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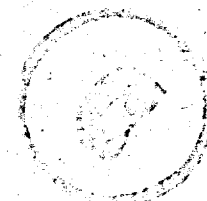
Rail Coach

Vol: 1

1957

NO: 9 June 1957

NO: 10 July 1957



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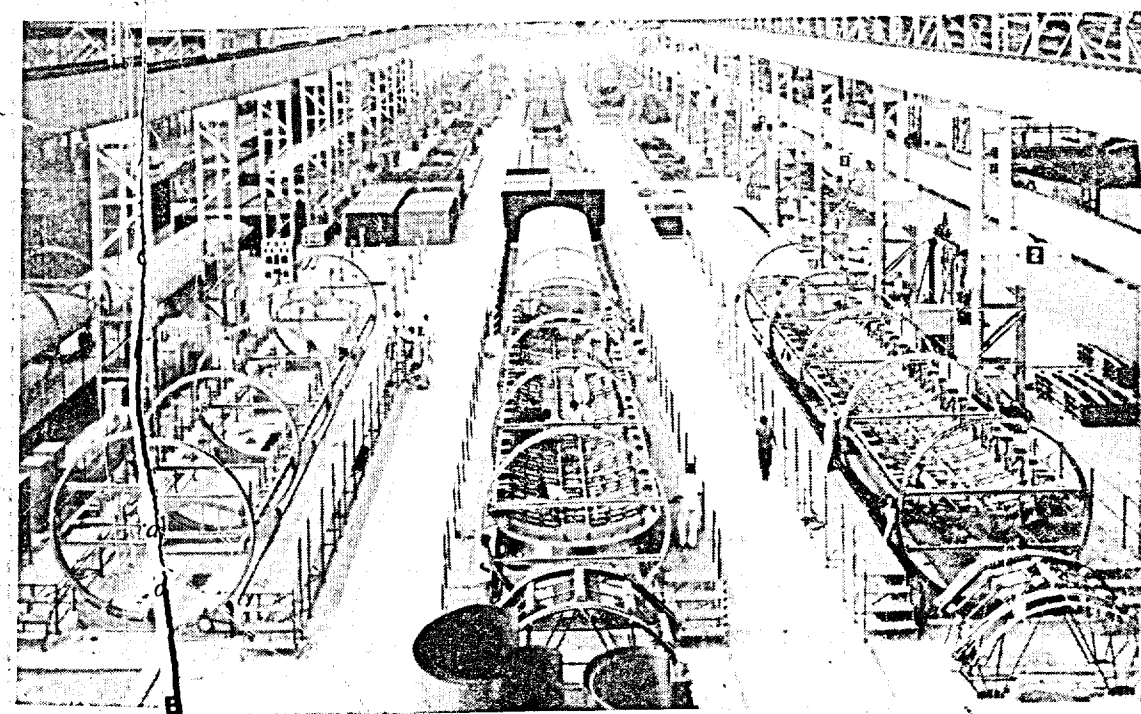
RAILCOACH

VOL. I, No. 9



JUNE 1957

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A view of the three assembly lines in the Main Assembly Shop of the I.C.F.

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RAILCOACH

Published by the Integral Coach Factory
ISSUED ON THE 15th OF EVERY MONTH

Devoted to all Railway problems, Technical Matters
and other problems of General Interest

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The "Railcoach" circulates among Officers and staff of the Integral Coach Factory, General Managers and other important Officers of all Railways country, the Union Minister for Railways and Transport, the Union Deputy Minister for Railways and Transport, the Chairman and Members of the Railway Board etc.

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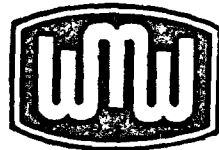
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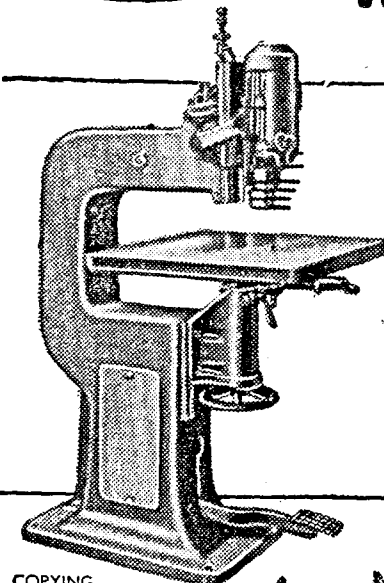
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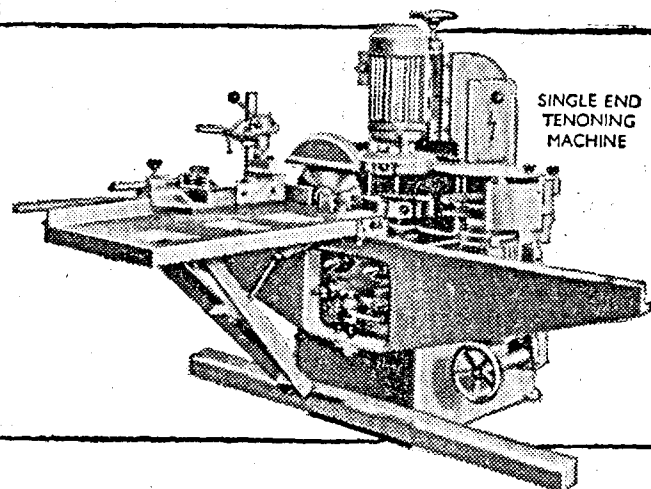


