtain charcoal and air is blown over it. Producer gas is obtained, tar being pushed out as a waste product. Here Hydrogen is manufactured by Lane's Process. Hydrogen and producer gas are preserved in separate tanks. The producer gas, is utilised in Lane's Process instead of water gas. The spent gas which contains carbon dioxide, carbon monoxide, and nitrogen, is purified by scrubbing through water and passing through Mono-Ethanol Amine. Pure Nitrogen is also preserved in another tank. The Nitrogen and the Hydrogen obtained are suitably converted to Ammonia. Chromate solution is used for cooling to prevent corrosion. In FACT they also manufacture ammonium sulphate from Ammonia. Sulphuric acid is also prepared by the contact process from sulphur. When we came out we found small holes in some of our shirts. Sulphuric acid, in drops, had stealthily got into them.

From there we hurried to "Travancore Chemicals." Since it was lunch time for the workers, we had to wait for an hour. We were then taken inside. The main chemical reaction is the electrolysis of sodium chloride. It is carried out by sixty-four electrolytic cells. They were arranged in a grand sequence. This was very beautiful to look at from the balcony. Owing to the passage of electric current sodium chloride is converted into sodium hydroxide, liberating chlorine and hydrogen. Hydrogen and chlorine are suitably converted into hydrochloric acid. Eighty tons of Hydrochloric acid are thus being prepared every day.

We proceeded to the 'Indian Rare Earths' which is run by the Government. Here they are manufacturing cerium chloride. Trisodium phosphate and thorium hydroxide are obtained as by-products. Thorium hydroxide will be sent to Bombay in exchange for other chemicals. Cerium chloride as such is not used in India. It is being sent to

America. Two important features of the factory are a small tin-making room and the neatness of the factory.

Next morning the weather was not pleasant. We experienced a terrible downpour. But somehow we managed to get into a bus and reached 'Indian Pottery Works' at 10 a.m. Here they are preparing sanitary wares such as shanks, tea-cups, plates, jugs, etc.

From there we hurried to the "Indian Aluminium Company Limited" which was a mile from the Pottery Works. The important process in which the whole company is engaged is the electrolysis of purified Aluminium Oxide. Carbon anodes are being prepared here. Purified Aluminium Oxide is directly sent from 'muri'. They are getting current from Pallivasal. They are utilising carbon anodes and copper cathodes.

From there we hastened to the Glass Factory. Owing to the good weather we had then we did not feel tired even though we walked a distance of five miles. On the way we had to cross narrow channels and there came a boat to our rescue.

As we had not much time left we entered the Glass Factory. Here they are preparing lantern chimneys, glasses, bottles etc. First of all sand, borax, manganese dioxide, sodium nitrate, and slaked lime are mixed and melted in a big furnace. There was not much to be seen here.

We started for Ernakulam by bus the same afternoon and reached at 6 p.m. The Principal of St. Albert's College was kind enough to give us accommodation even though the university examination was going on.

There were yet so many places to be seen, but the following day being Sunday we could not visit the 'Tata Oil Mills.' Early in the morning after breakfast we started for Cochin Harbour by steam boat and reached the harbour at 10 a.m. Fortunately a ship called "Sabarmathi" stood anchored in all its glory. The Harbour authorities were kind enough to allow us into the ship where we examined all its features.

Soon after breakfast the next day we hurried to "The Tata Oil Mills Limited" where all kinds of soaps, such as Hamam, Palmolive, Nirvan, bar soaps, etc. from groundnut oil and sodium salts of Stearic, Palmatic and Oleic acids are prepared.


When we entered the factory the smell was unbearable. Here they also manufacture hair oils and perfumed coconut oils. Dalda is being prepared by the hydrogenation of oils.

As we were coming out we found a shop inside the Factory. We thought that since they were preparing the things there they would be cheap. Afterwards we found that the commodities were in no way cheaper.

Our Excursion lasted for five days. The knowledge we gained by this excursion was vast. Such excursions should be encouraged.

# Can there be life on the Moon?

By K. Venkatakrishnan, V B.Sc. Hons.

“ONTRARY to popular belief, the Moon does not revolve round the Earth, but the Moon and the Earth revolve round each other—or, more precisely, around a common centre of gravity. The entire Solar System is moving within the Star system at the rate of 13 miles a second; the local star system is moving within the Milky Way at the rate of 200 miles a second; and the Milky Way is drifting with respect to the external galaxies at the rate of 100 miles a sec.—and all in different directions!” Such is the structure of this expanding universe. Puny men gifted with outstanding intellectual capacity have explored this universe through their gigantic telescopes.

As Walter Pater points out, the quest for beauty is an inborn quality of human beings. So scientists were captivated by the beautiful colours and structures presented by some of the planets. The major planets—Jupiter, Saturn, Uranus and Neptune—are very far from the Sun; so they are very intensely cold, too cold indeed to make life on them possible. The possibility of finding life on the planets is decided by their temperature and atmospheric conditions and not by their beauty and structure. Since Mercury is the planet nearest to the Sun, it is too hot, its surface temp. being about  $400^{\circ}\text{C}$ . In Mars, the conditions have changed, though they were favourable many millions of years ago. On Venus, our Earth's twin sister as it is called, the conditions that now exist are unfavourable, though there is a possibility of finding life on it in the remote future. Thus the hopes of the scientists were frustrated.

So they turned their attention to the Moon, which is the planet nearest to our earth, at a distance of about a quarter million miles. It presents a very delightful appearance in the telescope. Its surface is found to contain rugged mountains which are said to have been caused by the tidal bulges produced by the attraction of the Earth while the Moon was younger. As it rotated, the dragging action retarded its motion, until it always turned the same face towards the Earth. The Earth may in course of time also turn the same face to the Moon so that our day will be lengthened. The striking feature of the Moon is the formation of mountains on its surface in the form of concentric rings. These are called craters, their diameters ranging from 1 to 100 miles. There are some craters intersecting others. These might have been produced by volcanic action. Another view is that they are

a result of the bombardment of the Moon by the gigantic meteors on its more scarred face. Many cracks of hundreds of miles have been discovered to cross the ring mountains. How delightful it is to see the coloured streaks or rays emerging radially from some of the craters!

Owing to the roughness of the surface, only 10% of the incident sunlight is reflected. We all know that a lunar eclipse is caused when the Earth's shadow falls on the disc of the Moon, which happens when the Earth comes between the Sun and the Moon. The phenomenon of phase variation is also known to be caused by the fact that at any time only one half of its surface receives the sunlight. During New Moon, the illuminated face is turned away from us, and the reverse happens during Full Moon. It is found that a Lunar Day is equivalent to 14 of our days.

In order to know the possibility of finding life on the Moon its temperature and atmospheric conditions have to be investigated. The temperature of the surface is estimated from the reflected light, using a temperature-measuring device known as a bolometer and also from the wavelength of the reflected light by spectroscopic methods. The temperature at the equator of the Moon is  $120^{\circ}\text{C}$  and at sunset it is  $-10^{\circ}\text{C}$  below the ice-point. During total eclipse, the temperature falls from  $70^{\circ}\text{C}$  to  $-120^{\circ}\text{C}$ . Thus the temperature conditions are extreme and rapidly varying, which is not conducive to any kind of life on its surface. Moreover, the Moon is devoid of atmosphere. Atmosphere comprises water vapour, hydrogen, oxygen, nitrogen etc. If it had atmosphere, it would provide a fuzzy edge in the telescope. Unfortunately, it presents a very well defined disc in the telescope.

Our fear is even more aggravated when we know that owing to the Moon being lighter than the earth, the force of gravity is smaller, which fact enables the atmosphere to drift away from the surface far into space. No propagation of sound is possible. This is a source of annoyance. It is found that the earth meets with millions of meteors every day which are completely vapourised before they penetrate our atmosphere, at a distance of 20 miles from the surface of the earth. That is how we escape from calamity. But as there is no such atmosphere on the Moon to resist the motion of the meteors, the life of any lunar explorer will surely hang by a thread. He is liable to be hit and charred by the meteors at any moment. Hence no one can dream of living on this horrible planet.

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# The Opportunist

*By S. Mahadevan, II U.C.*

**A** gust of cold wind blew and awoke me from my troubled sleep. The train had stopped at some minor station. The door of the carriage was ajar.

A lad of eighteen or thereabout stood at the door. He was covered in rags which were drenched in rain. He looked suspiciously round the third-class carriage as he wiped the drops of water from his head and face. The compartment was dimly lit by a single lamp; yet I could see his features clearly. His face wore a lean and hungry look. There was a furtiveness in his movements that seemed to suggest guilt. His glance rested on me for a moment and then shifted while I was apparently asleep. There was no one except the newcomer and myself.

Suddenly he hid himself under one of the seats. (There were two. I was on the upper berth and therefore I could watch things without other people finding out I was doing so). I laughed silently. 'Poor fellow,' I thought, feeling unusually sympathetic, 'it is one of those ticketless chaps again.' But soon I regretted having been sympathetic. I cursed him in my mind. He had left the door open and the howling wind and rain invaded the carriage.

Reluctantly I was thinking about descending from my place and closing the door when I saw a figure emerge from the darkness outside. It was that of a young man dressed in western fashion, wearing gold-rimmed spectacles. Tall and fair-complexioned, with regular features, he appeared to be handsome in a dim way. He closed the door behind him and walked to the middle of the compartment. The train slowly began to pull out of the station.

I observed that his clothes were soaked in rain. His shoes were muddy. I saw his eyes wander across the place. He looked in my direction, and as the lad had done a few moments ago, turned away. He must have thought I was sleeping. He had not noticed the figure under the seat. He seemed pleased at the state of affairs; and having deposited his kit on a seat, he started to remove his wet clothes. As he did so, something small fell on the floor. The noise of its fall was not heard, for at that time the train happened to be crossing a tunnel making a deafening noise. The young man too was so preoccupied with his thoughts that he did not see a hand shoot forth from under the seat and withdraw the object. All this happened in a few seconds, but not in so few seconds as to escape my attention. I had seen it. It was a small purse.

My heart gave a thud against my ribs. The blood rushed to my head. I was excited and became alert. It was somewhat difficult to watch things without seeming to do so, but I had to do it. The young man hurriedly thrust his clothes into the kit, locked it, and took it with him as he went to the adjoining toilet room.

Meantime I was evolving a plan in my mind how I should make use of the situation. I looked in the lad's direction and saw a momentary gleam appear in the dim light and vanish. "Surely," I said to myself, "there is too much gold in it to be missed." It seemed as if greed and temptation would overcome me; and so they did.

I must tell you that I was not poor in the strict sense of the word. Though I earned a moderate income, it was sufficient for my family. But possessed of a nagging wife and importunate sons and daughters whom the thirst for wealth and comfortable ways of living had made more mean and selfish than they already were, I could not remain satisfied with my income. Here I was now, in the railway carriage, in the presence of a golden opportunity. Why should I hesitate to take my chance?

Things are more easily thought of than done. I confess I did not have the guts to carry out a coup like that and get away with it successfully. I ran the risk of being caught at any moment and severely punished. I had to think of the cloak of prestige beneath which most men conceal their selfishness and meanness. I was rattled. Nevertheless temptation overpowered me and at last I made up my mind to threaten the lad and rob him of the purse.

The young man had returned from the adjoining room. He looked puzzled and excited. He scrutinized every nook and corner of the place. He saw the lad who was playing his part well. He gave me a cold stare while I pretended to be asleep and looked doubtfully at the lad. He kicked him with the toe of his shoe. The lad groaned, turned from one side to the other and continued his beauty sleep. The man was quite beside himself but he could do nothing. He was afraid for some reason. I guessed he had found out the loss.

The train gave a shrill whistle and slowed down. It was still raining outside. The young man, impatient and angry with himself, went out as the train stopped, closing the door behind him with a bang.

I had decided to follow the lad if he got down there. I thought it better to take my chance then and there as the circumstances seemed then to be in my favour. I gathered it was a small station; for there was not much noise or bustle. Instead a frightening stillness prevailed. I watched while the boy, slowly and stealthily, with catlike movement, came out of his place and walked to the door. At the door he hesitated

for a moment. I acted quickly. I was beside him when he turned his head to observe me. The next instant I sent him reeling to a corner of the carriage. He fell back, his head banging against the edge of a seat. He lost consciousness while blood began to ooze out in profusion from his wound.

Briskly I began to search his person for the purse. I found it and within it were a gold chain and a large sum of money. A few seconds later, as the first bell went, I opened the door to disappear into the darkness. I received the shock of my life. I had run into a sleepy ticket-examiner. I recoiled in terror; but it lasted only a split second. Desperate now, I made a leap at him like a wild animal jumping at its prey. I did not know what happened then.

When I came to myself, I found I was in a small room of a railway station. A constable stood beside me. There was also another man with a hypodermic needle, a doctor evidently. I sat up in bed. The purse was gone. The constable barked out that I should get up and go to the next room. I was escorted by two plain-clothes men to that room where two men were seated. One was an Inspector as I understood and the other was none other than the young man I had seen in the train. I let out a cry of astonishment. The young man pointed a forefinger at me and said something to the Inspector that I could not hear properly. The Inspector stared hard at me for a moment and then came out with his formula while the two men in plain clothes slipped handcuffs round my hands. I was accused of having robbed the famous actress (who travelled in the same train as I did) of her gold chain and money. The second charge was that I had also murdered her servant maid accompanying her. I was scandalised at the word 'murder.' What did they mean? I could not stand any more of that. Then it dawned on me that I was going to pay for a crime which the young man had committed. I felt impotent anger rising in me and convulsing me. My emotions were in a turmoil and my head swam. But amidst the whole turmoil arose a vivid picture before my inward eye, namely that of my wife decked in gold chains and my children with their faces flushed with a joy that wealth conferred upon them. I lost my senses.

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### Bigness

"It is the vice of a vulgar mind  
to be thrilled by bigness."

—E. M. FORSTER

# Fifty Years of Co-operation

By P. Chandrasekhar, Post-graduate

**F**IFTY years have passed since the Co-operative Movement was started in this country. On this Golden Jubilee it is natural to inquire into the working of the movement during this half century and point out the lessons taught by its working. It is very often asked: Has the Co-operative Movement achieved any success at all in this country compared with the progress it has achieved in countries like Denmark and Ireland?

Not infrequently it is alleged that Co-operation in India is a Government policy rather than a democratic movement. It is also said that Co-operation in this country is mainly Credit Co-operation. These critical remarks, though relevant in a sense, ignore the fundamental fact that in a country where the majority of the people are engaged in agriculture the emphasis cannot but be on credit. The chronic famines that ravaged the country during the closing years of the last century pointed out the need for an effective organization to provide the agriculturist with his credit needs. To stop the deteriorating agricultural conditions brought about by the huge volume of agricultural indebtedness it was thought that Co-operation would help the peasant to free himself from the clutches of the money-lender. In this respect at least, thanks to the services of co-operators who strove for its success, the Indian co-operative movement has not belied the hopes and aspirations of its founders.

The competition of co-operative credit institutions with the private agencies providing credit facilities to the agriculturist has resulted in the downward trend of interest rates. This was a boon to the peasant, who before was paying exorbitant rates of interest on his borrowings for agricultural operations. As Sir M. L. Darling remarks, "Even where the money-lender's financial hold is unshaken, his psychological influence is weakening."

Another benefit which Co-operation has succeeded in bringing about is the educative influence which it has had on the agriculturist. In many cases it has helped the Agricultural Department to popularise new methods of cultivation. The training which the co-operative institutions afford to our rural countrymen in business methods is a feather in the cap of the movement. The Indian farmer is notorious for his lack of business methods; with the progress of co-operation he is gradually overcoming this deficiency.

And yet Co-operation is not a total success. Much has been said about officialdom and bureaucratic domination, a unique characteristic of

the movement in India. The fundamental principle on which co-operation is based is the desire for self-help. It should spring from the people.

The predominance of agricultural credit to the exclusion of co-operation in other fields of activity is often cited as a defect of the co-operative movement. In recent times, however, efforts have been made for the development of various other aspects of co-operation, from the time of the Reserve Bank's plea for the growth of multi-purpose co-operative endeavours. A fact that co-operation has revealed in its working during this half century is that a distributed emphasis on the various needs of the agriculturist would help to promote a better living standard for our peasants.

The lack of knowledge of basic principles of co-operation among those in charge of the movement is a set-back to its progress. Dishonesty and inefficiency have been the consequence. Recently the Madras Registrar for Co-operative Societies, Mr. J. C. Ryan, referred to the fact that as many as 150 cases were pending against people working in co-operative institutions on charges of misappropriation and mismanagement. Such a state of affairs is undesirable especially in a movement which is based on honesty and mutual help. Among other defects mentioned are the delayed dispatch of loans, the failure to recover loans, the inadequacy of loans, and the lack of proper supervision. All these show the scant attention paid to the effective and systematic management of co-operative education.

In spite of all these shortcomings, however, Co-operation in India can boast of a fair record. The way the movement has lived through adversity is really praiseworthy. During the Depression of the thirties and the Second World War, the movement successfully acquitted itself. Comparing the figures of 1938-39 with those of 1945-46, there is an enormous increase in the number of Societies, the number of members, and the working capital. While in 1938-39 the Movement touched only 6% of the population, in 1945-46 it extended to 10% of the population. The growth of Consumer's Stores and other types of non-credit institutions to unthinkable magnitudes during the war is another feature. The credit societies extended their functions and the Movement has clearly revealed its multi-purpose potentialities.

The main features of the Co-operative Movement during its growth these fifty years have been :—

1. Co-operation in India was not an offspring of the people but a Government policy.
2. The predominance of credit over other forms of activity ever since the beginning of the movement.
3. More or less uniform organization in all States with slight differences here and there.

The future policy should aim at the increase in competence of co-operation to embrace all forms of economic activity of the agricultural and labouring class. This can be achieved by fostering the development of Multi-purpose projects. There is need for greater financial help from the Reserve Bank of India than at present. Carried on on these lines with the co-operation and help of the Reserve Bank, the movement is sure to make rapid strides bringing about an economic regeneration of the Indian worker.

To quote the Reserve Bank Report: "In conclusion it may be said that in spite of all the difficulties which it has had to face, the co-operative movement has had a fairly successful period of development. . . The potentialities are very great in view of the importance given to the movement in all nation-building activities in the various states. Guided properly by zealous co-operators and well-trained officials, the movement has every reason to look forward to an increasingly effective and useful role in shaping the future of the country."

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## A Century After

*By T. N. Seetharaman, IV Hons.*

THE morning's paper lay open before me. On the top of the page were printed in big letters these words: "Three-year B.A. Course—Proposed University reform—Academic Council passes resolution." I threw my head back on the chair. All sorts of questions appeared before my mind. How will the colleges take it? What will be the reaction of students to this change? And, above all, what will be the future of our university education? I closed my eyes and repeated within my mind. "What will be the future of university education? What will be the future. . . .?" It appeared something was happening to me. I closed my eyes tight. Some time passed.

There was a buzz in my ear and it became louder and louder, turning into a huge whirring noise. I slowly opened my eyes to see the source of that noise, if I could. It was. . . . yes . . . it was a helicopter, something which I had seen only in pictures. There was in front of me a huge building. I gradually raised my eyes to see the whole of that building. No, I could not see it. It was so tall. I

raised my eyes still further and further on until my eyes could see the top. It was then that I realised I was standing before a skyscraper. A skyscraper! Then am I in New York? I asked myself. How came I to be in New York? It was unbelievable.

Another noise similar to the one I had first heard disturbed my thoughts momentarily. A helicopter, a skyscraper—sure, this must be New York.

Everybody seemed to be in a hurry, and I was afraid to ask where I was. I hesitated for some time and my eyes caught a man who moved rather slowly, with measured steps. I went to his side and plucking up courage said: "Just a word with you, sir". "Yes", the man groaned. "Can you please tell me the name of this place?" He answered and I was surprised to find that it was the name of one of our own towns in India. I was dumbfounded for a few minutes. Then gathering myself up I slowly walked along the busy road. The new familiar noise of the helicopter interrupted my thoughts at intervals.

Suddenly, there came before my eyes a shop window. I stood before it and looked in through the glass. It was a bookshop. I tried to enter the shop to look at the large number of people moving about inside the shop in a leisurely manner. Just as I was about to open the door, the door opened by itself and a man came bang upon me. I could not see his face, since he had hidden it behind a newspaper. I fell heavily on the kerb. Before I could get up he came to me, gave me his hand, and said with an apologetic smile, "So sorry, I didn't see you coming. It was a mistake." I got up and smiled back. The man began to move. I touched his shoulder gently and said, "Sir, can I have a look at that paper?" "Yes, of course," the man said and handed me the paper. I was surprised. It was rather heavy and a look at the numbering on the last page revealed to me that it contained sixty-eight pages. I glanced through the pages full of innumerable photographs and advertisements until I came to the first page. On top of the page was printed: 10th of January, 2055."

I do not now remember how that paper left my hands or how that man took leave of his strange friend. It was all a dream. The whole thing came to one point. I was in 2055 A.D. A hundred years in the life of this world had rolled by.

It was only then that I realised the full significance of the things I had been witnessing for some minutes. Civilisation had advanced. Skyscrapers had become common things in India. Helicopters were not strange to this land. In fact they had become the conveyance of the common man. There were no trams and no buses moving slowly about the roads. Education was widespread. I had gathered that from the huge crowd I had seen in that bookshop. As

I walked further and further along the round I found that every third shop was a bookshop. I peeped into offices and found that they were all air-conditioned and up-to-date, machines replacing men in some clerical work. Everything was automatic from filing in offices to serving in hotels. You had only to insert a coin into a slot, press a button, and look, there was before you some eatable. People were so machine-minded that I wondered they had no machines to eat and digest for them.

Nothing struck me more than the sheer absence of any beggars. People were so well clothed and so decent in their manners that I felt like a poor, ill-clothed, miserable beggar in their midst. I inquired what had become of the beggars and was told that there were no beggars in any part of the country. Of course, there were poor people (comparatively poorer than the other citizens) but even they had a decent living. One of the acquaintances I made that day told me that I could be sure that a man was poor if he drove in a car along the street. Decent people used helicopters, he said. Steam locomotives could be found only in museums. Atomic-powered airplanes that travelled at the speed of two thousand miles per hour were used by people to travel long distances. And, in fact, some of the rich themselves owned planes. There was an airship with automatic control equipment in every small town. Electric trains could be found in some parts of the country but they were very rare. I should admit that I was really shocked to hear from one of my acquaintances that rich people usually went to the moon, in giant rockets, to spend full or new moon there.

My aimless walk brought me to a small but neat building in front of which there was hung a neon sign. I was indeed amazed to read the words: "Wanted Students—College." I peeped in to see what was happening inside. Behind a glass partition there was a small group of some ten students listening to an old man lecturing from a platform. It was more a conversation than a regular lecture or class. I gathered this from outside, merely looking through the window. The class dispersed after some time and the scholars came out. I approached one of them and took him aside.

"Would you mind telling me what course you have taken?" I asked him gently.

"Why, Business," he answered.

"Business!" I said in astonishment, "Is there any such course?"

"You don't seem to know anything about our education," he replied. "I'll tell you," he continued and we sat on a seat near by.

"I saw a sign just outside. . . . ."

"Yes," he said, "the college is advertising for students. Nobody takes up a college course nowadays and you see how the number has



been going down year by year. In fact, the Principal himself sends out invitations to students individually to join the college. But nobody comes."

"How is the system of education here? I don't understand anything. Can you explain?"

"Yes," he said, "everybody passes his languages and general knowledge, sciences and literature in the lower classes and enters service with some person or institution."

"Are there no Colleges for engineering, medicine, and all that sort of thing?"—I asked.

"No, there are no such colleges. People specialise in the different fields under experts, as their apprentices. The whole theory and practice is taught by the experts and you get first-hand knowledge of things, not mere bookish knowledge."

"Then of what use are these colleges?"

"Why! Here they teach you how to live—the ins and outs of each profession."

"How many years do these courses last?"

"You speak in terms of years. We have to do only one year in a college. There is no college course lasting more than a year and even that is sufficiently long."

"Is it true!", I exclaimed, and as an afterthought added, "Who handles these classes?"

"Experienced men. Those who have practised and retired from their profession. Now, did you see our professor? He was a businessman, a millionaire, and his sons are carrying on the business after his retirement."

"Is he paid anything?", I asked the student.

"No, why should he expect anything? His job is only honorary and so is the work of other professors."

"And what about your textbooks?" I asked my friend.

"We have no textbooks. We did away with them when we finished our lower classes," came the reply.

"And how about the lower classes? Are there lower schools?", I inquired.

"Yes, there are schools. But only a few attend schools. For the rest the lessons are televised home," he replied while I gave out cries of astonishment.

"Do you find. . . .," I began to ask something.

"My helicopter is waiting for me. . . ." he said, winking at his watch.

"Thanks a lot for giving all this information. But one thing more. Is all this education free or. . . ."

"Yes, entirely free. But nobody has the time to undergo this course. Cheerio," he said and went away.

I did not stir from the seat for a long time, but afterwards slowly got up and walked aimlessly. I met a posse of women police marching along the street. I saw women doing jobs which men were in the habit of doing in good old 1955. I asked a stout old lady coming out of a shop about the status of women. She looked at me in an angry fashion and asked "Why, are you mad? . . ." I gathered from her talk that women were in every way given equal status with men. The Prime Minister of the country was a woman and six of the twelve Ministers in the central Cabinet were women.

I moved on and on in that busy thoroughfare looking more and more awkward. I felt as if all eyes were riveted on me and on my shabby clothes. I wanted to hide myself in the dark depths of some lonely corner. A lovely garden came in sight. I entered it and there heard people talking about growing a big tree in two months by injecting something into its trunk. Everywhere there was talk about soilless cultivation and the huge surplus of agricultural products cultivated through that process, which had become the routine method in the whole country.

I felt strange and awkward. My head reeled and I approached the nearest seat and rested my head on the back of the seat. Something seemed to happen to me. I held my eyes closed. My head felt clear again and I slowly opened my eyes. There lay spread before me the morning's paper. On top of the page was printed—. . . . Sept., 1954 under which were the words: "Three-year B.A. course—Proposed University reform—Academic Council passes resolution."


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### This Tinned Age

Come, bombs, and blow to smithereens  
 Those air-conditioned, bright canteens,  
 Tinned fruit, tinned meat, tinned milk, tinned beans,  
 Tinned minds, tinned breath.

# India and the Welfare State

*By P. T. Kuriakose, V Hons.*

OVERNMENT is a contrivance of human wisdom to provide for human wants. Men have a right that these wants should be provided for by this wisdom"—these immortal words of Burke's seem to carry more weight and meaning today than at any other time, as reflected in the great vehemence with which people talk of the Welfare State. What is it that has made this concept so attractive to the imagination of politicians, intellectuals, and economists?

The answer is to be found in the pages of history. The last hundred and fifty years witnessed very dramatic changes in the economic set-up of society. The industrial revolution brought into existence what we now call the industrial proletariat. Before the days of the industrial revolution people lived in small self-supporting families and were able to fend for themselves. But the revolution changed the whole picture. Owing to division of labour and specialisation in production the industrial worker now played only a minor role in the whole process of production. The doctrine of laissez-faire had worked havoc in industrial relations. The worker became just a thing to be scrapped when the employer so felt. The result of all this was that the individual families became more and more unable to support themselves.

The growth of trade unionism coincided with these new developments. People began to feel that it was the duty of the State to look after those individuals and families that were unable to look after themselves and the passing of a series of factory acts and labour and social laws was just a manifestation of this feeling. As a culmination of all this came the U. N. Charter which in Article 55 explained its concept of the Welfare State. And as a practical step the British Government appointed a committee under the chairmanship of Lord Beveridge; the report of this committee and the acceptance of its recommendations by the Government gave England a lead over other countries in establishing the Welfare State in all its meanings.

What is a Welfare State? Unfortunately there is no limit to the confused ideas prevalent about its true meaning. There are a thousand and one interpretations given to it by a hundred and one welfare economists. Dr. Mark Abraham says: "Essentially it is a community where state power is deliberately used to modify the normal play of economic forces so as to obtain a more equal distribution of income, in this way ensuring for every citizen a basic minimum real income irrespective of the market value of his work and of his property." Therefore it is evident that not every State which undertakes some progressive measures can claim to be a Welfare State. There are certain marks which distinguish a Welfare State from a State which undertakes some welfare measures. N. S. Sarkar observes: "The determining factor of a Welfare State lies in the avowed assumption of certain basic responsibilities by the State in regard to promoting education, sanitation, medical relief and means of livelihood to the people and the

correlation thereof of the means of production of national wealth . . . There are, however, some special responsibilities as of unemployment insurance, old-age pensions etc. having a cradle-to-grave sweep, which transcend the traditional concept of State functions and focus the special features of a Welfare State as such."

The Welfare State concept is thus a kind of "guaranteeism." In a Welfare State the wage-earners are protected from unfavourable situations of work, while the industrialists are encouraged by giving them freedom of enterprise with certain restrictions. The consumer is also given protection. By preventing the growth of gigantic industrial monopolies and at the same time maintaining free competition between industrial concerns, the Welfare State safeguards the interests of the consumer. The Welfare State is thus a meeting place of two opposing principles, viz. state monopoly and free competition, and its glory lies in the fact that it blends them together into one.

After having concisely examined the concept of the Welfare State it is now time to see how this concept has found expression on Indian soil. It is to be remembered that it is not something new to India. Our age-old joint-family and caste systems were but different forms of a welfare society. In the place of the modern State the joint family or the caste took up the care of the individual. But times have changed and along with them institutions have also changed. Independence has brought in a new outlook. The old ideas of social service were only negative, and a positive policy had to be evolved. Our Constitution in its Directive Principles lays down that India should endeavour to become a Welfare State. And the inauguration of the First Five-Year Plan marks a definite era in the progress of the Welfare concept in India.

However, although the part that the State has to play as a welfare agency in India has been recognised, the question is about the speed with which India should proceed in the matter of implementing those conditions which make a Welfare State. The present trend seems to be that the State should take upon itself many of those things which in other countries are left to private initiative so that the pace of progress may be speeded up and a Welfare State established sooner. But the experience of the past has proved abundantly that the fulfilment of these conditions is circumscribed by many factors which cannot be easily overcome. A Welfare State implies the provision of a satisfactory basic minimum of the national dividend to each individual and it in turn presupposes an adequate fund from which that minimum can be paid out. But to any one acquainted with Indian conditions it is plain that we do not possess such a minimum.

There are further difficulties. A Welfare State must provide the workers with certain minimum benefits. Now in India where the majority of the workers are employed in agriculture it is almost inconceivable at present that such benefits can be conferred upon them. On the industrial side the Welfare State takes away from the worker all the spurs which

formerly induced him to work. Now that he is assured of the basic necessities of life, he becomes indifferent to the learning of new crafts. Another reason why the worker becomes indifferent (and the English experience corroborates this) is that 30 to 40 per cent of his earnings are taken away by taxation. Besides, it has to be noted that in India where Labour is unorganised trade unions are still used as mere tools by political parties. A Welfare State will give the worker a dominant place in the nation's life. Indeed Labour has to play a mighty role in the building up of the resurgent India; but as long as it does not have proper leadership, that greater influence which the Welfare State gives will be misused.

A Welfare State means high taxation; such high taxation will have very unpleasant results in India. More direct taxation will reduce saving and investment; and more indirect taxes will raise prices and consequently the workers will demand higher wages. The resultant increase in the cost of production will have an adverse effect on the competing capacity of our products in the international markets. To be sure, high taxation will retard the industrial incentive. Saving and investment will suffer, with the result that the industrialisation of the country will be retarded. And only a policy of industrialisation will increase the per-capita saving. If experience has anything to teach in this, it shows that in England the adoption of the Welfare State has only diminished the per-capita saving. Whereas it was 2.8 per cent in 1938, it fell to 1.7 per cent in 1949.

The Welfare State adversely affects the middle classes also. The heavy taxation that will be required in order to finance social services will reduce the standard of living of this class. In the U.K., for instance, there were in 1938 some 900,000 people with an average net income of £575 a year. But the position was different in 1949 when the average net income of the same group was £1050; for when allowance is made for the fall in the value of the pound, it has been calculated that there was a fall of about 20%. And in India when we are making a do-or-die struggle for raising the standard of living of the people, a fall in the standard is to be deprecated.

Thus a Welfare State may be good in itself. It may be good in those countries where circumstances permit it. In India, however, it should be only a long-term policy to be achieved very slowly and gradually. Competent critics still doubt whether many of the economic difficulties which Britain faces today are not due to the Welfare State. The Government of India made a bold attempt in setting up an Employee's State Insurance Scheme and yet the difficulties in putting it through are many. These difficulties prove that the ideal of the Welfare State is very difficult to achieve. What we need today is hard work. There is no short cut: "The benefits of the Welfare State, in the last analysis, are to be attained by sweat of brow and burden of thought." It may be a thing worth striving for, but it needs time and caution.

# नास्तिकता

By B. Raj, II U.C.

नास्तिकता को हम अंग्रेजी में Atheism कहते हैं। जो ईश्वर के अस्तित्व के ऊपर सन्देह करता है, या नहीं मानता है वह नास्तिक कहलाता है। हमें कभी भी यह नहीं समझना चाहिए कि ईश्वर नहीं है। उसके बिना कोई भी चीज़ पैदा नहीं हो सकती। वही दुनियां रूपी चक्र को घुमानेवाला है। उसी के अनुसार सभी काम चलते हैं। सूरज निकलता है, चन्द्रमा प्रकाश देता है, तारे चमकते हैं, रात आती है, मन्द पवन चलता है, ज़ोर से आंधी चलती है, फूल, फल आदि उगते हैं। इसलिए अब हम यह विचारेंगे कि पुराने ज़माने में भारत में नास्तिकता किस हद तक थी, अब किस दशा में है ?

पहले पहल हिन्दुस्तान में जब आर्य और द्रविड लोग रहते थे, तब से लेकर उनके मन में दैव-भक्ति कूट कूट कर भरी थी। इसका प्रमाण हम पुराने इतिहास और वेदग्रन्थों में पाते हैं। वे देवताओं की आराधना करते थे। उनको भगवान और देवताओं के ऊपर बहुत बड़ा विश्वास तथा भक्ति थी। जब कभी उनके समूह में कोई विवाह करना था या कोई अच्छा काम शुरू करना था तो तुरन्त वे भगवान की मूर्ति के सामने जाकर उसकी अनुमति मांगते थे। अगर भगवान की अनुमति नहीं मिली, तो वे समझते थे कि भगवान की पूरी मर्जी नहीं है इस काम में। इसलिए वे तुरन्त उसे छोड़ते या टालते थे। उन्हीं के अनुसार जब कभी मनुष्य देवताओं की विशेष पूजा करने लगता था तभी भगवान भी किसी के द्वारा प्रगट होकर अपनी मर्जी बताता था। अतएव सबों को भगवान के ऊपर भरोसा स्थिर रहा। वे भगवान को सोने, चान्दी, हीरे आदि नवरत्नों से अलंकृत करके बहुत तृप्त होते थे। भगवान के लिए वे अपना सब कुछ निछावर करते थे। अगर कोई बीमार पड़े तो वे भगवान से मनौती करते थे कि अगर वह बच जाय तो खुदा के लिए कुंभाभिषेक करेंगे, नयी मूर्ति स्थापित करेंगे इत्यादि। इस तरह वे अपनी सब चीज़ों को प्यार से ईश्वर की भेंट करते थे। अगर कोई लावारिस मरे तो उसकी सारी संपत्ति देवालय को प्राप्त होती थी। उस ज़माने में एक दस घरों की बस्ती में भी ज़रूर एक मन्दिर था। मन्दिर में भगवान की मूर्ति के नीचे वे इस भरोसे से अपनी सारी संपत्ति रखते थे कि भगवान चोर और डाकुओं से इसकी रक्षा करेगा। इसलिए ग़ज़िनी मुहम्मद, गोरि मुहम्मद, नादरशाह आदि मुसलमान राजाओं ने मन्दिर आदि पुण्य स्थलों को तोड़ा और लूट-मार की।

चौदहवीं शताब्दी के पूर्वार्ध तक मुसलमान लोग स्थायी रूप से भारत में जम गये। हिन्दू विजित थे और वे विजेता। सब कहीं हिन्दुओं की हार ही हार होती थी। इसलिए उनके मन में ईश्वर के प्रति जो उम्मीद थी वह डांवाडोल होने लगी। सभी जगहों में नास्तिकता फैलने लगी। उनके मन से आत्मविश्वास उठ गया। लोग भगवान के अस्तित्व के ऊपर भी संदेह करने लगे। अब जनता की मनोभावना को ईश्वरभक्ति की राह में मोड़ना बहुत आवश्यक था। इसलिए कवियों ने उस समय की मनोवृत्ति को ख्याल में रखकर भक्ति को काव्य का विषय बनाया। हम तो जानते ही हैं कि जब समाज की मनोवृत्ति बदलती है तब काव्य का विषय भी साथ साथ बदलता है। इन भक्तिकाल के भक्त कवियों की दो प्रमुख शाखायें थीं, निर्गुणोपासक और सगुणोपासक।

भगवान को आकार न देकर उपासना करनेवाले निर्गुणोपासक माने जाते थे और इसके विरुद्ध भगवान की लोक-कल्याण-कारी मूर्ति की स्थापना करके उनके गुणों का विस्तार पूर्वक वर्णन करके उपासना करनेवाले सगुणोपासक कहलाते थे। निर्गुणोपासक कवियों में “कबीर” और सगुणोपासक कवियों में “तुलसी” मुख्य हैं।