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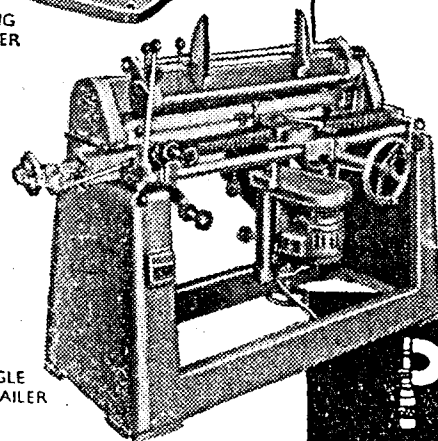
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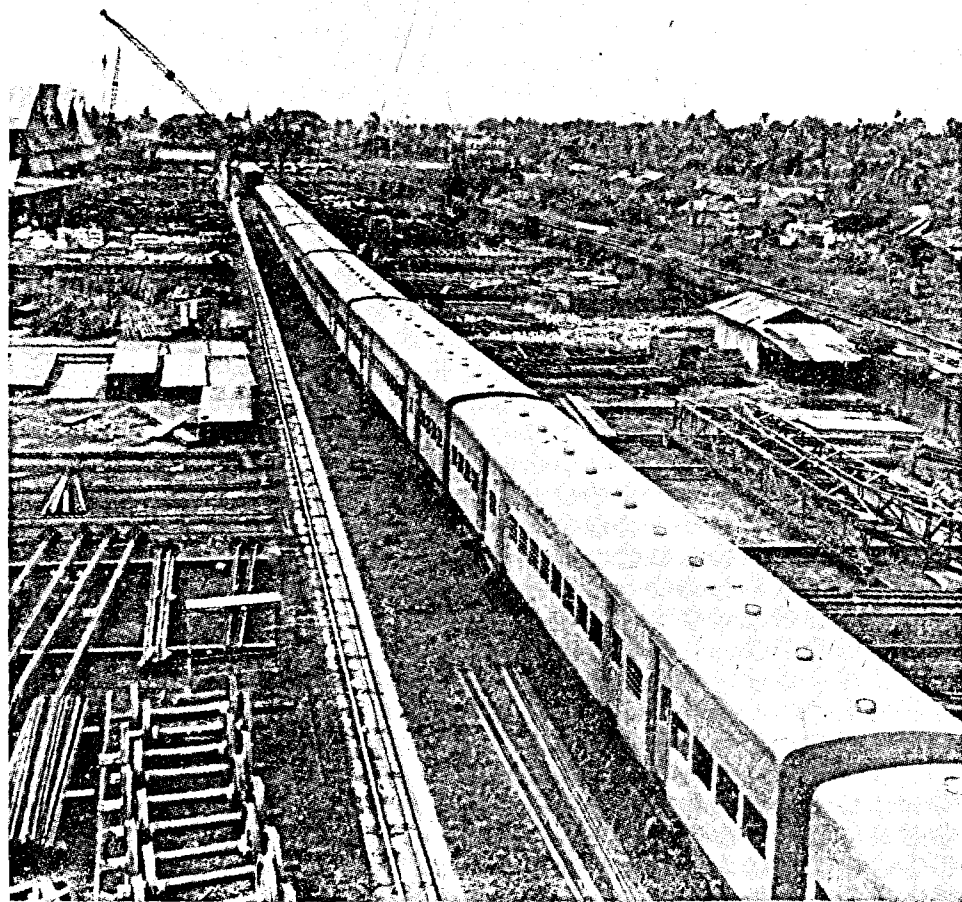
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- * Cooled and filtered water at Railway Stations is for drinking. Do not use it for other purposes.
- * You will annoy others by sitting in compartments with your feet on the seats. Please sit properly in trains.
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- * It is an offence to smoke in railway trains when requested by a fellow-passenger not to smoke. Please avoid smoking when requested by a fellow-passenger, when the compartment is crowded or when doors and windows of the compartment are shut.

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(INTEGRAL COACH FACTORY MAGAZINE)

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Manuscripts and photographs, not accepted for publication, will not be returned unless the sender so requires. Intending contributors from outside our Factory, if they intend to get back unaccepted articles and photos, should send a suitably stamped and self-addressed envelope along with the material sent by them.

Contributions should be addressed to the Editor, not by name, and reach him not later than the 25th of every month for consideration for publication in the next month's issue.

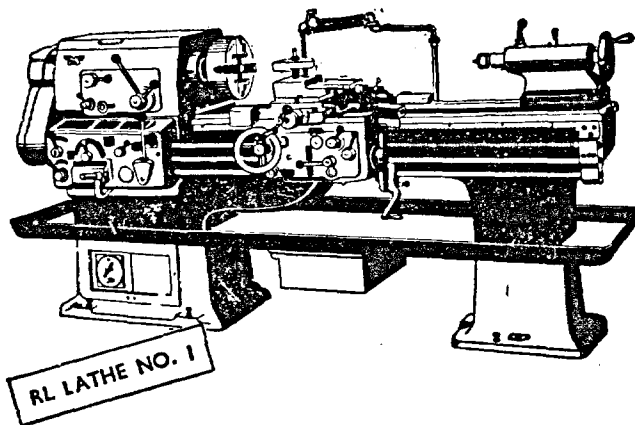
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Annual Subscription Rs. nP.
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FROM THE EDITOR'S DESK

THE FURNISHING ANNEXE

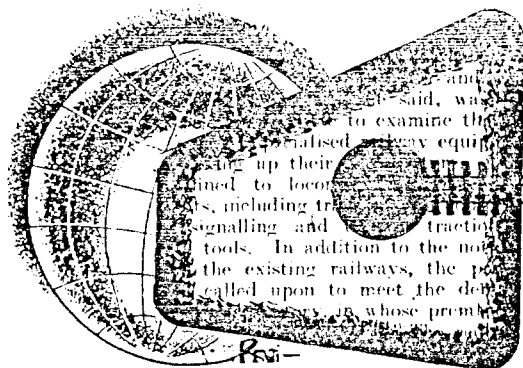
With the Railway Board's sanction for the construction of a Furnishing Unit as an adjunct to the Integral Coach Factory, the stage has been set for our factory to blossom into a full-fledged coach building works. The Railway Minister during his visit last year had expressed a desire that the coaches manufactured in this factory should be furnished here itself, as dependence on other Railway Workshops for this purpose could not continue for long. The Railway Workshops in the country have a full load already and the demands of the Second Five-Year Plan are really pressing.

The Rs. 3.69 crore furnishing annexe will have a covered area of 5.5 lakhs sq. ft. and the factory buildings would be of modern design with ample lighting and ventilation. It is estimated that the factory will employ about 2,400 men when in full production. The necessary training in furnishing work will be provided by a suitable expansion of the Technical Training School for the purpose. The standards of amenities for staff would be the same as is obtaining in our factory, providing the workers good working conditions, cooled drinking water, bathing cubicles and co-operatives.

In the meanwhile interim furnishing arrangements have been made for the furnishing of our coaches simultaneously with their assembly. The interim furnishing arrangements have been so planned that the workshops of the furnishing unit will be utilised immediately they are completed and the staff of the interim furnishing sheds will be switched over to the annexe.

The Integral Coach Factory has grown up steadily into a proud possession of the nation, rather a feather in its cap, and the days ahead are full of increased responsibilities for us of the I.C.F. family to push ahead our targets as time glides by.

When the I.C.F., along with the Furnishing Annexe, is able to turn out fully furnished coaches in a steady stream, the nation's coach requirements would be more than fully met.



NEWS AND NOTES

U. S. Aid to Indian Railways

The Governments of India and the United States of America signed two supplementary project agreements on April 27 at New Delhi under which the U.S. will provide \$ 10.5 million for the development funds for the Indian railways and \$ 2 million for the community development programme.

This total of \$ 12.5 million is part of the amount of \$ 55 million available to India from the development funds during the current fiscal year under the Indo-American programme and is in addition to the technical assistance funds.

The sum of \$ 10.5 million will be used by the Railway Board for purchasing approximately 56,400 tons of steel rails and 1,900 tons of fish-plates.

The sum of \$ 2 million is intended to continue assistance to the community development programme by providing necessary funds for the purpose of procuring the equipment required for opening 200 new community development blocks. This will increase the total number of blocks to 822 covering 13 million people in the rural areas of India. The money will be used to acquire from outside India jeeps, cargo personnel carriers, station wagons, road rollers, audio-visual sets, hand camera and battery-operated public address sets for use in the 200 new blocks.

The Government of India are providing the three-year Rupee expenditure of the 200 blocks

which will amount to Rs. 26,20,00,000 including the inland handling and transportation costs for the equipment to be imported under the agreement.

World Bank aid for Railways

Shri J. Dayal, Financial Commissioner for Railways, left for London on May 9 on his way to Washington.

Shri Dayal is leading a high-level team of railway officials for negotiations with the World Bank. The World Bank has invited the team to complete the negotiations for financial assistance from the Bank for financing the Second Five-Year Plan of the Indian Railways.

Shri Dayal told reporters at Santa Cruz airport that they had reason to be hopeful of success in their mission. He said the foreign exchange requirements of the development programme of the Railways under the Second Plan would be about Rs. 425 to 450 crores. He could not say as to what amount India could get from the World Bank. The negotiations between the World Bank and Indian officials have begun on May 19 and will last for about six weeks.