कबीर निराकार भगवान एक ही को मानते थे। वे हिन्दुओं के भगवान और मुसलमानों के अल्ला दोनों की खिल्ली उड़ाते थे। वे न हिन्दू थे न मुसलमान। उनकी मौत के बारे में यह भी कहा जाता है कि जब वे मरे तो हिन्दू और मुसलमान दोनों झगडा करने लगे कि इन्हे जला दें या गाड़ दें ? आखिर जब कफ़न को हटाकर देखा तो वहां कुछ ही फूल बिखरे पड़े थे। कबीर ने अपने दोहों से दोनों तरफ़ के लोगों को सबक सिखाया कि मूर्ति को अलंकृत करने से कुछ होता नहीं, लेकिन आन्तरिक भक्ति ही सबों को चाहिए। वे एक दोहे से हिन्दुओं को संबोधित करके कहते हैं कि

“पाहन पूजे हरि मिलै, मैं पूजौं पहार,  
तातें ये चक्की भली, पीसि खाय संसार” ॥

लेकिन इसके विरुद्ध थे ‘तुलसी’। वे एक सगुणोपासक कवि थे। वे राम को अच्छे मनुष्य का रूप देकर अपने ‘रामचरितमानस’ में वर्णन करते हैं। इन्होंने राम भक्ति से भरे हुए कई दोहे लिखे हैं। उनमें

“जहां राम तहँ काम नहिं, जहां काम नहिं राम,  
तुलसी कबहुँ होत नहिं, रवि रजनी इक ठाम” ॥

और “ राम-नाम-मनि दीप धरु, जीह-देहरी-द्वार,  
तुलसी भीतर बाहिरो, जो चाहसि उजियार ” ॥  
आदि पद अच्छे हैं ।

इस तरह उस काल के कवियों ने नास्तिकता की राह पर कदम रखनेवाले लोगों को भक्ति मार्ग में मोड़कर ईश्वर के ऊपर विश्वास और प्रेम को पैदा किया । ये ही नहीं, हिन्दू समाज में भी रामकृष्णपरमहंस विवेकानन्द, तायुमानवर आदि बड़े पुरुष अवतरित हुए और नास्तिकता को कोसों दूर भगा देते थे । इसके बाद जनता को फिर भगवान के ऊपर भरोसा आया और वे पहले की तरह पूजा-पाठ करने लगे ।

लेकिन आजकल बीसवीं शताब्दी में लोग कई क्षेत्रों में खूब बढ़ चुके हैं । कुछ लोग तो भगवान के ऊपर विश्वास ही नहीं करते । वे भगवान की मूर्तियों को यह कहते हुए तोड़ रहे हैं कि अगर भगवान हो तो वही आकर अपनी रक्षा कर दे । वे शायद यह नहीं जानते कि भगवान तुरन्त फल नहीं देगा । लेकिन ऐन वक्त पर अच्छा फल देगा । अंग्रेजी में एक कहावत है कि

“ The mills of God grind slowly ; but grind exceedingly fine ”. वे इसके बारे में चिन्ता ही नहीं करते कि अगर भगवान न हो तो कौन दुनियां भर में इस तरह फूल और अनाजों को उत्पन्न करता है ? दुनियां की सभी वस्तुओं को उत्पन्न करनेवाला एक ही सर्वेश्वर है । उसे कई लोग कई नाम से पुकारते हैं । एक पुकारता है अल्लाह, दूसरा ईसा आदि आदि । कुछ नास्तिक लोग कहते हैं कि रूस के सभी लोग भगवान को नहीं मानते हैं, अपनी ताकत के ऊपर भरोसा रखते हैं । इसलिए उसका देश उन्नत दशा को प्राप्त है । लेकिन अब हम “ योगी शुद्धानन्द भारती ” के मुंह से ये बातें सुनते हैं कि वहां के लोग सब के सब रविवार में गिरिजा घरों में जाकर प्रार्थना करते हैं । उनकी आंखों से भक्ति के कारण आंसू बहते हैं । सभी गिरिजा घर लोगों से भरपूर रहते हैं । देखिये, उतना मशहूर देश भी ईश्वर भक्ति में लीन रहता है ।

इसलिए हमें तो यह मानना ही चाहिए कि ईश्वर नामक एक चीज़ है जो दुनियां रूपा चक्र को घुमानेवाली होती है ।

यह कहावत तो मशहूर है कि अल्लाह की मर्जी न हो तो ग़ला भी पैदा नहीं होगा ।



# Book Review

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**A Guide to Patterns and Usage in English.** By A. S. Hornby, Oxford University Press, 1954. .Price : 8s. 6d.

The well-known Press at Amen House has already quite a library of reference books on English to its credit. It has of late brought out all but another family of dictionaries for foreign students whom it sympathetically calls 'learners of English.' Mr. A. S. Hornby, with his experience of English teaching in Japan, has collaborated to compile three dictionaries of different standards for such students and has now alone written this latest addition to the family—this time not a dictionary or word-board but a guide to English phrase, construction, and idiom.

This aspect of language-study is at least as important as vocabulary ; it has been so far unaccountably neglected. A word by itself conveys no meaning ; it is the sentence that is the unit of expression. Patterns or idioms are therefore dealt with in this book in a simple and systematic way. And since the key to meaning is the verb, Mr. Hornby devotes nearly half his book to the twenty-five patterns of the verb and the ways of expressing time by tense. In these two parts of the book the Indian student will find what he chiefly needs, for it is in verb-forms and tense-patterns that English differs most from Indian languages. The use of the continuous tense, the distinction between 'is come' and 'has come', the expression of future time—all these are quicksands to the 'foreigner.'

Parts 3 and 4 deal with adjectives, nouns, pronouns, and adverbials. These seventy pages are full of useful information on the use of parts of speech which are rooted in the long and rich history of English. Here one is in need not only of grammar but of a good ear and of a sense for the right phrase or pattern which comes only with much reading and accurate study of the masters.

Part 5 is probably the best and most useful to the Indian student of English, for it deals with the expression of various concepts like commands and prohibitions, permissions and suggestions, possibility, probability and certainty, purpose and result, cause and reason, comparison and contrast, obligation and necessity. Here Mr. Hornby shows a refreshing combination of strictness and broadmindedness which no mere grammarian is likely to possess. After saying, for example, that 'can' expresses ability and 'may' is used for asking and giving permission, he adds that 'can' is often used in colloquial style for 'may', as in : 'Can I go for a swim, Mother?' and in the expected answer : 'No, you can't.'

A good feature of this book must be mentioned. It does not go on the method of giving incorrect specimens and asking the learner to correct them ; it proceeds by the positive and healthy principle that it is better for him not to know what is wrong. I have no doubt that, though it is not written by one who has experience of 'Indianisms', it is very useful, if not indispensable, to Indian students of English.

# Clive's Calling

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**L**IFE flowed into our House on 22nd June 1954 after three months of repose with the return of seniors refilled with fresh hopes, new vigour and energy. With the admission of the enthusiastic and cheerful freshers this noble building of historical interest turned into a centre of educational and cultural value. Our Warden, "a man to all the students dear, and passing rich with 300 students a year," gave a hospitable welcome to all with his usual, genial smile.

In conformity with the long preserved traditions of our hostel, the semi-democratic office-bearers for the year were elected. Sincerity of purpose, earnestness, unfailing devotion to duty, and utmost efficiency are the chief features of our office-bearers.

The first quadrangle meeting took place on 26th June '54 when Rev. Fr. Warden asked us "to settle down to work right from the beginning". If anybody was too busy to attend the meeting, he was busy indeed.

On the day of the first feast, the flush of overwhelming joy and happiness could be seen on the faces of juniors and seniors alike.

Our hostel library began to function from the first of July and it is gratifying to find that the hostellers have been making constant use of the books.

The Inaugural address of our Association was delivered on 4th July '54 by Mr. M. K. Venkataraman, M.A., of National College. Thanks to the unfailing co-operation and overwhelming enthusiasm of the inmates, the association has been making very remarkable progress. One of the striking achievements was the successful conducting of the "Study Circle Lectures."

On the morning of 22nd July '54 we had a minor picnic at Mullakudi, a small village situated on the bank of the Cauvery. The green fields, the gentle breeze, the buzzing songs of the bees were the sweet remembrances of a happy day spent amidst dear friends and numerous guests and our smiling, busy Warden. Some went to the Grand Anicut to have a glance at the roaring river with its various branches. But they began to repent of their decision when they had to come all the way back. They returned weary and haggard though proud of their achievement.

Independence Day dawned with the hoisting of the national flag by Prof. Hirudayaswami Reddiar, M.A., followed by a fine speech in which he referred to the countless great men who had laid down their lives at the altar of freedom. An oratorical contest in Tamil also

took place in which budding orators were ushered in. On the same afternoon, Carl T. Rowen, one of the ten outstanding journalists of America, visited Clive's and talked to us about "America."

At the approach of the first terminal examination we had mixed feelings of apprehension about the impending exams. and joy at the nearness of the vacation.

The beginning of the second term was not very pleasant owing to the melancholic effects of the exam. One significant event of this term was the starting of Tutorial Classes for II U.C's. under the guidance of Fr. Warden and the budding Additions of Clive's faced severe ordeals.

For about three days commencing from 15th October, Clive's invited hundreds of spectators who flocked to witness the Centenary Basket Ball matches.

An English oratorical competition took place at the beginning of November, wherein our silver-tongued orators showed their talents. The day of Deepavali dawned delightfully with the detonation of crackers, and instilled fresh hopes and mirth. On 4th November, Rev. Fr. Murphy, S.J. paid a visit to our hostel and talked to us about games and sports. If enthusiasm can reflect ability in games, Clive's can boast of her talents. But considering the rather low strength of Clive's as compared to other teams, we did extremely well in the Pruv<sup>o</sup>t tournament. Though Clive's had no tracks and fields, yet her sportsmen always cherished the highest ideal—"Play the game in the spirit of the game."

After the second terminal exams. some packed up things for home and some prepared the necessary things for the My-Ba-Ma-Ma excursion organised by our Deputy Warden.

The last term blossomed forth on 4th January '55 with the arrival of our brothers after a fairly long interval. Everybody seemed to be more serious than ever, determined to settle down to work—better late than never!

The Pongal sun witnessed the opening of the Fine Arts Exhibition by Major P. R. Subramanyam. As usual a music competition was held on the same day; and though the general standard was not high, yet a few did very well and bagged the prizes too!

The hoisting of the National Flag was done by K. M. Vallatharasu, M.P., on the morning of Republic Day and was followed by an oratorical contest.

Our Hostel Day was celebrated on 6 February. In the morning Sri. P. V. Pavithran, M.A., Assistant Superintendent of Police, hoisted the national flag. The evening function was presided over by Sri. A. Srinivasa Raghavan, M.A., Principal of V.O.C. College, Tuticorin.

The homelike atmosphere of Clive's is all the more *enriched* by the parrot which calls "Akka" to perfection, the monkey which is an unending source of mischief, and the fat cat all the time busy running after rats. Some brothers of our  $1\frac{1}{2}$ -year-old monkey occasionally visited the hostel, and became the target of our Fr. Warden's unerring aim and they rested peacefully in our College python's stomach.

T. G. VENKATRAMANI, IV U.C.

## New Hostel Notes

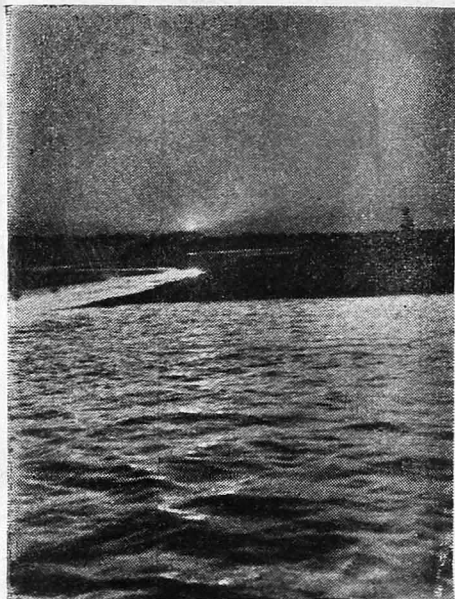
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On the 23rd June, 1954, with the opening of the College, New Hostel once again sprang to life. Right at the start, we had a very pleasant surprise in store for us. Our Fr. Siqueira, who we thought last year would be leaving us, was here once again. Probably the links of love which made him walk twelve miles to come to us in that fateful cyclone of November 1952 were too strong to be severed. There he was with our Rev. Br. Mariasoosai offering smiles to all those who came.

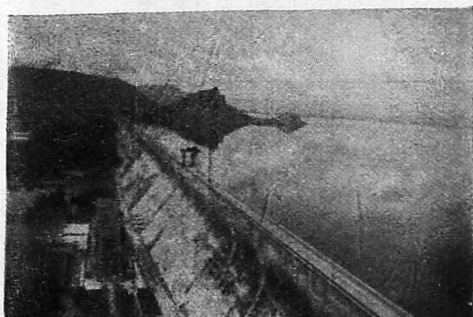
We had other good news also. Our hostelers had secured the first places in the College in all the three Honours examinations. In fact, two of our men, S. Sundaraganapathy and M. S. Lakshmanan, obtained University prizes and medals. Our achievements in the academic field were brought out in a startling way when the College Day came. Nineteen awards came to New Hostel, and in the Degree classes we got more than half the prizes open to us, a really meritorious achievement considering the fact that we house only one-fifth of the total number of students in the College. It may be added that our success has been 100% in 12 university examinations, viz. the three branches of M. A.; the three branches of Honours; B.Sc. (Hons.) Part I and Subsidiary; B.Sc. Physics, Chemistry, and Botany; and B.Com.

In the sphere of extracurricular activities, we have maintained our good record. A number of Secretaries of the various College Associations are from our Hostel. It was a member of our Hostel who won the first prize in the Elocution Contest held by the Trichy Rotary Club and we had a representative of ours in the Inter-Collegiate Oratorical Contest at Mathurai. Quite a number of prizes were secured by us in the Fine Arts Exhibition this year also.

Lest all this should imply that New Hostel cares more for brain than for brawn, mention should be made of a few of our feats in the



*K. M. K. Kamatchi, II U.C.*



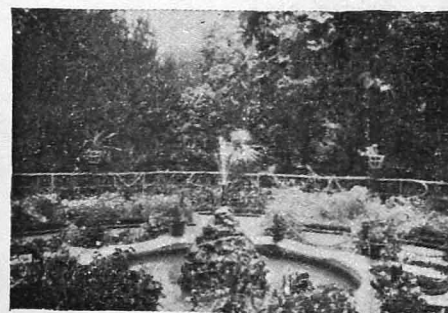
METTUR DAM  
and Power House  
*A. Gnanaraj, III U.C.*



Ornamental Gardening  
below the Dam Site  
*D. Sampath, I U.C.*



The Main Falls at Courtallam  
*E. Sundaresan, I U.C.*



A scene in the Government  
Botanical Garden, Ooty.  
*G. Kittu Rao*

## SPOTS



Sunrise at Cape Comorin

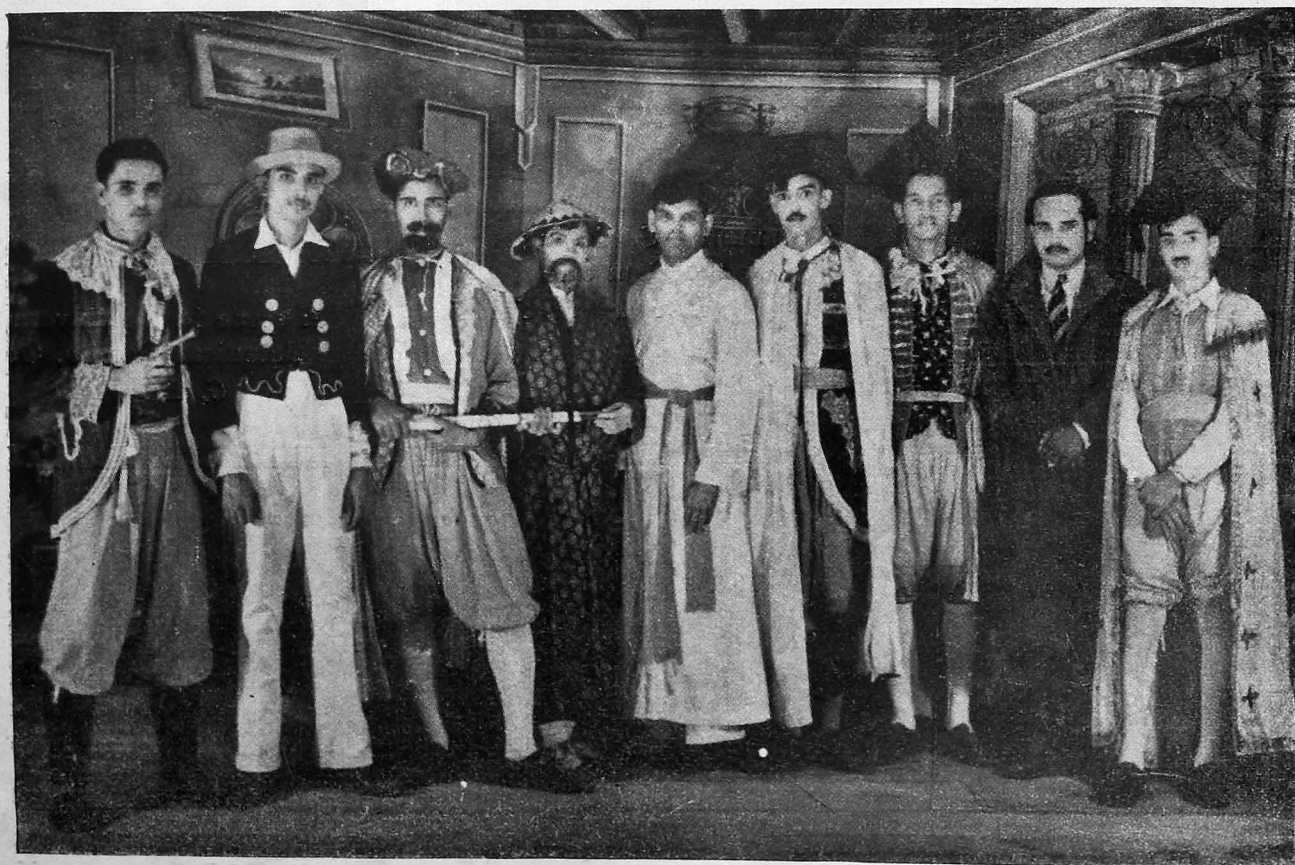


"STILL WATERS"  
*A. C. Ramaswamy, II U.C.*





Football (Dayscholars)  
Winners of the Ramasami Sivan Cup



"THE CHINESE PUZZLE"  
College Day Play

field of sports and games. We won the Pruvôt Trophy for games with ease. But this year we won for the first time the Rapinat Trophy for athletics with an overwhelming lead of 120 points. We won more than 35 cups in the College Sports, including almost all the rolling cups. Such a domination of the College Sports by a single Hostel was so unprecedented that Rev. Fr. Murphy, who presided over the function, called that day the New Hostel Sports day! It must also be pointed out that two of our hostelers, Varghese Paul and Ratnalingam, represented the Madras University in the Inter-University Sports at Aligarh, and that our Athletic Captain Paul Jacob came first in Hop-Step-and-Jump in the Madras State Meet, in the third week of January '55.