New amenity for holiday-makers

The Indian railways will shortly provide camping coaches at a few selected stations for the convenience of rail travellers on holiday.

The Estimates Committee of Parliament had some time ago recommended that this experiment should be tried on the model of similar camping coaches provided by the British railways.

The Railway Board has advised the railways that unserviceable passenger coaches should be utilised for this purpose and these should be specially fitted up to provide the necessary conveniences.

The stations where these camping coaches will be made available will be decided by each Railway Administration but these would preferably be stations which do not have retiring rooms.

The internal fittings will be the same as in First Class coaches. An attendant will be

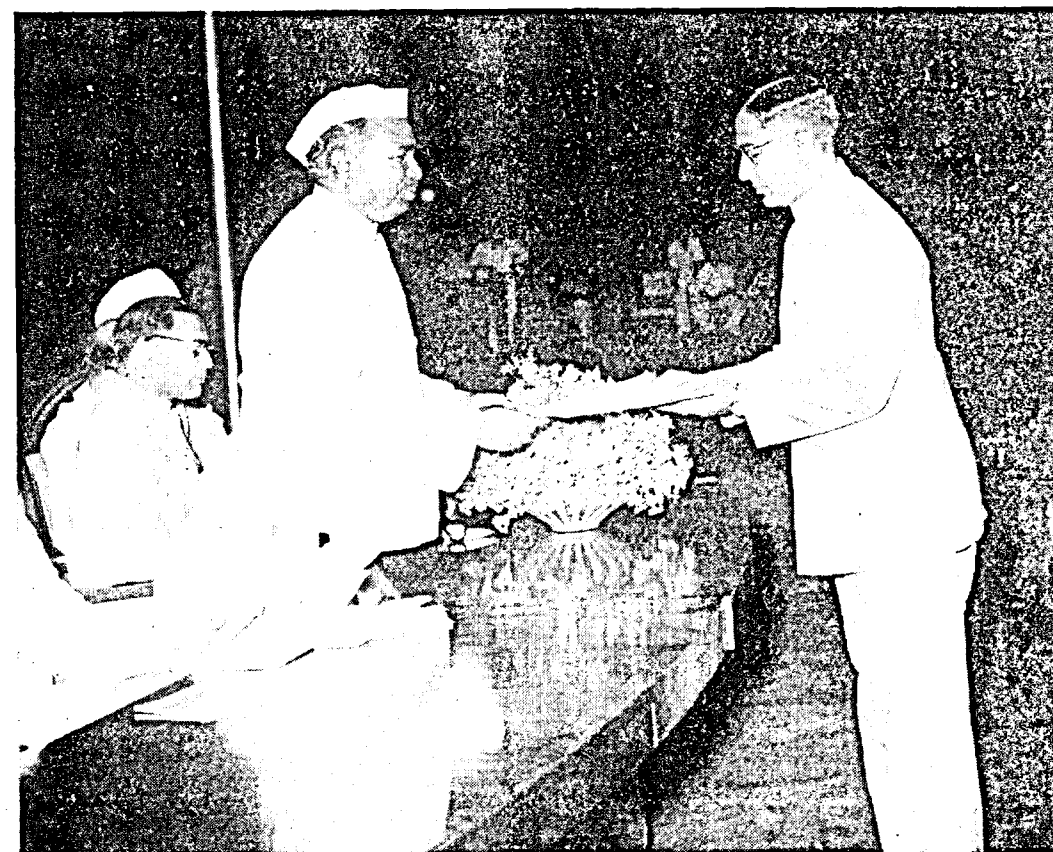
provided to look after these coaches. Generally speaking the rules in force in the case of retiring rooms would be applicable to camping coaches also. Cooking will not be allowed in these coaches.

Nominal charges have been fixed. A four-berth compartment would be allotted for Rs. 4 and a coupe for Rs. 2 for every 24 hours or part thereof. Normally compartments will be reserved for a maximum of 72 hours at a time.

Shortage of railway sleepers

A serious shortage of railway sleepers is hampering the progress of numerous works provided in the Second Five-Year Plan of the Indian Railways.

Shri Viswanathan, Foreman of our Factory, receiving the Certificate of Merit from the Railway Minister at the function held in New Delhi during Railway Week



The railways are at present using up all the wooden sleepers available within the country but these cover only a small proportion of the total annual requirements, despite the various steps that have been taken to increase indigenous production.

The balance has to be made good with cast iron and steel sleepers ; there is general shortage of these as well.

During 1956-57, the total demand of the Indian Railways was 90 lakh sleepers. However, they were able to get allotments of only 76 lakh sleepers, out of which the actual deliveries amounted to no more than 46 lakh sleepers. This comprised 21 lakh wooden sleepers and 25 lakh cast iron and steel sleepers.

During the current financial year the railway requirements total up to 100 lakh sleepers, but the railways have been allotted only 71 lakh sleepers. Out of these, wooden sleepers account for only 25 lakhs, the balance being cast iron and steel.

Khadi pugree cloth for Railway staff

The Indian Railways purchase over 500 miles of pugree cloth annually for their staff, and, in future, all this will be khadi cloth.

The decision that the mill-made pugree cloth at present being purchased should be replaced by khadi cloth has been taken by the Railway Board as part of the drive to popularise the use of khadi on the railways.

At present the annual purchase of 800,000 to 900,000 yards of mill-made cloth required by the railways cost approximately Rs. 10 to 11 lakhs.

Quarters of Railway Class IV Staff

The Government of India have decided that in future all quarters for Class IV staff should be electrified.

Electric fittings in all the existing 5,000 quarters for Class IV employees of the Union Government in Old and New Delhi have been completed by the Central Public Works Department at a cost of about Rs. 12 lakhs.

"Rail Nilayam."

"Rail Nilayam", a documentary produced by the Railwaymen's Fine Arts Society, Chetput, was shown at a preview on April 24 at the Gemini Studios. The Chief Minister of Madras State, Shri Kamaraj, presided over the function.

Produced at a cost of Rs. 75,000, the film aims at instructing the public on the need to observe cleanliness, courtesy, etc., and also telling them about the efforts taken by the Railways to give greater amenities to the passengers and to reduce congestion in trains. The proceeds of this film would be spent by the Society to offer 5,000 handloom sarees to deserving women through the Guild of Service and to supply free books to 1,500 students through the Harijan Welfare Department.

A token gift of 100 sarees was handed over to the Guild of Service on the occasion, and the Chief Minister presented them to Mrs. Mary Clubwala Jadhav, Sheriff of Madras, who received them on behalf of the Guild.

Shri K. Subramaniam, cine director, described the film as an "entertaining documentary" and congratulated the Society on producing the film at such a low cost.

Shri S. S. Vasan, Proprietor of the Gemini Studios, expressed surprise that the film which was greatly entertaining was produced at Rs. 75,000 and within 30 working days. He thought that this might set in a revolution by the production of more such cheap films. He congratulated the amateurs who had produced this film and was sure that it would secure the necessary encouragement from the public.

Shri Kamaraj said that he was told at the time when he inaugurated the production of the film that the Society's wish was to produce a documentary at a low cost. He now found that they had succeeded in their efforts, on seeing the film, because the film well brought home the need for observing cleanliness, patience, courtesy, etc., on the railways. He also felt

that such films should be exempted from tax, but many other things had to be considered before this could be done.

Mrs. Clubwala Jadhav said that it was very good of them to have given these sarees to the Guild of Service and thanked the Society on behalf of the organisation.

Electrification plans of Railways

The Railway Board has decided to invite offers of technical association from firms in foreign countries in connection with the railway electrification programme during the Second Five-Year Plan period.

The technical associates finally selected by the Government of India would be expected

to assist the Indian Railways in designing, erecting and initial operation in respect of certain main line electrification schemes.

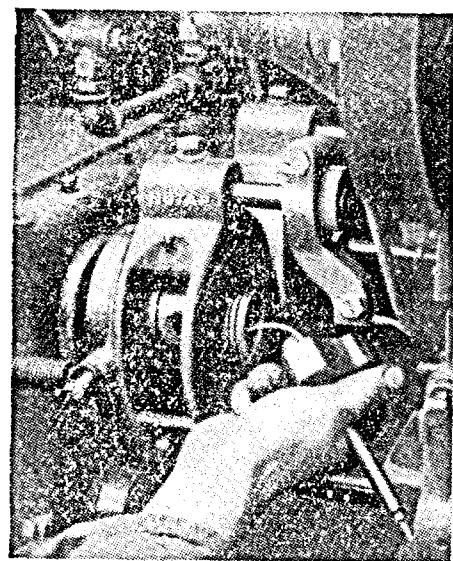
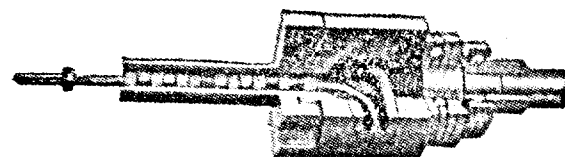
Recently the Railway Board tentatively decided to adopt the A.C. 50 cycle traction system for main line electrification in this country.

The lines, in respect of which offers of technical association have been invited, are the Burdwan-Moghalsarai section on the Eastern Railway and the Asansol-Rourkela and the Rajkharwan-Barajamada sections of the South-Eastern Railway.