One of the new features this year is the motto of our Hostel. Our men do not come from the same place. All the districts of Madras State are represented. Andhra State, Travancore-Cochin, and Ceylon beyond the seas have their sons here. They come from different communities. But all these differences do not exist inside our Hostel, where every man considers another as his brother and shares with him his joys and sorrows. This is cast in our motto, COR UNUM (= One Heart) which reflects the New Hostel spirit in its truest form.

Another of the specials this year was the evening tea on November 7 to celebrate the glorious performance of our Hostel sportsmen at the College Sports, and the institution of January 26th as our Sports Day. But the "red-letter day" of the year was assuredly February 2, our Hostel Day. It was also the day when our Old Boys, who have banded themselves together as 'The New Hostel Sporting Club' with our Warden as its President, were our guests. Their annual meeting, the second since the inception of the Club, took place in our Assembly Hall at 10 a.m. that day. Mr. K. S. Venkataraman, M.A., I.C.S., District Judge of Tanjore, presided over our Hostel Day. Both he and Mr. P. Prabhakaran, M.A., who hoisted the National Flag that morning, brought out clearly the 'personality' of our hostel—'one heart' inside and "neatness, regularity and order" outside.

This year we had an Exhibition which was opened by Lt. Col. Swami Desikachari on 30th January. We had sections in Philately, Numismatics, Photography, and Picture-collecting; but the grandest exhibit of all was the cardboard model of our Hostel cut and painted with infinite patience and accuracy by our artists. We should thank all those concerned, particularly the organizers, C. Ranganathan and S. Subramanian, and the exhibitors for their selfless sacrifice to add some spice to New Hostel life.

A much needed amenity for such a big and well-known Hostel as ours was installed this year. We now have a telephone with the number 548. It has proved very useful to our parents and ourselves, even in this very short time.

The Pyramid-building which is a special feature of New Hostel Day deserves special mention. Being essentially a co-operative effort, it trains people to work as a group and not for each one's individual self which is completely submerged. The excellence of their 22 items this time showed that they had put in weeks of serious practice. After such co-ordinated practice, it is no wonder that they were able to give almost a professional touch to their show.

New Hostel can boast of a fine library, though our Father Warden refuses to call it by that name. There are quite a good number of books of various kinds, scientific, philosophic, religious or economic. There are also many bound volumes of excellent magazines. Though one of our hostelers works as a librarian, it is really painful to see that not many people make sufficient use of this small library. It is to be hoped that in future at least the library will be put to good use.

Another thing which needs rejuvenation is the New Hostel Orchestra. Started three years back, our orchestra reached its zenith last year. But this year, most of last year's stars have left the Hostel and our new finds are yet to mature. Consequently our orchestra has been struck very badly and our talented members should leave no stone unturned to re-establish it in its former position.

The aim of hostel life, to mould and perfect the growing personality of a young student and make him not only a gentleman but a good citizen, is the goal New Hostel sets herself to achieve. We have already created a tradition for our atmosphere and the correct guidance we get here. We look forward to the day when the word 'New Hosteler' shall become synonymous with good conduct and gentlemanly behaviour and therefore be a certificate in itself!

E. S. RAJAGOPAL, IV B.Sc. (Hons.)

## Sacred Heart Hostel Diary

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*Reopening Day* :—Bright morning dawns carrying students back after summer holidays. A queue in the shape of a Q is seen before our Warden's room. He manages to handle all, especially the newcomers, with an occasional "Application form?" or "Parish priest's certificate?" He has been keeping himself busy during the holidays. Electric bells are installed all over the place. Nobody can now give the excuse: "I didn't hear the bell, Father."



*June 25* :—First family gathering. Fr. Warden reminds us that to study is our primary aim in coming here and exhorts us to work hard from the beginning. He welcomes the newcomers with a gentle smile and appeals to us to approach V Hons. students for further advice and guidance!

*June 26* :—Mass offered in the College church by the Most Rev. Dr. Martin Lucas, S.V.D., Apostolic Internuncio for India. He treats us to a sermon on the need for sanctifying grace—"The only lasting distinction is to be in a state of grace." At 10 a.m. we receive him in the Lawley Hall. He exhorts us to remember the great good which our superiors here are so willing to do for us.

*June 28* :—Office-bearers and members of the "diplomatic circle" assemble in the library. Fr. G. P.'s advice—"Be practical, reflect, and then act."

*July 4* :—Adoration Sunday.

*July 18* :—Corpus Christi Procession. An external manifestation of our internal faith in our Eucharistic Lord. Those who witness it for the first time are struck by the solemn procession with hymns and chants. It is to signify that not we, but Christ lives in us.

*July 22* :—The annual retreat begins—three days of solitude, silence and meditation. We try to discover ourselves, and if we succeed, we discover God and God discovers us too.

*July 31* :—Feast of St. Ignatius—Solemn High Mass and Benediction.

*August 4* :—Pilgrimage to Vailankanni. We pray in the church of Our Lady of Health that she may obtain for a world diseased the healing balm of peace and unity.

*August 15* :—Feast of the Assumption of the Blessed Virgin Mary and Independence day. Mr. Joseph Chinnappa hoists the National Flag.

*August 20-22* :—Triduum in honour of the B.V.M., the climax of our Marian Year celebrations. On the first day, Rev. Fr. Provincial hoists the Papal flag and declares open the Marian Exhibition. This Exhibition, the work of days and nights all for love of Mary our Mother, attracts hundreds of Catholics and non-Catholics.

On the third day, Pontifical High Mass in the College church by Rt. Rev. Dr. R. Sundaram, Bishop of Tanjore. At 10 a.m. Academy in the Lawley Hall. Prof. M. Arokiasamy, M.A., and Mr. V. M. Sammanasu M.A. speak. Candle-light procession in the evening.

*September 28* :—College reopens. All are back after Michaelmas holidays.

*October 24* :—A very quiet Mission Sunday. At 10 a.m. a film show: "Below the Saharas." Then a raffle; Fr. Headmaster is lucky to get a

banjo!—a banjo of all things! Fr. Chockiah's hopes are blasted. Grand auction sale after dinner. All this not for the sake of fun but to win more souls for Christ.

*October 25* :—A very calm and solemn pilgrimage to Holy Redeemer's. No doubt it is a problem to keep six abreast; but all the same the on-lookers are greatly edified.

*October 31* :—Feast of Christ the King. Solemn High Mass in the morning and solemn Benediction in the evening. At 10 a.m. a grand rally in the Lawley Hall. It is a symposium on "The Responsibilities of Catholic Students." Two of our Honours men and two ladies from Holy Cross College speak on different aspects of the problem.

*November 28* :—Feast of St. Joseph Pignatelli, S.J., a new addition to the galaxy of Jesuit saints. In the evening Prof. Thomas Srinivasan eulogizes the new saint and exhorts us to give ourselves generously to the Society.

*December 8* :—Feast of the Immaculate Conception of the B.V.M. The end of the Marian Year and the beginning of a new life in every one of us.

*January 4* :—College reopens. The number of hostellers who have not yet turned up is a record for all time.

*January 13* :—A memorable day! Fr. G. P. speaks to all of us together for the last time in the year. It is an impressive, instructive and eloquent speech pregnant with wisdom. He gives out a few precepts which are sure to stand by us throughout our lives. "It is not the lessons which you learn but your character that counts." "Education consists in training in virtue, which for us means grace." "Progress without religion is nothing." We are sure these words will remain ringing and reverberating in our ears throughout our lives.

*January 14* :—We have the pleasure of listening to Mr. Jeremy Mitchell, the Asst. Secretary General of Pax Romana, on this international movement; he explains the importance of the All-Asia Seminar held in Dec. '54 at Loyola College, Madras.

*January 26* :—Republic Day. "Blood on the Moon" in the afternoon. Servants' sports in the evening. Many new items.

*February 2* :—Feast of the Purification of the Blessed Virgin Mary. We congratulate Rev. Fr. George Thottungal who took his Last Vows in the morning. An address is presented to him along with a rich spiritual bouquet.

*February 11* :—Feast of our Lady of Lourdes. Car procession.


*February 13* :—Hostel Day. The greatest event of the year. It is the only day when Fr. G. P. categorically says: "Don't study." In the

morning after Mass, Mr. V. M. Sammanasu, M.A. hoists the Papal Flag. Sports after breakfast and Music Competition after dinner. Not the recognized sportsmen and musicians, but "amateurs" take the lion's share, thereby showing that the spirit, not the muscle or the melody, is the thing. Rev. Fr. Headmaster distributes the prizes. After Benediction in the evening comes the Social in our lawn. Our chief guest is Dr. G. D. Veliath, Vice-Principal of Mangalore Medical College, a small man with a big heart brimful of compassion and fellow-feeling. He poses a few problems that confront the nation and gives vent to a few thoughts fit to be pondered. His is a call to the Catholic youth of St. Joseph's to put Christian charity into practice.

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## Games and Sports 1954-'55

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E commenced our activities early in July with the Intra-mural Tournaments in all Games. There was keen competition in Football, Volleyball and Basketball. The Rev. Fr. Pruvôt Trophy for Games was annexed by New Hostel, while the Sacred Heart Hostel and Clive's Hostel tied for the 2nd place. The Dayscholars also had their share of honour. Their Football team won the Ramasamy Sivan Cup. The healthy rivalry between the Hostels was responsible for bringing out latent talents, so that a number of young players were available who could be shaped to replace the seniors who had left us last year. Our teams had regular practice by playing friendly matches with local clubs and Colleges. The Football, Cricket and Basketball teams gained valuable experience in the tours undertaken during the Michaelmas holidays. This naturally enabled our teams to do well in the Inter-Collegiate tournaments that came off during the second term.

The College Annual Athletic Sports Meet was held on the Mahé Ground on 4 November 1954. As usual the events were held on an Inter-Hostel basis, and there was very keen competition among the competitors of the different Hostels. The beautiful costumes of the athletes, the colourful banners and flags—together with the sweet strains of music by the College Band—added lustre to this function. A large number of competitors took part in every event and the standard of performance was high. The most enjoyable items of the day were the Staff tug-o'-war, the Obstacle Race for the N.C.C., and the Musical Chairs for the

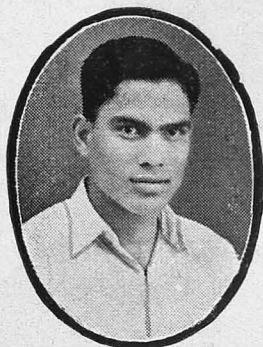
Midgets. The New Hostel team deserves special congratulations on winning the Rev. Fr. Rapinat Trophy for the first time, defeating the holders by a wide margin. The Rev. Fr. Kalathil Shield for Juniors was won by Sacred Heart Hostel, while the Rev. Fr. Siqueira Cup for Seniors was won by the New Hostel team. The Senior Championship Cup was annexed by Varghese Paul, while R. Padmanaban won the Junior Championship. Rev. Fr. L. D. Murphy, S.J., who presided over the function, while appreciating the standard of performance in general, advised the students not to dissipate their energy by competing in too many items, instead of specialising in a few events in which they could achieve excellent results. He welcomed the idea of providing separate events for 'Juniors' and suggested that other colleges might follow this example.

The University Inter-Collegiate Athletic Sports Meet was held at Madura on the American College grounds early in November. More than 250 competitors from sixteen Colleges in the Madura Division participated. There was very keen competition in almost all events and several new records were set up this year. We had some anxious moments when one of our best athletes had a muscle pull and was disabled during the Sports. But the rest of the team rose to the occasion and won both the Relay events and annexed the Popli Shield for the eighth year in succession. Varghese Paul was declared the best athlete of the day and a special cup was awarded to him. Five of our athletes were chosen to represent Madura Division at the Inter-Divisional Sports Meet in Madras. The mofussil athletes proved their worth by winning the University Athletic Championship Cup for the 3rd year in succession. Two of our athletes, V. T. Ratnalingam and Varghese Paul, represented Madras University at the Inter-Varsity Sports Meet held at Aligarh. Paul Jacob, one of our senior athletes, represented the College at the Madras State Olympics and won the first place in Hop-Step-and-Jump. Our College team also won the Championship Shield at the Trichy District Sports Meet held in January 1955.

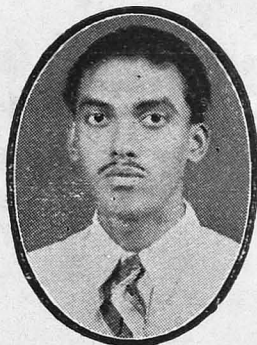
**Cricket.**—With the departure of some of our good cricketers last March we had some difficulty in finding fresh talents from among the juniors. As soon as the players were finally selected we started regular practice. The Cricket Clubs in Trichinopoly readily responded to our invitation and favoured us with a number of friendly matches. In fact no Sunday passed without a cricket match. Our cricket team also went on a tour to Madras during the Michaelmas holidays. It played with some of the best teams in Madras and gained valuable experience. Our Captain Narasimhan gave a very good account of himself by his all-round performance.

In the Inter-Collegiate Cricket Tournament we had an easy victory over National College, Trichy. In the second round, the match with

# OFFICE-BEARERS (SPORTS & GAMES)



N. Narasimhan  
(Cricket)



Md. Mustapha  
(Football)



E. D'Costa  
(Hockey)



Games President  
Rev. Fr. A. J. Thamby, S.J.



S. Ponnuraj  
(Basketball)



N. C. Matthew  
(Volleyball)



Physical Director  
(Mr. N. M. Joseph)



General Captain  
(Paul Jacob)



S. T. Paldano  
(Tennis)



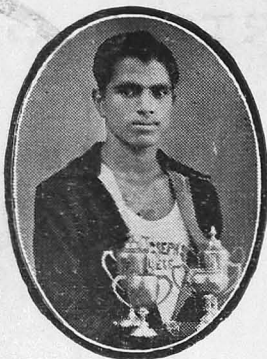
K. K. Sirangi  
(Athletics)



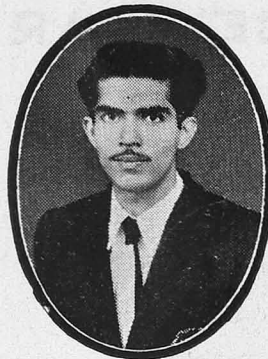
S. Palaniappan  
(Badminton)



# ROLL OF HONOUR

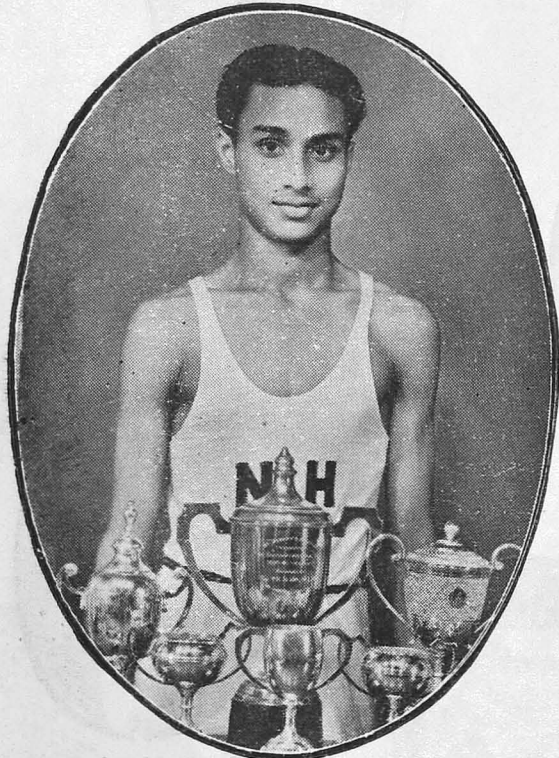


V. T. Ratnalingam

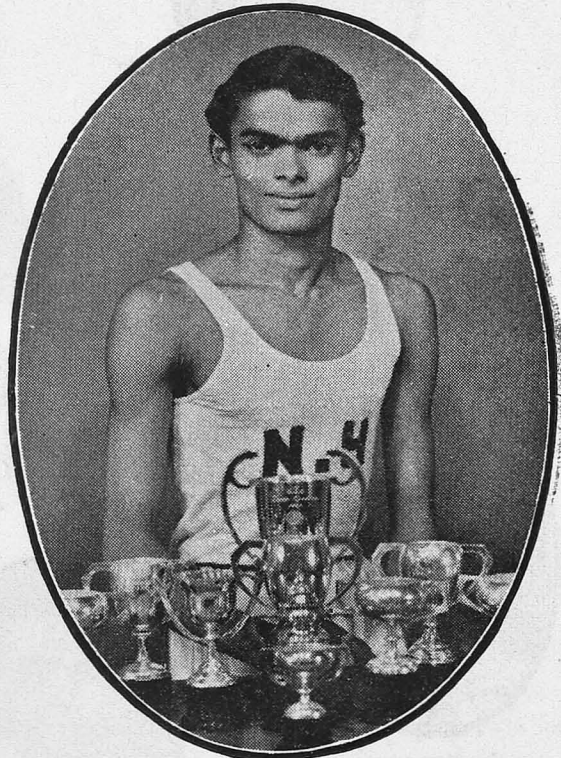


Paul Jacob

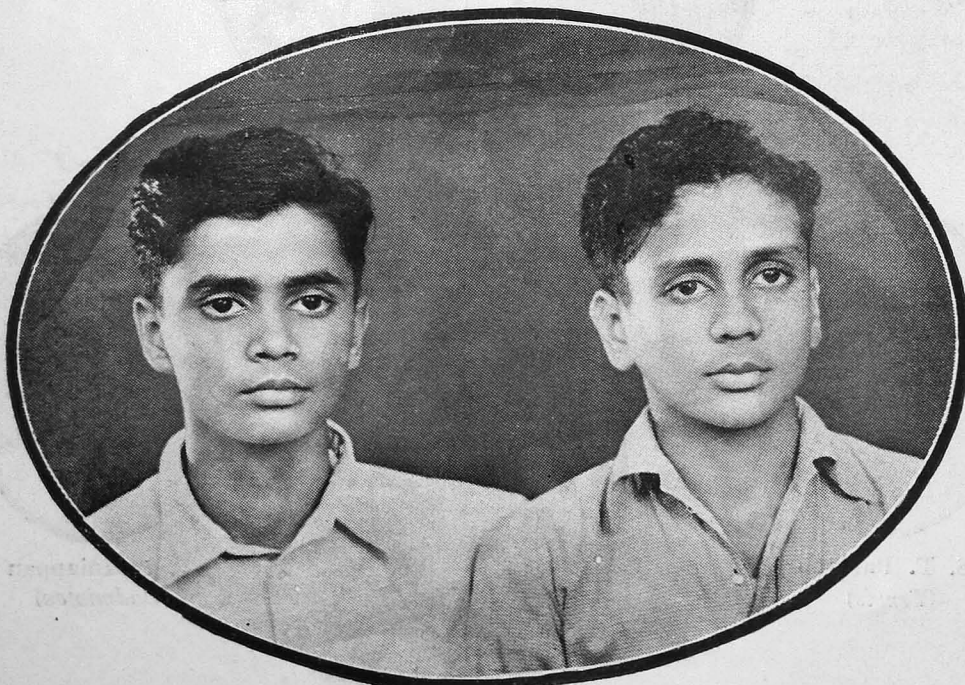
*Two of our Outstanding Athletes.*



Varghese Paul (*Senior Champion*)



R. Padmanabhan (*Junior Champion*)



## TENNIS

M. V. Krishnakumar (*Winner*) & S. R. Sridharan (*Runner-up*)  
*(S. India Hard Court Junior Championship Tennis)*

Alagappa College forced our players to put forth their best. We did have some anxious moments during the game, but our batsmen won the match by a comfortable margin. In the zonal finals held at Trichy we defeated Govt. College, Kumbakonam, by 9 wickets. At the Divisional finals played at Madura against American College, our batsmen and bowlers struck good form. Mahadevan and Harshan proved excellent batsmen, while Surianarayanan and Ebenezer shared the bowling honours. We are proud to be the first winners of the excellent Bhavnager Cup founded by Dr. Alagappa Chettiar.