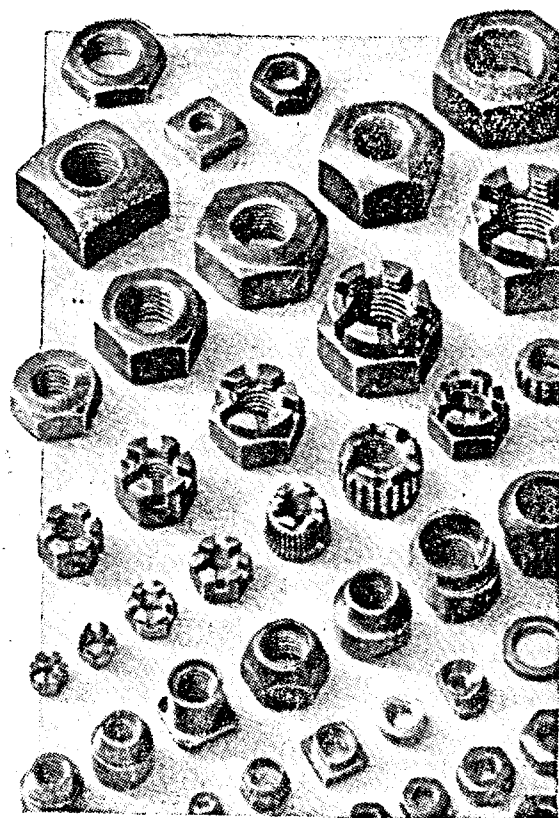
The total cost of electrification of these sections is likely to be in the neighbourhood of Rs. 35 crores.

Shri A. B. Krishnaswamy of the Southern Railway receiving the Certificate of Merit from the Railway Minister at the function held at New Delhi during Railway Week





INSERTING SLEEVE IN TAP HEAD



New Railway Budget for the year 1957-58

Speech by Railway Minister

Presenting the Railway Budget in the Lok Sabha on May 14, 1957, the Railway Minister, Shri Jagjivan Ram said :

" I rise to present the statement of receipts and expenditure of the Railways for the year 1957-58 :

" The estimates of expenditure for the current financial year already presented by me on March 19, 1957, to the then Lok Sabha for a ' vote on account ' remain practically the same, except for a few minor alterations which have been made in individual demands. These alterations are brought out briefly in the supplement to the Explanatory Memorandum on the budget and in detail in the explanatory notes in the Demand Book. On the earnings side, however, I have certain new proposals to make for the consideration of the House, and these affect the financial picture substantially.

" Honourable Members are aware that the Ministry of Railways had originally prepared their Second Five-Year Plan for an estimated outlay of Rs. 1,480 crores, that was considered as the minimum required for the creation of the necessary extra rail transport capacity for goods and passenger traffic. An increase of 30 per cent in passenger services, and an additional 60.8 million tons in goods traffic over that generated by the end of the First Five-Year Plan, making a total of 180.8 million tons, was thought necessary in keeping with the targets fixed for other developmental projects and schemes in the General Plan.

" The Railway Plan also provided for the construction of 3,000 miles of new lines. Due to the limited overall financial resources of Government, however, the Railways were allotted only Rs. 1,125 crores of which Rs. 375

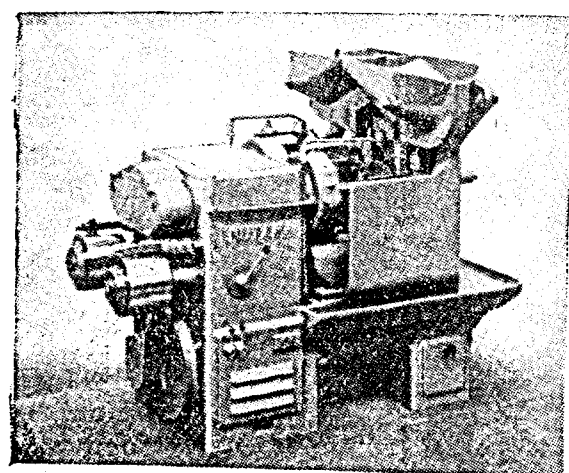
BUDGET AT A GLANCE

	Actuals 1955-56	Revised Estimate 1956-57	Budget Estimate 1957-58 (Rupees in crores)	
			As proposed in March '57	As now proposed
Gross Traffic Receipts	316.29	350.00	368.50	377.90
Working Expenses	213.22	229.34	244.16	244.16
Net Miscellaneous Expenditure	7.73	11.02	14.12	14.12
Appropriation to Depreciation Reserve Fund ...	45.00	45.00	45.00	45.00
Total	265.95	285.36	303.28	303.28
Net Railway Revenues	50.34	64.64	65.22	74.62
Dividend to General Revenues	36.12	37.69	43.79	43.79
Net Surplus	14.22	26.95	21.43	30.83

Automatic machines for producing nut threads

Nutap Automats are designed for the continuous tapping of nuts of every type with a minimum wear of taps and safety devices to prevent tap breakage. It is a twin spindle machine in which the taps are advanced to the pitch of the thread ensuring an accurate thread. These automats are built in four sizes for thread diameters from $\frac{1}{4}$ in. to $1\frac{1}{4}$ in. with a guaranteed output per hour varying between 650 and 4000 nuts. Nutap automats are also manufactured for counter-sinking of cold pressed or bright nuts and for deburring, counter-sinking and chamfering of hot forged nuts.