**Hockey.**—Our Hockey team, consisting mainly of young players, gave early promise of good results consequent on the experience gained by them in a series of practice matches arranged with local schools and colleges. In the Inter-Collegiate Tournament we defeated Alagappa Arts College, Karaikudi, and National College, Trichy, in the preliminary rounds. In the north zone finals we fought with Alagappa Engineering College for three days and conceded the honour owing to a solitary goal scored at the last minute on the third day. While the young players deserve praise for what they have done, we believe they can do better if they play with confidence and do not drop chances within the opponents' ring.

**Football.**—In Football we had the largest number of replacements owing to the exit of several of our good players. The Captains Md. Mustapha and Paramanandam made use of all available chances to hold as many practice matches as possible. In addition to this, the team went on a tour to Ernakulam during the Michaelmas holidays and played a number of friendly matches with some of the best teams on the west coast. The players showed good progress and they expected to do well in inter-collegiate matches. The match with Govt. College, Kumbakonam, ended in a draw on the first day. Our forwards showed good combination on the second day and victory was ours. In the next round, we were less fortunate and lost to National College by one goal. However, mention should be made of the good game exhibited by S. Doraiswamy and Paramanandam.

**Basketball.**—Our Basketball players under the energetic leadership of S. Ponraj and G. Narayanaswamy showed signs of good performance. The Intramural tournaments gave our players a good start and it was followed up by a series of practice matches played almost every week. A very useful tour was undertaken during the Sept. holidays. In the University Inter-Collegiate tournament we defeated Jamal Md. College and National College in the preliminary rounds. The zonal finals against Alagappa College, Karaikudi, proved a very exciting game. We won the match by a comfortable margin. The Divisional final came off immediately after the Christmas holidays and our players could not give of their best. We lost the match by a very narrow margin.

We are happy to record that our Centenary Basketball Tournament is becoming very popular and attracting good teams from the metropolis and other centres. This gives our young players an opportunity to witness the technique of experienced players. This year our College team defeated Annamalai University in the preliminary rounds but later lost to Madras Law College who were ultimately the winners of the tournament. Our Old Boys gave a good account of themselves but at the final surrendered the honour to the Law College team. The enthusiasm of our Old Boys who take part in the tournament from year to year deserves much appreciation.

**Volleyball and Badminton.**—Volleyball and Badminton continue to be very popular games in the College and especially in the Hostels, though we are unable to boast of any spectacular success. In the Inter-Collegiate Tournament we won the preliminary rounds only, but in Badminton we secured the T.D.A.A. open Championship Shield for the 2nd year in succession.

**Tennis.**—Our tennis courts near New Hostel have attracted a large number of young enthusiasts whose standard is fairly good. We had high hopes in our champion Krishnakumar who lived up to them in the preliminary rounds of the University Inter-Collegiate tournament. However, he had to concede the victory to a veteran player of Alagappa Engineering College, Karaikudi. But we are happy to record that Krishnakumar has made up for this by winning the Junior Championship at the S. India Hard-Court Tennis Tournament held recently in Madras. He was also runner-up in the Tennis Doubles tourney, partnered by his cousin S. R. Sridharan, another promising player of our club.

**Chess.**—The Chess club has been functioning steadily from the beginning of the year under the able guidance of Mr. Suriyanarayana Iyer. It is gratifying to note that as many as twenty-six students have participated in the Annual Chess Tournament.

**Inter-Class Tournaments.**—Our activities for the year are rounded off by the inter-class tournaments in all games. This keeps up the enthusiasm and the sporting spirit of our players right up to the end of the year. These tournaments are well contested, providing excitement and pleasure so necessary in February, when otherwise students are busy with textbooks and dreaming of the approaching examinations.

N. M. JOSEPH,  
*Physical Director.*





# Report of the College Sodalities

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**T**HE activities of the Sodality commenced early in July 1954. The great number of the members rendered it necessary for the Sodality to function again in two groups: Sacred Heart Hostel and Inter Division. Mr. Cyril Anthony and Mr. D. John were elected Prefects of the respective sections. The recitation of the Little Office and a short but instructive exhortation, by which the complexes, anxieties and fears of the modern soul are shaken off and integrated Christian youth is shaped, constitute the weekly meeting of each group. This year we did not celebrate terminal feasts in view of the Marian Year celebrations.

Besides the special functions every Saturday throughout the year, we went on August 6 on a pilgrimage to Velankanni. We participated in that universal jubilation of the children of Mary, in having a Marian Exhibition, a Triduum of Prayers, and above all the Academy, presided over by Rt. Rev. R. A. Sundaram, M.A., D.D., D.C.L., Bishop of Tanjore. Even in the busy hours of the examinations, we celebrated on the 8th of December the feast of the Immaculate Conception, most fittingly, because loyal children of Mary could not abstain from rejoicing in her glory and triumph.

Besides these purely spiritual exercises, the Sodality had its share in the various fields of genuine activity.

The Elocution Section has functioned successfully. The members of the Tamil Elocution Section, under the leadership of Mr. G. Britto, met every Sunday. There was also a Malayalam and an English Elocution Section, the general secretary being Mr. T. A. Jose. Doubtless much of the progress of the members in the art of public speaking was due to the able guidance of Rev. Fr. Arokiasamy and Rev. Fr. A. Panackal. An extempore speech competition and two Quiz programmes have also been conducted under the auspices of this section with remarkable success.

The Voluntary Catechism Section under the leadership of Mr. A. Augustine was as usual very active in teaching catechism twice a week.

Mr. Philomindas was appointed to arrange for our visits to the Government Hospital. Rev. Fr. Director accompanied by two sodalists went once a week to cheer up the patients, thus fulfilling the prophetic words of Our Lord: "Blessed are they that mourn, for they shall be comforted."

Under the leadership of Mr. G. Britto the Adult Education Night School functioned on progressive lines and our sincere thanks are due to the "voluntary lecturers."

Our heartfelt gratitude is due to the Directors of the Sodality—Rev. Fr. Froehly, S.J., and Rev. Fr. G. Thottungal, S.J.,—for the very kind guidance and inspiration they have given us all through the year.

N. G. THOMAS, *Secretary.*

# C. S. U. Report

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**T**HE headquarters of the C.S.U. was in this College till the beginning of this year. Last July it was shifted to Loyola College, Madras. Together with the headquarters Rev. Fr. P. Ceyrac, S.J., the Chaplain-General, also went to Madras. The C. S. U. of St. Joseph's will ever cherish a pleasant memory of him and will be grateful for his good offices. Our new Chaplain is Rev. Fr. George Thottungal, S.J.

The activities of this year began with the election of the office-bearers :

*President :* V. S. Ouseph  
*Secretaries :* F. P. Rayan  
Joseph Mundackal.

The inaugural meeting was held on 11th July '54. Rev. Fr. A. Nevett, S.J. of the Institute of Social Order, Poona, inaugurating the activities spoke on "The Responsibilities of Catholic Students." Study circles were formed shortly afterwards and began their work.

Rev. Fr. Chaplain, president, and secretaries went to Madras to attend the central committee meeting which took place on 17 and 18 July, when a decision demanding a new constitution for C.S.U. was adopted.

At the beginning of the second term the Chaplain-General paid a visit to our unit and spoke about the All-Asian Seminar. In October, on the feast of Christ the King, we organised a symposium in co-operation with the C. S. U. unit of Holy Cross. Miss Mendonça and Miss Gratia from Holy Cross and Mr. T. D. Felix and Mr. George James from our College spoke on the various aspects of "The Responsibilities of Catholic Students in Free India." The presidential address of Prof. Thomas Srinivasan was inspiring.

Two delegates—T. D. Felix and Joseph Mundackal—from our College took part in the All-Asian Seminar held in Loyola College from 10 December '54 to 2 January '55. After their return, at the beginning of the third term, they gave their impressions of the Seminar to all the students of our unit at a public meeting presided over by Prof. Hirudayasamy. The Seminar has been a landmark in the Catholic Students' movement in India. On 14 January Mr. Jeremy Mitchell, Asst. Secretary of Pax Romana, paid us a visit and spoke about the Pax Romana International movement to which our C. S. U. is affiliated.

The core of our activity is the cell work which has been carried out successfully this year. There has been substantial help from the senior students in this matter; and the dayscholars who have in spite of many difficulties held regular meetings of the study circle deserve our hearty congratulations.

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# Social Service League Report

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**T**HIS year offers no striking item to record. We number 110; we regularly cleaned and disinfected the streets and children of 8 slums; we visited and helped the patients in the General Hospital every week; we ran every evening two night schools and some 25 of us joined the Community Camp near Erode during the December holidays. Yet, though this looks like the ordinary carrying out of an ordinary syllabus, we notice several good points worthy of attention.

The first is that, though the League has no more the thrill of novelty about it, it excites great eagerness in the hearts of the students.

The second is the gradual disappearance of the superiority-complex and the untouchability-complex, giving place to two appreciable qualities: unassuming manners and gentler ways when doing work among the down-trodden.

The third good point is the ease with which the members carried out their activities. There was less repugnance, less struggle. From the beginning they took to it quite naturally. One would say that heroism is for them a matter of daily routine.

All these good things are the outcome of two powerful factors. First, the impetus given by the enthusiasm of the members of the Social Service Institute, and secondly the genuine desire that, if we are not able to convert slums into neat streets and unkempt children into pretty boys and girls, we shall at least convert ourselves into large-hearted men, broadminded patriots, useful and sympathetic citizens of India, and not mere certificate-hunters.



# Institute of Social Service

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OUR Institute of Social Service completed the first year of its existence on the 2nd of July 1954. By that time all the activities planned for the year were over. The most important achievement was the Social Service Camp during the summer vacation at Kiliampatti where our students built a school which will be an enduring monument of the willing cooperation of the students and the villagers. In the camp our students learnt the dignity of manual labour and the fruitfulness of self-help in managing their own mess. As soon as they came back after the summer holidays they faced their final examinations cheerfully and they were graded into first, second and third class on the basis of the complete record of their work throughout the year. They were privileged to receive their diplomas on the 4th of August 1954 at the hands of the Hon'ble Rajkumari Amrit Kaur, Union Minister for Health, who, in the course of her presidential address, wished the students and the Institute well and expressed the hope that this Diploma course would soon become a Degree course. As a souvenir of the activities of the first year of the Institute a neatly got up Annual Record was issued in October 1954.

The second year of this Institute began, as scheduled, on the 2nd of July 1954 when the Diploma course for the current academic year commenced with 28 students. Mr. V. Sammanasu, who had been teaching adult education the previous year, expressed his inability to continue his work; he was therefore relieved of his task, which was taken over by the Director himself. We thank Mr. Sammanasu for his invaluable services during the first year of the Institute. Other members of the staff continue their useful work and deserve our gratitude, particularly Dr. Enok under whose able guidance the medical course has gained immense popularity. This is the only course which has in addition to the regular Diploma students others who attend only these lectures in order to qualify for the St. John Ambulance certificates. The agricultural training imparted by this Institute has been placed on a better footing this year, thanks to the kind cooperation of the Dt. Agricultural Officer who deputed the Agricultural Demonstrator and the Plant Protection Officers to give useful lectures and demonstrations to our students. We are very grateful to the Dt. Agricultural Officer and the other officers of the Agricultural Department for their valuable help.

During the September holidays our students went on an excursion to Coimbatore and visited the Agricultural College, the Textools and G. D. Naidu Institute, Rangavilas Spinning and Weaving Mills, and Bhavanisagar Dam. An account of these visits is found elsewhere in this



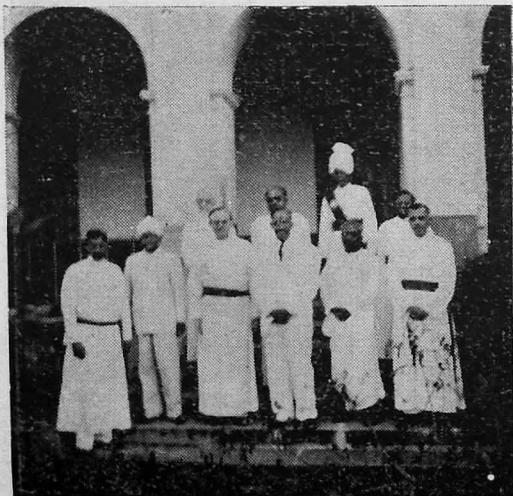
**SOCIAL SERVICE LEAGUE AND INSTITUTE 1954—'55**



11 NOV 1958

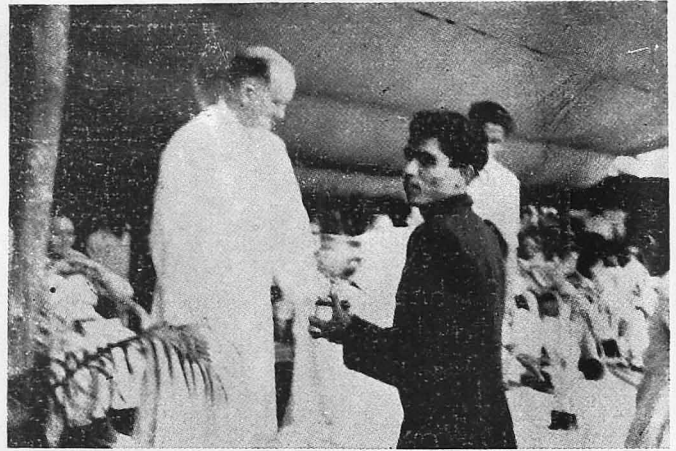


Rajkumari Amrit Kaur  
K. S. Ramakrishnan, III Hons.



Dr. R. M. Alagappa Chettiar's Visit  
S. Nithyanandham, IV B.A.

# MEMORABLE OCCASIONS



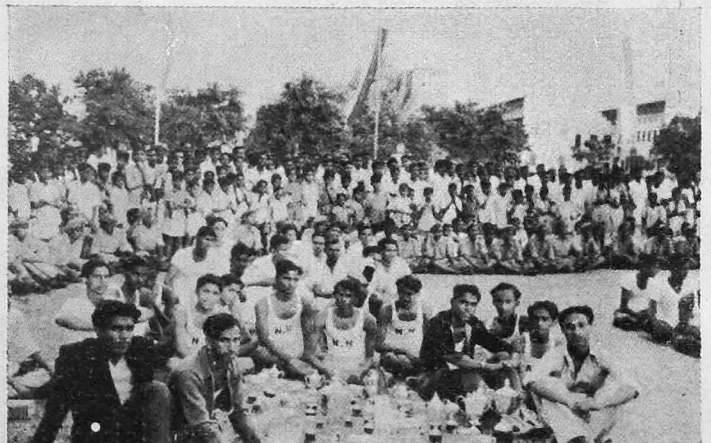
Paul Jacob receiving the Rapinat Cup on behalf  
of New Hostel

V. K. Lakshmanan, IV U.C.



Pole Vault : Arunachalam comes first  
clearing 9' 6".

V. K. Lakshmanan, IV U.C.



New Hostel Athletes with their cups.

V. K. Lakshmanan, IV U.C.

Magazine. This year too our students were able to visit the Golden Rock workshop and the workers' colony to get some preliminary knowledge of labour welfare and industrial relations. An additional feature of this year's activity was block placement for 2 weeks in some of the leading Mills of South India. Two of our Diploma holders spent two weeks in the Madura Mills during the September holidays and two others had similar opportunities in the Pankajam Mills at Coimbatore during the Christmas holidays. We thank the management of these Mills for helping us in this matter and hope that other Mills also will give us similar facilities.

This year's social service camp was unique because of special circumstances. New regulations regarding the minimum strength and duration of camps were issued by the Union Government, but the actual procedure was not quite clear. The Director of our Institute was in correspondence with the Union Government and the Community Project Officers of Erode, obtained permission to have a two weeks' camp and arranged to hold the camp from 9th to 23rd Dec. '54. But owing to the non-receipt of official sanction in time the camp had to be kept in abeyance and the students had to be sent home. When the sanction arrived on the 17th Dec., herculean efforts were made to call back the students. Students of the Institute, members of the Social Service League, and even others were pressed into service to make up the required number. The camp was actually held from 27th Dec. '54 to 10th Jan. '55. The 52 students who took part in it will never forget the hard work they put in and the happy days they spent in Attayampalayam and Samigoundanpalayam near Nasianur.

Our routine field work every Wednesday evening was also put on a better footing this year. Thanks to the cooperation of Messrs Pavamani and Xavier our students were able to do better work in Kuppankulam, Valluvetheru and Vamadam. In their work of slum cleaning they obtained the cooperation of the Sanitary Inspector of the locality and of the slum-dwellers themselves. They celebrated Independence Day on a grand scale this year. The adult education centre in the Thennur Municipal School was working satisfactorily throughout the year. The first anniversary of this centre was celebrated on the 26th Jan. '55 under the presidency of the Chairman of the Trichy Municipality, Sri. Annamalai Muthuraja, who was so much pleased with what he saw and heard that he promised to instal electric lights in the Municipal School building at an early date.

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# N. C. C. 1954-'55

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THE year under review has been exceptional in that our activities commenced earlier than the reopening of the academic year. The Cadre Camp, which so far used to be held at the end of the first term in September, was conducted at the end of the academic year in May '54. The Camp, which was held in the far-off village of Pennalurpet in Chingleput Dt., lasted 21 days from 10 to 31 May. Our Coy. was represented by 2 officers and 60 cadets. Our cadets had an entirely different experience in this camp, as it was devoted almost entirely to social service work. The vast extensive tank calculated to irrigate about 30 acres of land and the irrigation canal about  $2\frac{1}{2}$  miles long speak volumes for the hard work put in by the cadets of the II Circle NCC. The cadets of this Coy. had a very large share in the work of our Bn. which won the trophy for social service. The VIPs who visited us in camp included Sri. K. Kamaraj, our Chief Minister, almost all the other Ministers of the Madras Govt., Brig. Virendra Singh, Director of NCC, and Major Gen. Katoch, G.O.C. Madras Area. Being the Bn. which had taken the largest number of cadets in spite of the difficulties involved in dragging them out of their homes in summer, we annexed the Attendance Trophy also.

Our team of regular staff, with Sub. R. M. Warriar and CHMs Unni Nair and Govindan Nair, underwent a change in the middle of the year when CHM Govindan Nair was replaced by CHM Raman Nair. Our Sub Sab and the two CHMs are continuing their devoted service to the Coy. and we are doing our best to make their stay with us as comfortable as possible.

The recruitment of cadets began soon after the reopening in June. As usual quite a big crowd applied for enrolment and with great difficulty a very large number was filtered out partly on medical grounds and partly because they were unable to stand the physical strain reasonably expected of young men of their age.

During the first term we concentrated on the preliminary training of the junior cadets who were being initiated into the ABC of military science. Senior cadets had their feel of the rifle when they went on the range for miniature shooting during one of our field-day excursions into Andipatti House. RQMS Hiruthayaraj scored the highest number of points and won the CO's medal. A special cadre camp for C cert. cadets was held in the premises of the Jamal Muhammad College for 7 days from 19 to 25 Sept. The first camp of its kind, it was of immense benefit to our senior cadets, especially because we are nowadays less and less devoted to military training in our normal camps.

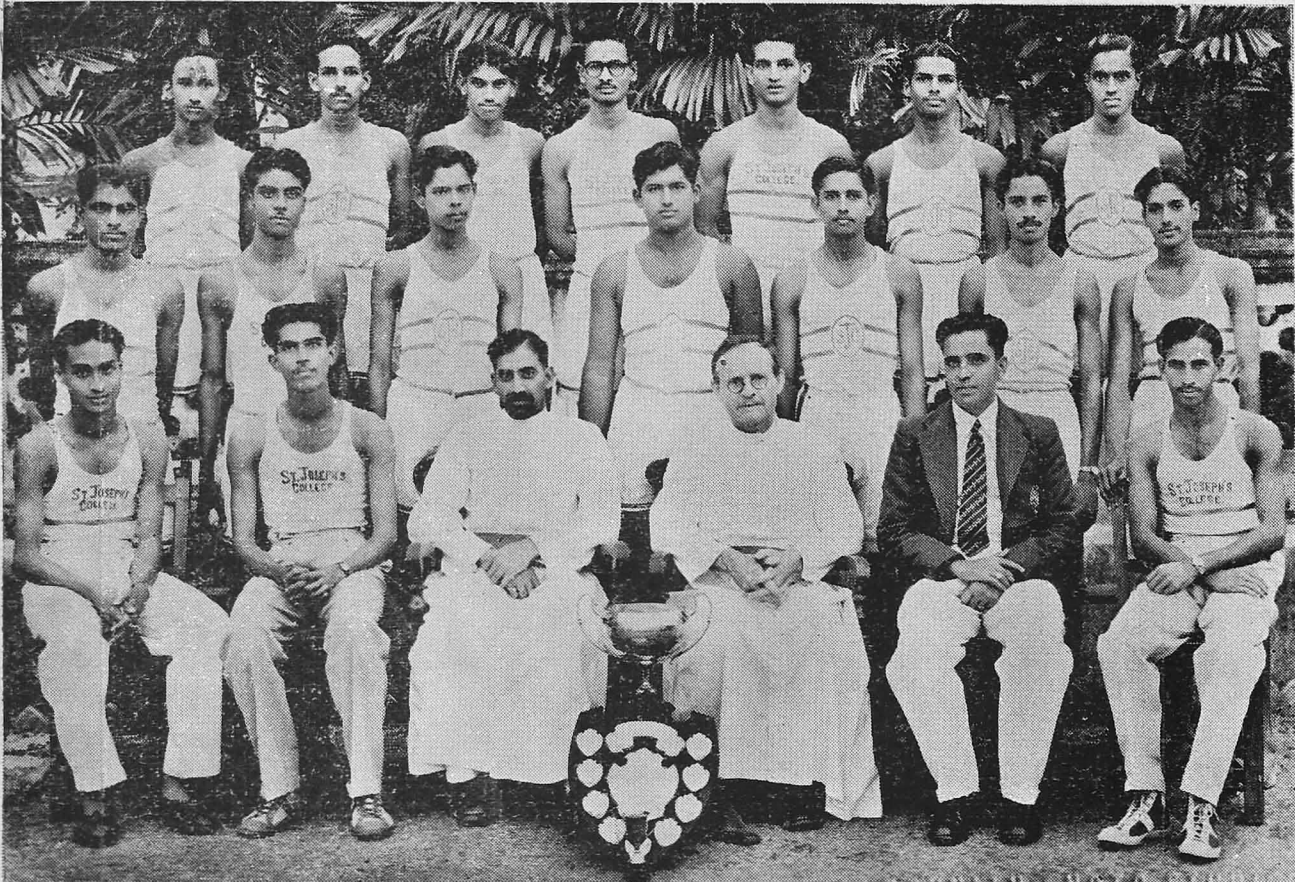
We sent four cadets to participate in the preliminary selection for the Earl Roberts' Imperial Shooting Competition and U/O Meeran came





N. C. C. B. COY : 1954—55





### **THE COLLEGE ATHLETIC TEAM 1954—55**

Winners of the University Inter-Collegiate Div. Championship and of the  
T.D.A.A. Open Athletic Championship.



**Our Cadets at Republic Day Parade, Delhi**

second in the Bn. On 4 Nov., the College Sports day, our cadets functioned as marshals and in the Obstacle Race for NCC Cpl. Sundarajan came first. On 7 Nov. we participated in the combined ceremonial parade during the inspection visit of the Circle Commander.

For the first time in the history of NCC we moved out of Trichy for the Annual Camp. The camp was run on the extensive grounds of the Race Course at Madurai for 14 days from 10 to 23 Dec. Among the distinguished visitors in camp were our Circle Commander and Col. V. P. Guptha, ADMS. As last year the medical contingent were also with us. The public of Madurai are grateful to the NCC for the humble bit of social service done by our cadets filling in the foundations for a block of municipal school buildings. The Sports meet at the end of the camp seemed to be the mighty event towards which the whole camp was moving. In addition to being the recipients of a good many prizes in sports events we were winners in Hockey and Tug-o'-war. So far as our Coy. is concerned, no account of the annual camp will be complete without mention being made of the encouragement given to us in the midst of our activities by the visit of Rev. Fr. Rector, Fr. Principal, and Fr. Vice-Principal.

On 26 Jan. we participated in the Republic Day celebrations in the College with flag salutation and march past. The grandeur and impressiveness of the function were heightened to a very large extent by the brilliant College Band under Rev. Fr. Fournier. One of our cadets RSM Srinivasa Raghavan was one of the two cadets who represented this Bn. in the NCC contingent which participated in the Republic Day ceremonial parade in New Delhi.

The months of Jan. and Feb. kept us busy with the intensive special parades for the certificate trainees. We are sending up this year about 45 cadets for the B cert. and 15 for the C cert. As usual we expect a very high percentage of successful cadets.

Our Information Room attracts a fairly good number of regular readers. This feature, which has come to stay as a very useful part of our daily life, is a valuable supplement to the general and military education of our cadets.

Eight cadets of this Coy. participated in the Circle Sports Rally in Madras during the first week of February. Our Bn. missed the championship trophy by a very narrow margin. Cdt. Varghese Paul was outstanding, winning the first place in 400 metres and 400 metres hurdles.

In conclusion, we take this opportunity to thank our Commandant, Major W. N. C. Hensman, and the adm. officer Capt. T. V. Krishnan for their able guidance and command. We are most grateful to Rev. Fr. Rector, Fr. Principal, and the Wardens of the College hostels for their help and encouragement.

LIEUT. P. PRABHAKARAN,  
*Officer Commanding B. Coy.*

# College Societies 1954-'55

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## Literary and Debating Society

On July 2, '54, Eapen Matthew, IV U.C., M. Marudachalam, V Hons., T. R. Subramanian, V Hons., and P. R. Balasubramanian, V Hons., were elected Secretaries representing Sacred Heart Hostel, New Hostel, Clive's Hostel, and Dayscholars respectively.

On July 15, Sri. K. Nagarajan, M.A., B.L., delivered the inaugural address on "Barred Words." Sri. P. T. Raman Nair, M.A., I.C.S., District Judge, Tiruchi, presided.

On August 2, there was a lively debate on the motion: "In the light of recent developments, Red China should be admitted into the U.N.O." The motion was sponsored by T. Raghavan, V Hons., and opposed by P. Chandrasekhar, V Hons. After listening to the numerous speakers, the House adopted the motion. Mr. R. Vaidyanathan, M.A., was the Observer.

On August 10, "The proposed reforms of the Madras University to abolish the Intermediate course and have a three-year Degree course are not of much value," came up for a spirited discussion. P. T. Kuriakose, V Hons., moved the resolution and K. S. Narayanaswami, IV U.C., opposed it. The House expressed itself in favour of the reforms. Rev. Fr. A. J. Tamby, S.J., was the Observer.

On August 16, we had the rare privilege of listening to Mr. Carl T. Rowan, one of the most cited young American journalists. He spoke on "The Role of the Newspaper in social reform." He impressed upon the audience the idea that a journalist is not a mere reporter of news but a responsible social reformer. He also dealt with the numerous services rendered by journalists in America, in different kinds of reform, especially in effecting hospital and prison reform and in improving racial relations.

On August 20, Prof. E. W. P. Thomas, M.A., Vice-Principal, Jamal Mohamed College, delivered an interesting lecture on "Literature and the Sense of Beauty." Rev. Fr. T. N. Siqueira, S.J., presided.

On August 31, there was a heated debate on the motion: "The N.C.C. should be abolished," proposed by Under-Officer S. Natarajan, IV Hons. and opposed by U/O K. S. H. Rao, IV U.C. The motion was defeated by an overwhelming majority. Lieut. P. Prabhakaran, O.C., B. Coy., 2nd Madras Bn., was the Observer and he congratulated the House on its wise decision.

On October 4, there was a contest to select two speakers to represent our College in the University Inter-Collegiate Debate. Out of

the many who competed, P. R. Balasubramanian, V Hons., and J. Sundaram, IV U.C., were selected.

On October 5, a British debating team of two Oxford graduates, Mr. Jonathan Boswell and Mr. Bruce Burton, visited the College, and an extraordinary debate was conducted with both the visitors and our students taking part. Mr. Boswell moved the proposition: "Asia rather than Europe controls the destiny of the next half-century." T. Raghavan, V Hons. opposed it. The House, with its characteristic good sense, adopted the motion. Rev. Fr. J. Adisayam, S.J., was the Observer.

On October 26, U.N.O. day, Prof. Thomas Srinivasan, M.A., L.T., spoke on "UNO and World Peace." Miss Ruth Anstey, Principal, All Saints' Training School, was in the chair.

On November 11, at the Oratorical contest conducted by the Rotary Club, Tiruchi, the College was represented by M. Marudhachalam, V Hons. and S. Santhanam, V Hons. The former secured the first prize, enabling us to retain the shield for another year.

On November 13, there was an interesting debate on "Peace through negotiation is an impossibility," moved by C. V. Joseph, III U.C., and opposed by P. R. Balasubramanian, V Hons. The House rejected the motion. George James, V Hons., was Observer.

On November 16, a special debate for students of the Intermediate classes was conducted. C. J. Roche, II U.C., introduced the motion: "Crossword puzzles should be abolished" and A. V. Krishnan, II U.C., opposed it. These budding hopes of the College displayed keen enthusiasm, which was manifested by the numerous supplementary speakers who took part. The House voted for the abolition. P. Chandrasekhar, V Hons., acted as Observer.

On January 18, Rev. Fr. T. N. Siqueira, S.J., who had presided over one of the Sections of the All-India Educational Conference at Patna, gave his impressions of the whole Conference.

On January 29, "The establishment of a socialistic pattern of society is in the best interests of India", provoked heated discussion. V. Aravamudham, V Hons., sponsored the motion, and P. Chandrasekhar, V Hons., opposed it. The House recorded its verdict in favour of the motion. T. Raghavan, V Hons., was Observer.

Besides these meetings our members have taken part in all the student programmes of A.I.R. Tiruchi and acquitted themselves very creditably.

EAPEN MATTHEW, IV U.C.

M. MARUDACHALAM, V Hons.

T. R. SUBRAMANIAN, V Hons.

P. R. BALASUBRAMANIAN, V Hons.

*Secretaries.*

# The Fine Art Association

The activities of the Association began with the election of the office-bearers; we have this year a good many groups among them, the President, the Asst. President, the Vice-Presidents, the General Secretary, and the Joint Secretaries.

<i>President:</i>	Rev. Fr. A. Fournier, S.J.
<i>Asst. President;</i>	Mr. G. Lourdasamy, M.A.
<i>Vice Presidents;</i>	Messrs S. A. Xavier, M.A. and V. Balakrishnan, B.A. Hons.
<i>General Secretary:</i>	P. T. Jacob, IV B.A.
<i>Joint Secretaries:</i>	V. Sadagopan, IV B. Com., S. Ranganathan, IV B.Sc., and P.M.G. Pathy, II U.C.

The Association is meant to provide opportunity to every member of this College to develop his aesthetic talents. With this end in mind we conducted our annual exhibition from 30 October to 3 November 1954. The contributions consisted of large numbers of excellent drawings, paintings and photos. Rev. Fr. Rector opened the exhibition and this year we had a large number of visitors from outside. Among them, Rev. Fr. Gordon, S.J., Dr. Alagappa Chettiar, and the Rev. Sisters and students of Holy Cross College deserve special mention.

## A. High School Department

### I. PENCIL SKETCHES:

Faces:	<i>1st Prize</i>	"Rajaji"	S. Venkatesan	V Form C
	<i>2nd</i>	"Bose"	V. Thangappan	VI Form C
	<i>3rd</i>	"Nehru"	A. Arumairaj	IV Form B

### II. INDIAN INK:

	<i>1st Prize</i>	"Silhouettes"	G. Palanivelu	V Form E
	<i>2nd</i>	"An Old Bridge"	S. Albert	V Form E

### III. WATER COLOUR:

(a) Landscapes	<i>1st Prize</i>	D. Saveriraj	V Form A
	<i>2nd</i>	G. Palanivelu	V Form E
(b) Persons	<i>1st Prize</i>	"Buddha" S. Albert	V Form E

### IV. A SPECIAL PRIZE:

	for two large Pencil drawings	G. Packiam	VI Form B
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### V. MAGAZINES:

A Lower Class	{	<i>1st Prize</i>	II Form D
		<i>2nd</i> "	III Form A
B Higher Class	{	<i>1st Prize</i>	IV Form A
		<i>2nd</i> "	V Form A
		<i>3rd</i> "	VI Form E

**B. College Department****I. PENCIL SKETCHES :**

- (a) Large Size  
     1st Prize "Rajendrasingh" T. A. Ganesan I U.C.  
     2nd " " "Tagore" C. Ranganathan IV B.Sc.  
 (b) Small Size  
     1st Prize "Mother and child" P. M. G. Pathy II U.C.  
     2nd " " "Secret or cigarettes" E. Matthew IV B.A.

**II. INDIAN INK :**

- 1st Prize "Murugan" K. S. Ramakrishnan III Hons.  
     2nd " " "Ships at sea" T. A. Ganesan I U.C.

**III. WATER COLOUR :**

- (a) Persons  
     1st Prize "Children at play" S. S. Manian III B.Sc.  
     2nd " " "Sisters" P. M. G. Pathy II U.C.  
 (b) Miscellaneous  
     1st Prize "Eagle feeding  
                     its young ones" P. M. G. Pathy II U.C.

**IV. OIL PAINTING :**

- 1st Prize "The Sacred Heart" T. T. Rajabooshanam II U.C.

**V. MAGAZINE :**

- A special Prize to T. Nagasundaram IV U.C.

**VI. PHOTOS :**

- (A) VIEWS 1st Prize  
             "Sunset on the Hills" V. K. Lakshmanan IV U.C.  
             2nd " "  
             "Malabar Backwaters" Rev. Fr. B. Nattar, S.J.  
 (B) PERSONS 1st Prize  
             "A Hat and a Head" V. Sadagopan IV B. Com.  
             2nd " "  
             "A Stone-cutter" K. Ramanathan IV U.C.  
 (C) ANIMALS 1st Prize  
             "Friendship?" K. M. Meeran IV B.A.

We are rightly proud of having introduced the College Orchestra presenting its first annual concert on 9 November 1954. Rev. Fr. L. C. Fernandes, S.J. presided over the function. As many as twenty different items were on the programme. Rev. Fr. Fournier, S.J. welcomed the huge gathering. We had a vast number of guests from far and near. Rev. Fr. J. Kalathil, S.J., Rev. Fr. Koilparambil, S.J., Rev. Sisters and students of Holy Cross College were among the audience.

In conclusion, the earnest efforts of the Asst. President, Mr. Lourdu-samy, M.A., to organise a successful orchestra for the Association must be mentioned.

P. T. JACOB,  
*General Secretary.*

## The Mathematics Association

M. Ganesan, IV Hons., and S. Srinivasan, IV B.A., were elected Secretaries for the senior section; and V. Jayaraman, II U.C., for the junior section.

The Inaugural Address was delivered by Dr. Seetharaman, M.A. Ph. D., Professor of Statistics, Thyagaraja College, Madurai, on "The foundation of Mathematics". Mr. S. Suryanarayana Iyer, M.A., Vice-President of the Association, was in the chair. The speaker traced the history of Mathematics and explained how the different schools of thought though widely different contributed much to the science of Mathematics. The lecture was punctuated with some mathematical paradoxes.

An ordinary meeting was held on 17-9-1954 when Mr. Krishnamurthy, M. Sc, post-graduate student of Mathematics, spoke on "Relativity".

At an extraordinary meeting Mr. S. Ramakrishnan, B.A. Hons., spoke on "Stellar magnitudes, distances, and temperatures". He mainly dealt with the interaction of gases and the resulting temperature of the huge stellar members.

Another ordinary meeting was held when Mr. M. Ganesan, IV Hons., delivered a lecture on "The History of Hindu Mathematics". Mr. R. Ramanathan, IV Hons., was in the chair. A main feature of the speech was the numeral terminology and the Kharosthi numerals.

At an ordinary meeting under the chairmanship of Mr. M. Ganesan, Mr. B. Krishnamurthy, IV Hons., spoke about "The possibility of life in Mars."

On 29-1-1955 Mr. K. Subramanian IV B.A. explained the theory about the formation of stars by a sudden pressure in the inter-stellar gas.

The Association held a written Quiz test for the Intermediate students: 267 students wrote the test, which is a record.

M. GANESAN, IV Hons.  
S. SRINIVASAN, IV U.C.  
V. JAYARAMAN, III U.C.

*Secretaries.*



## The Malayalee Samajam

On 10 July 1954 John Kuzhiparampil and Rajan Valliath were elected Secretaries for the current year.