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The Railway Minister, Shri Jagjiwan Ram

crores were to be found by them over the Plan period from their own resources. To conform to the reduced allotment, the scope of the Railway Plan had necessarily to be cut down and, after eliminating most of the new lines except those essentially required for the projected expansion in steel and coal production, it was found possible to cater within the funds allotted for an increase of only 15 per cent in passenger transport and a total of 162 million tons in goods transport. The reduction in the target of passenger transport capacity restricted the possibility of any substantial relief of the overcrowding in our passenger trains during the period of the Plan. While the prospect of the continuance of the present state of overcrowding was undesirable, the enforced reduction of the provision for extra goods transport from 180.8 million tons to 162 million tons was much more serious from the point of view of the country's developing economy. After reserving capacity for 25 million tons on account

of coal and other raw materials required for the new steel plants and expansion of the existing ones, 6 million tons more coal for other consumers and 4 million tons more for cement, a very meagre margin was left for the increase in the general merchandise traffic, including increases in trade and the output of all other industries and agriculture.

Railway 5-Year Plan

"The experience of the first year of the Second Five-Year Plan has made it abundantly clear that the demands on rail transport during the Plan period are likely to exceed even the original estimate of 180.8 million tons. It is, therefore, manifest that the allotment of Rs. 1,125 crores, which includes financial provision for carrying only an additional 42 million tons of traffic, will be quite inadequate. To cater for a higher volume of traffic a substantial expansion of the Railway Plan has become inescapable, and such an expansion must be planned straight-away as the execution of the line capacity and signalling works essential for moving the higher quantum of traffic will take its own time.

"On a rough basis it is anticipated that an additional amount of over Rs. 100 crores at the present price levels would be required to carry 180.8 million tons. Apart from the demands of the larger quantum of traffic which the Railways must carry as the Plan develops, the rise in the cost of labour and essential materials like steel, cement, etc., since the Plan was prepared, has already made the allotment of Rs. 1,125 crores insufficient for creating capacity even for the increase of 15 per cent in passenger transport and 42 million tons of goods traffic, and it is estimated that achieving the physical targets originally included in the Rs. 1,125 crores Plan will itself require an extra amount of about Rs. 100 crores.

"The two items of extra expenditure just mentioned add up to well over Rs. 200 crores. As my predecessor, Mr. Lal Bahadur Shastri,

explained in February, 1956 when proposing the present 6½ percent supplementary charge on goods and parcels freight, the Railway revenue resources computed on the basic level of fares and freights in force were estimated to amount during the Plan period to only about Rs. 325 crores including the contribution of Rs. 225 crores through the Depreciation Reserve Fund, the expenditure on open line revenue works, interest on Railway fund balances and Revenue surpluses, leaving a gap of Rs. 50 crores to be filled in order to make up the Railway contribution of Rs. 375 crores envisaged in the Plan.

"On present estimates it seems that the Revenue surpluses at the basic fare and freight rates may be somewhat higher and that the levy of the supplementary charge of 6½ percent would bring in about Rs. 71 crores extra over the Plan period. It is, however, quite clear that, on the basis of the present supplementary charge of 6½ percent on goods and parcels freight, the resources that will be left over after filling the initial gap of Rs. 50 crores will not amount to more than a small proportion of the extra amount of over Rs. 200 crores which has to be found if the Railways are to cope with the anticipated demand of goods transport by 1960-61. There is now universal recognition of the fact that transport capacity cannot lag behind other developments envisaged in the Plan and that the very success of the Plan would depend on the timely creation of the additional transport capacity. It is, therefore, essential that the necessary where-withal to meet the extra expenditure has to be found as early as possible.

"In March last, in presenting the Budget, I stated that the report of the Freight Structure Enquiry Committee was expected shortly and that when the budget was again presented in the new House, it would be possible to give an indication of the recommendations of the Committee and the effect of the implementation

of those recommendations. I regret to say that it has not been possible for me to do so. The report in its final and complete form was received only recently. The task assigned to the Committee was a difficult one and I would on behalf of the Government express our deep gratitude to Mr. Ramaswami Mudaliar and his colleagues on the Committee for the thorough manner in which they have dealt with this intricate subject in their report.

Freight Structure

"While the recommendations of the Committee envisage an appreciable rise in the general level of freight rates, various aspects dealt with in the report have far-reaching implications and the recommendations, particularly those related to the augmentation of freight rates, call for a detailed study. It is anticipated that a complete examination of the recommendations and the preparatory work like the amendment of the Goods Tariff and the preparation of mileage tables which must precede the introduction of the new freight rates are not likely to be completed until the end of the current calendar year. As we are already well into the second year of the Plan, the augmentation of resources to meet the extra expenditure on rolling stock and works can brook no further delay; otherwise the Railways may be too late in creating the capacity required to carry the additional traffic load which, it is quite certain now, will devolve on the Railways during the Plan period.

"It is proposed, therefore, to enhance, as from the 1st July, 1957, the supplementary charge on goods and parcels traffic from 6½ percent to 12½ per cent, certain commodities being exempt as at present. I have not made any changes in the passenger fares, as my colleague, the Finance Minister, is considering this matter.