The inaugural address was delivered on 19 July by Mr. C. V. Elias, M.A., Lecturer, Jamal Mohamed College, Trichinopoly. The songs of



B. Nambuthiripad, IV B.Sc., and M. C. Mamachan, II U.C., added charm to the meeting.

The first ordinary meeting was held on 3 August with Mr. K. V. Mathai, B.O.L., in the Chair. K. George James, V Hons. and Thomas K. Polayil, I U.C. moved the proposition. "The present P. S. P. Government in the T.-C. State is a complete failure." Ouseph Manvettam V Hons. and K. V. Joseph, II U.C. opposed the motion. After a heated discussion the House rejected the proposition.

"The formation of a united Kerala is an urgent necessity for Malayalees" was the topic debated on 19 August. Mr. Sebastian Vettam, B.A. took the Chair. Joseph Vellathottam, I U.C., M. T. Joseph, II U.C. and T. K. Anthony, I U.C. were the movers of the proposition; and Matthew Thampy, II U.C., Eappan Matthew, IV U.C. and Joseph John, II U.C. the opposers. The House with its characteristic discretion rejected the motion.

On 4 October we conducted a mock assembly on the lines of the T.-C. State Assembly with Mr. M. V. Kurian, B.A., Lecturer in Mathematics, as Speaker. Ouseph Manvettam, George James, V. C. John, and Thomas K. Polayil were the 'Ministers', while Eappan Matthew, P. T. Jacob, Zacharias and John Marokey represented the Congress, U.F.L., R.S.P., and T. T. N. C. respectively. Thomas Paul was an Independent member. Joseph John represented the only lady member in the House. The Prohibition Bill introduced in the House by the Government side was referred to a Select Committee after a heated discussion.

We conducted a symposium on "The Works of Kumaran Asan". P. T. Anthony, I U.C., threw light on "Asan as a snehagayakan" P. T. Jacob spoke on "Asan's Heroines" V. C. John, IV U.C. on "Asan as a keen observer of human life," and P. T. Kuriakose, V Hons. on "Asan's philosophy of life". Mr. P. I. Isaac, B.A., was in the Chair.

On 8 November we had an extraordinary meeting to record our deep sorrow at the passing away of Shri Nalapattu Narayana Menon, a popular poet.

Under the presidentship of Rev. Fr. George Ayckara, S.J., George Matthew Elenjical, III U.C. and P. V. Thomas, IV. U.C. moved the proposition: "At present it is necessary to encourage the anti-communist front, since the communists are making capital out of the ignorance of the working classes". This was strongly attacked by John Marockey, IV Hons. and Joseph Mundakkal, IV Hons. But the motion was carried.

Joseph Chazhur, III U.C. and T. A. James, I U.C. moved the proposition: "In the present circumstances the U. N. O. cannot contribute towards world peace"; Mr. P. V. Vareed, B.Sc., presided. The opposition was led by K. V. Joseph, II U.C., and P. V. Varkey, IV B.Sc. The proposition was defeated by one vote.

On 16 November we had the rare privilege of listening to Mahakavi G. Sankarakurup. Mr. Kizhkulam N. Raman Pillai, M.A., a retired Professor of University College, Trivandrum, presided.

During the academic year Ouseph Manvettam and Joseph Mundakkal were selected to compete in the Inter-Collegiate debate held under the auspices of Madras University. We are glad to mention that Mr. Mundakkal got selection for the final contest as well.

On 20 January 1955 P. T. Kuriakose and G. M. Elenjikal moved the motion: "The Constitution Amendment Bill pending before the Indian Parliament is an encroachment on our fundamental rights". Opposition was raised by K. George James and Joseph Chazhur. At the end of the debate the Opposition Leader informed the House that he was not pressing the opposition, whereupon the Speaker declared the motion passed. Ouseph Manvettam was in the Chair.

JOHN KUZHIPARAMPIL,  
RAJAN VALLIATH,

*Secretaries.*



## தமிழ்ப் பேரவை

தமிழ்ப் பேரவையின் தொடக்கவிழா 19—7—54 திங்களன்று இலாலி மன்றத்தில் நடைபெற்றது. வழக்கறிஞர் திரு. கைலை அனந்தர், B.A.B.L. தலைமையில் திருச்சி நகராட்சி முன்னாள் ஆணையர் திரு. கீ. இராமலிங்கன், M.A. திறப்புரை நிகழ்த்தினார்கள்.

3—8—54 செவ்வாய்க்கிழமை மாலை நடைபெற்ற சொற்போருக்கு மாணவர் திரு. மருதாசலம், V Hons. தலைமை வகித்தார். நாட்டின் நன்மைக்குக் கட்சிகள் தேவை என்ற தீர்மானத்தை மாணவர் இராசேந்திரன், V Hons. கொண்டு வந்தார். மாணவர் கந்தசாமியும் மற்றும் பல மாணவர்களும் எதிராகப் பேசினர். கடைசியில் தீர்மானம் வெற்றிபெற்றது.

19—8—54 வியாழன் மாலை, மாணவர் கந்தசாமியின் தலைமையில் நடைபெற்ற கூட்டத்தில், 'வாழ்வும் வரலாறும்' என்ற தலைப்பில் மாணவர்கள் தங்க வேலு, குஞ்சிதபாதம் ஆகியோர் பேசினர்.

26—8—54 வியாழனன்று, திரு. ஐயன்பெருமாள் கோனார் அவர்கள் தலைமையில், பெருஞ்சொல் விளக்கனார், திரு. அ. மு. சரவண முதலியார் தமிழிலக்கியத்தினுள்ள உவமை நயங்கள் எனும் பொருள்பற்றிச் சொற்பெருக்காற்றினார்.

29—9—54 புதன் மாலை கவிமணி தேசிகவிநாயகம் பிள்ளை அவர்களின் மறைவு குறித்து நடத்தப்பட்ட இரங்கற் கூட்டத்தில் திரு. ரம்போலா மாஸ்கரேனஸ், திரு. ஐயன்பெருமாள் கோனார் ஆகியோர் கவிமணியின் சிறப்பியல்புகள் குறித்துப் பேசினார்கள்.

பாரதிவிழா 22—10—54 வெள்ளி மாலை மணி 5-க்கு லாலி மன்றத்தில் நடைபெற்றது. 'சிவாஜி' துணையாசிரியர் திரு. கிருட்டிணசாமி செட்டியார் தலைமையில், சீதாலக்ஷ்மி கல்லூரிப் பேராசிரியை திருமதி. ஜனாபாய், M.A. அவர்களும், திரு. சிவாஜி சீதாராமும் பாரதியாரின் இலக்கிய சேவைகளைப்பற்றி விரிவுரை நிகழ்த்தினார்கள்.

19—11—54-ல் சங். ஆரோக்கியசாமி அடிகளார் தலைமையில் 'இலக்கியமும் வாழ்வும்' எனும் பொருள்பற்றி மாணவர்கள் இராமமூர்த்தி, கந்தசாமி, குஞ்சிதபாதம் ஆகியோர் சொற்பொழிவாற்றினர்.

17—1—55 திங்களன்று ரம்போலா மாஸ்க்ரேனஸ் அவர்கள் தலைமையில், 'வாழ்க்கை வாழ்வதற்கே' எனும் பொருள்பற்றி மாணவர்கள் சாமிமுத்து, திருவேங்கடம், முத்துசாமி ஆகியோர் சொற்பொழிவு ஆற்றினர்.

22—1—55 சனி மாலை, திருவாளர், ஐயன்பெருமாள் கோனூர் அவர்கள் தலைமையில் திருக்குறள், அட்டாவதானி திரு. C. P. செல்லையா பிள்ளை அவர்கள் அட்டாவதானம் செய்து ஆராய்ச்சிச் சொற்பொழிவு ஒன்றும் ஆற்றினார்கள். மாணவர்கள் சார்பில் செயலாளர் ராமமூர்த்தி அவதானியருக்குப் பணமுடிப்பு வழங்கி நன்றி நவீனரூர்.

செயலாளர்கள் :

அ. இராமமூர்த்தி, IV U.C.

ச. சாமிமுத்து, III U. C.

ச. தேசிகன், II U.C.

ச. சம்பத்துமார், I U.C.



## Hindi Samaj

On 16 July, 1954, Vidwan K. L. Paul, IV U.C. and C. C. Mamachan, II U.C. were elected secretaries, and Matthew Thampy and T. A. James representatives for II and I U.C. respectively.

The inaugural address was given on 29 July by Janab M. Rahman, M.A., Lecturer, Jamal Muhammad College, who stressed the importance of studying Hindi and advised the students to speak Hindi whenever they got an opportunity. Mr. S. Gopalan, M.A., President of the Samaj, presided over the function.

An extraordinary meeting was held on 12 August with Mr. S. R. H. Sundaresan, Vidwan, Vice-President of the Samaj, in the chair. Sri. Rajagopal B. O. L., Lecturer, National College, spoke on "Sahithya Par Ek Nazar".

On 12 October an ordinary meeting was held when V. V. Jacob, IV U.C. presided and G. N. Pathy, Matthew Thampy, and M. T. Joseph spoke on the various aspects of "Adhunik Bharat ki Samasyayen".

On 27 November an ordinary meeting was held when M. A. Cherian and K. Sundara Rajan, both of IV U.C., spoke on "Raja Neethi Me Sahithya ka prayojan." Ouseph Manvettam, V Hons., occupied the chair.

An extraordinary meeting was held on 17 January '55 when Sri Gopalan, M.A. presided and Sri. P. Jayaram, Hindi Pandit of E. R. S. High School, spoke on "Hindi sahithya me gadhya dhara". C. C. Mamachan proposed a vote of thanks.

On 24 January T. S. Ramamoorthy, IV U.C., occupied the chair and K. Sundara Rajan, M. T. Joseph, and Sri. S. R. H. Sundaresan, Vice-President spoke on 'Samajodhar.'



## Sanskrit Samajam

T. G. Venkatramani, IV U.C. and K. Varadarajan, II U.C. were elected secretaries. The junior classes were represented by E. V. Raman, III U.C. and E. S. Balasubramanian, I U.C.

The Inaugural Address was delivered on 19 July '54 by Sri. V. Rengaswamy Iyengar, B.A., B.L., Lecturer in Mercantile Law, National College, on the goal of education and the need for the development of a moral outlook, which is the pivot of Sanskrit literature. He said that Sanskrit was being relegated to the background in these days and that this great language should be restored to its ancient glory, for it is a language of life, light, and bliss for all time and a consolidating factor which can be used as the basis for the social integration of India.

At the first ordinary meeting, under the presidency of Sri. V. Gopala Iyengar, M.A., Mr. Ramaswamy, B.Sc., gave a lecture on "The Clown in Sanskrit Drama", dwelling on the origin and development of the concept of the clown and on the great humorous characters created by classical dramatists like Kalidasa and Harsha.

On 23 August P. K. Yagnanarayanan, III U.C., talked on "What strikes me most in Sanskrit literature." With a good number of illustrations, he expounded artistic delicacies, depth of thought, and rich poetic fancy. The Vice-President of our Samajam took the chair on the occasion.

At another ordinary meeting on 4 October, S. Ramanathan, IV U.C. compared Kalidasa and Shakespeare: he said that Kalidasa deals more with Nature and Shakespeare more with life, and Kalidasa excels in poetic and lyrical qualities. K. S. Hanumantha Rao of the same class presided.

On 16-10-'54 under the presidentship of T. G. Venkatramani G. S. Rajarathnam, IV U.C. spoke "The Origin and the Development of Sanskrit Drama"; he examined its distinctive features and the contribution of the major dramatists like Bhasa, Kalidasa, and Bhavabhuti.

K. N. Narasimhan, IV U.C. delivered a lecture about "Alankaras in the works of Kalidasa" on 20 November under the presidency of Sri. S. Ramakrishnan, B.A. Hons., of our College. The speaker as well as the President cited several brilliant examples from the Kavyas and Natakas of the master-poet, dwelling on the special charm of the similes.

At an extraordinary meeting on 23 November, under the chairmanship of the President of the Samajam, Sri. S. Suryanarayana, Retd. Prof. of Sanskrit, Mysore University, stressed the need for the modernization of Sanskrit and pointed out that it was the duty of the lovers of Sanskrit to write works on History, Geography, and the positive sciences so as to keep pace with modern thought.

On 1 February, 1955, Sri. K. Chinnaswami Iyer, M.A., Retd. Prof. of English, delivered a discourse on "Mooka Saraswathi."

A symposium on Bhavabhuti was conducted on 7 February, '55 in which most of the IV U.C. students spoke on the several aspects of Bhavabhuti, like style, treatment of Nature, characterization, development of sentiments, etc. Sri. V. Gopala Iyengar, M.A., presided.

On 16 February, '55 the Samajam conducted two written Quiz competitions in Sanskrit, one for the B.A., and the other for the Intermediate classes.

The Valedictory Address was delivered on 19 February by Sri. A. Srinivasaraghavan, M.A., Prof. of Sanskrit, Rajah's College, Pudukottai.

T. G. VENKATRAMANI,

K. VARADARAJAN,

*Secretaries.*



## The Botany Association

On 13th July, 1954, Alexander Moreira, IV B.Sc. was elected Secretary and K. G. Abraham, III B.Sc., M. T. Joseph, II U.C., and James Kurien, I U.C. to represent their classes.

The Inaugural Address was delivered on 5 August by Rev. Sister Marie Geraldine, B.Sc. Hons. of Holy Cross College on "The First Algae". She gave an account of the elementary forms of life and referred to chlorella, a unicellular alga which has much economic importance from staple food to ice-creams. Mr. K. R. Viswanathan B.Sc. Hons. presided.

On 21 August T. Edward, IV B.Sc. took the chair and Varghese P. John of the same class spoke on "The classification of plants."

At an extraordinary meeting on 22 October under the presidentship of Rev. Fr. Balam, S.J., Mr. W. H. Lazarus, M.A., L.T., spoke on "Animal Phosphorescence."

On 21 January 1955 A. G. Johnson, IV B.Sc., delivered a lecture on "Photosynthesis", with N. V. Inasu of the same class in the chair.

Our educational excursion to Kodaikanal was in two batches: one, with all the Junior students and a dozen of the Seniors, started on 10 October under the guidance of Rev. Fr. Balam, S.J. and Mr. K. R. Venkatesan, B.Sc. Hons. The second started on 15 October under the leadership of Mr. K. R. Viswanathan, B.Sc. Hons. In Kodai, we visited the Observatory, Fairy Falls, Bear Shola, Bryant's Park, and the Lake. Each batch botanized for four days and collected very rare specimens. One batch of students Visited Shembaganur where we saw the College, the Museum, and the orchid garden.

In October we had a botanical ramble in and around Tiruchirapalli under the guidance of Mr. Venkatesan, B.Sc. Hons.

ALEXANDER MOREIRA, IV U.C.

*Secretary.*

## Commerce Association

R. Varadarajan, IV B.Com., and Felix Balu Vincent, II U.C. were elected secretaries.

1. The Inaugural Address was delivered on 29 July, 1954, by Mr. K. C. Mahadevan, B.A., B.L., Income-tax Officer at Trichy, with Mr. A. Hirudayaswami, M.A., B.L., Vice-President of the association, in the chair.

2. An extraordinary debate was conducted on 5 August, on the proposition; "To promote Trade and Industry, Sales-tax should be abolished". B. Gangadaran, IV B.Com., moved the proposition, and S. T. Annamalai, IV B.Com., opposed it. After a prolonged and heated debate, the motion was carried by a majority of six votes.

3. "Co-operation and India's Economic Policy" was the subject of a lecture on August 13 by V. Natarajan, IV B.Com.

4. Mr. A. Hirudayasami Reddiar, M.A., B.L., Vice-president of the Association, took the IV B.Com. students on a study visit to the Trichy District Co-operative Central Bank on 17 August, 1954. Mr. Varadarajan, an official of the Bank, explained the working of the Bank in detail and enlightened us on the salient features of the Indian co-operative movement.

5. On 20 August, S. Ratnachalam, IV B.Com., was in the chair when S. Gopalaratnam, IV B.Com., delivered a lecture on "The development of small industries in India."

6. On September 4, the members of the association bade farewell to Mr. C. E. Krishnan, B.Com. Hons., Lecturer in Business Organisation and Commercial Geography, who was going to take a post in Madras.

7. On 9 October, S. Ebenezer, IV B.Com., spoke on "The Organisation of Banking in India."

8. On 21 October, S. Ratnachalam, IV B.Com., spoke on "The future of Private Enterprise in India." P. P. Augustine of the same class took the chair.

9. On 27-10-54, S. Ramanathan, IV B.Com., spoke on "The Industrial Development of Commerce in India after Independence." V. Sundaram of the same class was in the chair.

10. At an extraordinary meeting on 9 November Mr. M. Muthuswami, B.A., B.L., Advocate and our lecturer in Mercantile Law, spoke on "The choice of a commercial career." Prof. B. Gopalan, B.A., M.Com., National College, Trichy, presided.

R. VARADARAJAN, IV B.Com.  
FELIX BALU VINCENT, II U.C.

*Secretaries.*

## Chemistry Association

S. Subramanian, IV B.Sc., and N. S. S. Rajan, III B.Sc., were elected secretaries.

The inaugural address was delivered by Dr. M. Sivalingam, M.B.B.S., of the Headquarters Hospital, on the 30th July on "Chemistry in Medicine." Mr. A. C. Joseph, M.A., presided.

### Ordinary Meetings :—

DATE	SPEAKER	PRESIDENT	SUBJECT
12- 8-54	Mr. T. S. Seetharaman, IV B.Sc.	Mr. N. V. Inasu, IV B.Sc.	Chemistry of Dyeing.
19- 8-54	Mr. V. Narayanan, IV B.Sc.	Mr. Hariharasarma, IV B.Sc.	Plastics.
12-10-54	Mr. Srinivasaraghavan, IV B.Sc.	Mr. P. G. Menon, IV B.Sc.	Factories in Alwaye.
15-10-54	Mr. S. Sivaraman, IV B.Sc.	Mr. S. V. Srinivasan, IV B.Sc.	Glass.
15- 1-55	Mr. P. S. Gopalan, III B.Sc.	Mr. Krishnamachari, III B.Sc.	Chemistry in Photography.

**Extraordinary Meetings :—**Mr. P. R. Srinivasan, B.Sc. of our staff spoke on "Accidents that led to notable discoveries" on 26 August 1954. Mr. A. Subramanian, B.Sc. presided.

On 30 September '54 Rev. Fr. Lourdu Yeddanapalli, S.J., Head of the Department of Chemistry, Loyola College, Madras, gave an interesting lecture on "The value of Experimental Sciences."

**Debate :—**The subject taken for discussion on 22 October '54 was "The study of English Literature is not necessary for Science Students". T. J. John, IV B.Sc. moved the motion, while N. V. Inasu, IV B.Sc. opposed it. Many took part in the discussion which was presided over by Mr. A. C. Joseph, M.A. The House gave its verdict against the proposition.

**Symposium :—**A symposium on 'Radio-activity' was held on 8 and 9 November '54 in which K. Santhanam, R. Rangarajan, and H. Srinivasan, all IV B.Sc., took part. Mr. P. M. Thomas, M.Sc. presided.

A series of talks on 'Our Resources' was begun on 22 Jan. '55 by V. Narayanan, IV B.Sc. with a speech on "Coal and Lignite." R. Natarajan, S. Ramaratnam and T. J. John spoke at subsequent meetings on other resources of India.

**Excursions :—**Our major excursion this year was to Alwaye, 'the dream of young chemists.' An article on this excursion appears in this Magazine. We also visited the Vanaspathy factory at Pudur and the A. I. R. Transmitting Station at Tiruverumbur.



**Valedictory Address :—**The valedictory address was delivered by Prof. P. S. Lakshminarayanan, M.A., of American College, on 'Modern Science and Ancient Superstitions,' on 19th Feb. '55. Prof. A. C. Joseph presided.

**Essay Competition and Prizes :—**As usual we have had essay competitions for Intermediate and Degree classes and a prize for the best speaker of the year.

S. SUBRAMANIAN, IV B.Sc.

N. S. S. RAJAN, III B.Sc.

*Secretaries.*



## The History and Economics Association

On 6 July, 1954, P. T. Kuriakose, V Hons. and M. Natarajan, IV B.A. were elected secretaries for the year. The Inaugural Address was delivered on 17 July by Mr. S. Srinivasan, M.A., Professor of History, Alagappa Chettiar College, Karaikudi. Rev. Fr. J. Adisayam, S.J., was in the chair. Mr. Srinivasan deplored the present tendency to relegate History into the background even in the academic world.

The members of the Association had the pleasure of hearing Rev. Fr. A. Nevett, S.J. of the Indian Institute of Social Order, Poona, speak on "The Welfare State." After discussing the pros and cons of the Welfare State he warned the students to be rather cautious, as there were two kinds of it, the democratic and the totalitarian.

The South East Asian Treaty Organisation was the topic of a debate held on 29 July with K. A. John, IV U.C. in the chair. M. Marudachalam, V Hons. moved that "The proposed S.E.A.T.O. is an unnecessary interference by the West in the affairs of Asia" and was supported by P. R. Balasubramanyan, V Hons. He was opposed by C. V. Joseph, III U.C. with the support of T. D. Felix, V Hons. The House carried the motion by an overwhelming majority. On 13 August a symposium on "The need for the proper reconstruction of India's past history" was held under the chairmanship of K. S. Rajendran, V Hons. T. A. Jose, M. Kunjithapatham, and V. C. John participated.

The most outstanding event of the year was the inter-collegiate staff-and-students debate held on 23 August with Prof. L. R. Krishnamoorthy of National College in the chair. The proposition: "The U. N. O. as it is will not be able to establish permanent peace in the world" was moved by Prof. A. Hirudayaraj of St. Joseph's College, supported by Mr. M. Sasheerulha of Jamal Mohamed College, M. Marudachalam of St. Joseph's College, and K. N. Subramanyam of National College. Prof. R. Subbiah of Jamal Mohamed College with his able supporters,

K. C. Srinivasan of National College, M. Niyamathulla of Jamal Mohamed College, and C. V. Joseph of St. Joseph's College, opposed the motion. The House decided in favour of the motion by a thumping majority.

On 9 October T. D. Felix, V Hons. moved that "Any attempt at the redistribution of the Indian States at present is not conducive to the national interest." P. Chandrasekaran, V Hons. was Leader of the Opposition. Mr. Hubert Pavamani, B.A. Hons., was in the chair. The motion was lost. "Peaceful Co-existence" is not only possible but is the only course to adopt" was the topic of a debate in which a large number of members took part. Mr. Hirudayaswamy, M.A., B.L., acted as Speaker. By a narrow majority the House voted for the motion. On November 11 an extraordinary meeting was held when Mr. S. Lakshmikanthan, M.A., Commercial Tax Officer, Trichy, spoke on "The Economic basis of Society." Rev. Fr. J. Adisayam, S.J., presided.

Six more meetings were held in the course of the year when V. S. Ouseph, P. R. Balasubramanyan, K. George James, P. T. Kuriakose, T. D. Felix, M. Marudachalam, and K. Chandrasekharan all of the final Honours class, delivered lectures on "Land Reforms in India," "Rationalisation," "Peaceful Co-existence," "The Future of Private Enterprise in India," "The Press in the Modern State," "Regional Pacts and World Peace," and "Convertibility of Currencies."

P. T. KURIAKOSE, V Hons.  
M. NATARAJAN, IV B.A.

*Secretaries.*



## The Physics Association

As a business meeting on 3 July, 1954, E. S. Rajagopal, IV B.Sc. Hons. and G. Kittu Rao, IV B.Sc. were elected secretaries of the senior section, while T. Cathirgamu, II U.C. and M. Sundaresan, I U.C. were voted secretaries of the junior section.

The Inaugural Address was delivered by Prof. S. Ramachandra Rao, Ph. D., D.Sc. (Lond.), F. Inst. P., of Bangalore on 17 July '54, on 'CIVILIZATION AND THE USE OF ENERGY,' Rev. Fr. Rajam, S.J., D.Sc. presiding. Dr. Rao explained the necessity and use of energy. The meeting concluded with an interesting film show.

A series of talks were delivered on THE QUANTUM THEORY. On 30-7-'54, E. S. Rajagopal, IV Hons. lectured on 'THE ORIGIN OF THE QUANTUM THEORY,' P. S. Santhanam, V Hons. presiding. On 5-8-'54 with S. Sankararaman, V Hons. in the chair, R. Rajan, V Hons. talked on 'THE DEVELOPMENT OF THE QUANTUM THEORY.'

The third lecture was given by K. Venkatakrishnan, V Hons. on THE NEW QUANTUM THEORY. S. Gurumoorthy, V Hons. presided. This series of lectures aroused keen enthusiasm among the students.

The fourth ordinary meeting was held on 17-8-'54 when T. Rajagopalan, IV Hons., spoke on NUCLEAR FISSION. The meeting was presided over by G. Rangarajan, V Hons.

On 23-8-'54 S. Gurumcoorthy, V Hons. talked on THE THEORY OF COSMOS, the chair being occupied by N. Ramachandran, V Hons. The speaker gave a detailed account of the various cosmological theories with emphasis on the Friedmann—Lemaître—Einstein theory of the expanding universe.

On 30-8-'54 'THE PHYSICS OF THE ATOM BOMB' was the topic of a lecture by R. Venkatakrishnan, IV Hons. E. S. Ramamoorthy of the same class presided.

On 9-10-'54, N. Subramanian, IV B.Sc. spoke on X-RAYS, K. Panchapakesan of the same class presiding. On 14-10-'54, T. S. Ganapathy, IV B.Sc. gave a talk on 'WIRELESS FOR ALL', with R. Krishnan, IV Hons. in the chair. He dwelt on the construction of home-made crystal-receivers; the lecture was supplemented by E. S. Rajagopal, IV Hons. who gave an account of the recent advances in the field.

COSMIC RAY PHYSICS was the subject of a talk by S. P. Visvanathan, IV Hons. on 19-10-'54, with J. Philomendos, IV Hons. as chairman. The next meeting, the tenth of the ordinary meetings, was on SPACE TRAVEL, the lecturer being S. Ramamoorthy, IV Hons., assisted by the president, R. Natarajan, IV Hons. on 5-11-'54.

A symposium on Artificial Transmutation was presented under the auspices of the Association. The programme was as follows:—

DATE	SUBJECT	SPEAKER	PRESIDENT
12-11-54	Artificial Transmutation	A. R. Kalyanasundaram, V Hons.	G. Rangarajan, V Hons.
15-11-54	Technique of Transmutation	K. Venkatakrishnan, V Hons.	R. Rajan, „
19-11-54	Neutron Transmutation	K. Ramachandran, V Hons.	K. Venkatasubramanian, V Hons.
22-11-54	Induced Radioactivity	P. V. Vareed, V Hons.	J. Koitara, „
26-11-54	Nuclear Fission	S. Sacchidanandam, V Hons.	S. Gurumoorthy, V Hons.

The symposium, the first of its kind in the Association, was a success, and the whole topic was elegantly covered by the speakers, supplemented by the presidents.

The success of the first symposium led to a second and a third one. The second symposium was on Cosmic Rays and the lectures delivered were as follows:—

DATE	SUBJECT	SPEAKER	PRESIDENT
12- 1-55	Cosmic Rays (General)	C. K. Narayanaswamy, V Hons.	S. Sankararaman, V Hons.
17- 1-55	Mesons	A. Gomathinayagam, V Hons.	S. Jayaraman, V Hons.
21- 1-55	Positrons	R. Balasubramanian, V Hons.	E. S. Rajagopal, IV Hons.

The third symposium was on Nuclear Spectra.

DATE	SUBJECT	SPEAKER	PRESIDENT
24- 1-55	$\alpha$ -Ray Spectra	P. Venugopal Nair, V Hons.	P. S. Santhanam, V Hons.
27- 1-55	$\beta$ -Ray Spectra	K. J. Peter, V Hons.	N. C. Matthew, V Hons.
29- 1-55	$\gamma$ -Ray Spectra	K. V. Mani,     ,,	P. K. John,     ,,

This year we paid as usual a visit to the A. I. R. station at Tiruverumbur in November 1954 which happened to be the Radio Month also. There were four parties of about 30 each and we are grateful to the members of the staff who accompanied them.

Our Junior section has been quite active also. Five meetings, two of them extraordinary, have been conducted:—

DATE	SUBJECT	SPEAKER	PRESIDENT
3- 8-54	Heat Engines	M. Padmanabhan, II U. C.	Sri N. Ananthakrishna Iyer, B.A. Hons.
2- 9-54	Stars and Shooting Stars	Sri. K. Anantha Pad- manabhan, B.Sc. Hons.	
12-10-54	Photo-electric Cells and their Uses	K. Sivaraj,     II U.C.	Sri N. Ananthakrishna Iyer, B.A. Hons.
5-11-54	Faraday and his Experiments	T. Cathirgamu, II U.C.	,,
25- 1-55	A Magician: a mist and a Magic Box	Sri N. Ananthakrish- na Iyer, B.A. Hons.	

The Valedictory address of the Association was delivered, on 24-2-'55, by Dr. S. Sampath, B.Sc. Hons., D.I.I.Sc., M.S. (Stanford), of the Indian Institute of Science, Bangalore, Rev. Fr. J. B. Rajam, S.J., D.Sc., presiding. He spoke on 'Television Principles' giving a lucid account of the latest developments in the field.

The secretaries take this opportunity to thank all those who have made this year a tremendous success as seen from the record number of twenty-five meetings. We are specially grateful to the President, the Vice-presidents and the members of the Physics staff who always had a word of advice or encouragement for us.

As regards the annual prize contests under the auspices of the Association, while the B.Sc. and Intermediate students had the usual essay competitions, the B.Sc. Hons. and P. G. students had extempore speeches—a new departure to be extended to other sections as well.

The results of the competitions of the last academic year are :—

*The subjects were :* For Honours classes    The Ionosphere.  
                                  For B.Sc. classes        Thermoelectricity.  
                                  Intermediate       Gravity and its applications.

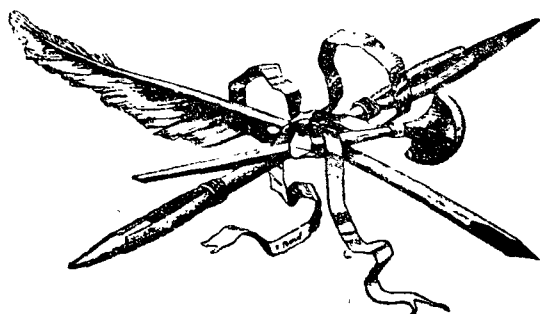
*The prize-winners were :*

Honours	E. S. Rajagopal III Hons.	1st.
	G. Rangarajan IV Hons.	2nd.
B.Sc.	C. G. Vaitheeswaran IV B.Sc.	1st.
	R. Govindarajan                    "	2nd.
Intermediate	A. Nagarajan II U.C.	1st.
	S. Arulanandam                    "	2nd.

The results of the competitions in 1954—55 will be published in due course.

E. S. RAJAGOPAL, IV Hons.  
 G. KITTU RAO, IV B.Sc.  
 T. CATHIRGAMU, II U.C.  
 M. SUNDARESAN, I U.C.

*Secretaries.*



# Exchanges 1954-'55

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ST. ALBERT'S COLLEGE ANNUAL, ERNAKULAM.  
ALAGAPPA CHETTIAR COLLEGE MAGAZINE, KARAIKUDI.  
THE ALOYSIAN, GALLE, CEYLON. .  
ALTECH, JOURNAL OF THE ALAGAPPA COLLEGE OF TECHNOLOGY, GUINDY.  
ST. AGNES' COLLEGE MAGAZINE, MANGALORE  
ST. ALOYSIUS' COLLEGE MAGAZINE, MALTA.  
ST. ALOYSIUS' COLLEGE ANNUAL, MANGALORE.  
ST. ALOYSIUS' COLLEGE HIGH SCHOOL ANNUAL, MANGALORE.  
AMERICAN COLLEGE MAGAZINE, MADURA.  
ANDHRA CHRISTIAN COLLEGE MAGAZINE, GUNTUR.  
ST. BENEDICT'S COLLEGE MAGAZINE, COLOMBO.  
BESANT THEOSOPHICAL COLLEGE MAGAZINE, MADANAPALLE.  
BISHOP HEBER SCHOOL MAGAZINE, TRICHINOPOLY.  
BLUE AND WHITE, St. JOSEPH'S, COLOMBO.  
BLUE AND WHITE MAGAZINE, St. JOSEPH'S, BANGALORE.  
CARITAS, St. JOSEPH'S SEMINARY, ALWAYE.  
CARMELA, St. AGNES' COLLEGE, MANGALORE.  
COIMBATORE GOVT. COLLEGE MAGAZINE.  
ENGINEERING COLLEGE MAGAZINE, MADRAS.  
EXCELSIOR, St. BERCHMANS' COLLEGE, CHANGANACHERY.  
FACT, ALWAYE.  
FATIMA COLLEGE MAGAZINE, QUILON.  
FINDLAY HIGH SCHOOL MAGAZINE, MANNARGUDY.  
GOVERNMENT ARTS COLLEGE MAGAZINE, ANANTAPUR.  
GOVERNMENT ARTS COLLEGE MAGAZINE, MADRAS.  
GOVERNMENT BRENNEN COLLEGE MAGAZINE, TELLICHERRY.  
GOVERNMENT COLLEGE MAGAZINE, AJMER.  
GOVERNMENT COLLEGE MISCELLANY, MANGALORE.  
HINDU COLLEGE MAGAZINE, MASULIPATNAM.  
HOLY CROSS COLLEGE MAGAZINE, TRICHY.  
JAFFNA COLLEGE MISCELLANY, JAFFNA.  
ST. JOHN'S COLLEGE ANNUAL, PALAMCOTTAH.  
ST. JOSEPH'S INDIAN HIGH SCHOOL ANNUAL, BANGALORE.  
JOURNAL OF THE OSMANIA UNIVERSITY, HYDERABAD (DECCAN.)  
KERALA VARMA COLLEGE MISCELLANY, TRICHUR.  
KUMBAKONAM COLLEGE MAGAZINE.  
LADY WILLINGDON COLLEGE MAGAZINE, MADRAS.  
LAW COLLEGE MAGAZINE, MADRAS.  
LITTLE FLOWER SCHOOL ANNUAL, SALEM.  
LOYOLA COLLEGE ANNUAL, MADRAS.  
MADRAS CHRISTIAN COLLEGE MAGAZINE, TAMBARAM.  
MADRAS FOREST COLLEGE MAGAZINE, COIMBATORE.  
MADRAS MEDICAL COLLEGE MAGAZINE.

MADRAS VETERINARY COLLEGE MAGAZINE.  
 MADURA COLLEGE MAGAZINE, MADURA.  
 MAHARAJAH'S COLLEGE MAGAZINE, ERNAKULAM.  
 M. D. T. HINDU COLLEGE MAGAZINE, TINNEVELLY.  
 METKEM, METTUR CHEMICALS, SALEM.  
 MRS. A. V. N. COLLEGE MAGAZINE, VIZAGAPATAM.  
 MUNGRET ANNUAL, MUNGRET COLLEGE, LIMERICK, IRELAND.  
 NORTH POINT ANNUAL, DARJEELING.  
 PACHAIYAPPA'S COLLEGE MAGAZINE, MADRAS.  
 PAULIAN, SAINT PAUL'S, SERAMBAN, MALAYA.  
 PRESIDENCY COLLEGE MAGAZINE, MADRAS.  
 PUDUKOTTAH COLLEGE MAGAZINE.  
 SALEM COLLEGE MAGAZINE, SALEM.  
 SACRED HEART COLLEGE ANNUAL, THEVARA.  
 SANATANA DHARMA COLLEGE MAGAZINE, ALLEPPEY.  
 SCOTTISH CHURCH COLLEGE MAGAZINE, CALCUTTA.  
 SENTHIKUMARA NADAR COLLEGE MAGAZINE, VIRUDHUNAGAR.  
 SIR C. R. REDDY COLLEGE MAGAZINE, ELURU.  
 SOPHIA COLLEGE MAGAZINE, BOMBAY.  
 STANLEY MEDICAL COLLEGE MAGAZINE, MADRAS.  
 STONYHURST MAGAZINE, BLACKBURN, ENGLAND.  
 ST. PHILOMENA'S COLLEGE ANNUAL, MYSORE.  
 ST. STANISLAUS H. S. MAGAZINE, BANDRA.  
 TECH. MAG. SIR ARTHUR HOPE ENGINEERING COLLEGE, COIMBATORE.  
 ST. TERESA'S COLLEGE MAGAZINE, ERNAKULAM.  
 ST. THOMAS COLLEGE MAGAZINE, TRICHUR.  
 UNION CHRISTIAN COLLEGE MAGAZINE, ALWAYE.  
 UNIVERSITY COLLEGE MAGAZINE, TRIVANDRUM.  
 UNITAS, St. JOSEPH'S SEMINARY, KANKANADY, MANGALORE.  
 VICTORIA COLLEGE MAGAZINE, PALGHAT.  
 VIVEKANANDA COLLEGE MAGAZINE, MYLAPORE.  
 VOORHEES COLLEGE MAGAZINE, VELLORE.  
 WAH YAN ANNUAL, HONG KONG.  
 ST. XAVIER'S COLLEGE MAGAZINE, BOMBAY.  
 ST. XAVIER'S COLLEGE MAGAZINE, CALCUTTA.  
 ST. XAVIER'S COLLEGE MAGAZINE, PALAMCOTTAH.  
 ZAMORIN'S COLLEGE MAGAZINE, CALICUT.

போதன விஷயப் பூங்கொத்து, R. C. TRAINING SCHOOL, TRICHINOPOLY