"Consequent on the increase of the supplementary charge, it is estimated that the additional earnings will be about Rs. 11.3 crores

for goods traffic and Rs. 1.2 crores for parcels traffic per year. But since the increase is to take effect only from July 1, the extra earnings for this financial year are expected to be only about Rs. 9½ crores. It is hoped that towards the end of the current year it will be possible to introduce a selective variation in freight for goods traffic based on the recommendations of the Freight Structure Enquiry Committee and withdraw the flat supplementary charge.

"Taking the increase in parcel and goods earnings into account, the total surplus for the current financial year is now estimated at Rs. 30.83 crores, which will be credited to the Development Fund.

Concessions to passengers

"Although the view has been pressed, both in this House and elsewhere, that concessions for passenger traffic should be reduced or withdrawn in the context of the prevailing overcrowding and the need to enhance earnings, I do not at the moment propose to cancel any of the existing concessions. In fact, I propose extending the concession of a single ticket to cover a blind passenger and his attendant, which applies at present only to blind persons under the care of recognised institutions, to all blind persons. A similar concession is being extended to patients suffering from tuberculosis for their journeys for admission to and on discharge from hospitals and sanatoria. Both these concessions will, of course, be subject to production of appropriate certificates to avoid misuse.

"I am sure the House would be interested to know the progress already made in the implementation of the Railway plan of Rs. 1,125 crores, and I would invite the attention of the Honourable Members to the introductory section of the White Paper on the Railway Budget for 1957-58, which gives the details of the progress made in the year 1956-57 and that programmed in the current financial year. Put briefly, a sum of Rs. 193 crores had been

provided in the Budget for 1956-57 for expenditure on Works, Plant, Machinery and Rolling Stock, against which the Railways' final estimates in the last week of the year amounted to Rs. 178 crores, the short-fall being almost entirely on the Works side. The revised estimate of expenditure on civil engineering works in 1956-57 was nearly Rs. 11.8 crores less than the original estimate of Rs. 88.16 crores, and the final estimates fell short even of the revised estimate by nearly Rs. 6.6 crores. While this last surrender of funds was partly because the on-account payment proposed to be made for the purchase of the Bombay Government plant in the Chola Power-house could not materialise due to the negotiations not having reached any finality, it has become apparent from an analysis of the civil engineering expenditure during the last year that by far the greater portion of the short-fall was due to the shortage of materials, particularly permanent-way items like rails, sleepers and fittings and signal and interlocking stores and equipment. It will be appreciated, however, that some time is required to gear up the construction organisation to the desired tempo and it was not possible to do so in the very first year of the Plan. However, all the factors contributing to the short-fall have been carefully examined and are being further tackled with a view to ensure better progress in this and the coming years towards full implementation of the Plan.

Progress on new constructions

"Considering the acute shortage of essential materials, particularly steel required for permanent-way, bridge girders, cement, etc., the progress made on new constructions has been quite satisfactory and the projects have been executed with commendable despatch. During the year 1956-57, the 24 mile long Champa-Korba and 26 mile long Fatehpur-Churu branch lines were opened to traffic, as also the 37 mile long Ernakulam-Kottayam section of the Quilon-Ernakulam link, making an

aggregate of 87 miles of new railway lines. The construction of eight other projects totalling 524 miles is in progress. Recently, a link between Chandrapura and Muri, a distance of approximately 43 miles, has been sanctioned and the work is expected to get into full swing immediately after the monsoon. The 7-mile link between Gandhidham and New Kandla which was opened for goods traffic last year has now been opened to all traffic. Work is also in progress on nearly 700 miles of doublings of which about 370 miles are on the South-eastern Railway, 116 miles on the Western Railway and 78 miles on the Southern Railway. At the close of the last financial year more than 1,50,000 men were working on the various projects.

"Approved surveys totalled 2,800 miles during 1956-57, of which the fieldwork on nearly 2,000 miles is still in progress. Of the surveys sanctioned in 1955-56 or which were already in progress, those for the Madhopur-Kathua, Baraset-Hasnabad and the Mangalore-Hassan lines and for the avoiding lines in the Delhi area have been completed. Surveys for the Guna-Ujjain portion of the Gwalior-Ujjain and the Nizambad-Ramagundam, Muzaffarpur-Darbhanga, Robertsganj-Garhwa Road, Rampur-Haldwani, Bhaili-Bhadran and Sojitra-Dholka and Kadur-Chickmagalur-Sakhleshpur projects are nearing completion. Those for the Sambalpur-Titilagarh, Sitamarhi-Sonbarsa, Bangalore-Salem, Trivandrum-Tinnevely-Cape Comorin, Vellore-Conjeevaram, Kotah-Chitorgarh, Udaipur-Himmatnagar, Satna-Rewa-Gobindgarh, Nipani-Sakleshwar-Ghataprabha; and Bukhtiarpur-Rajgir projects and the branch lines in the Karanpura and Kathara coalfields are still in progress.

"The proposal for a second road-cum-rail bridge over the Jamuna at Delhi, with an avoiding line between Tughlakabad and Ghaziabad is under detailed examination and the survey of the railway alignment is expected to be com-

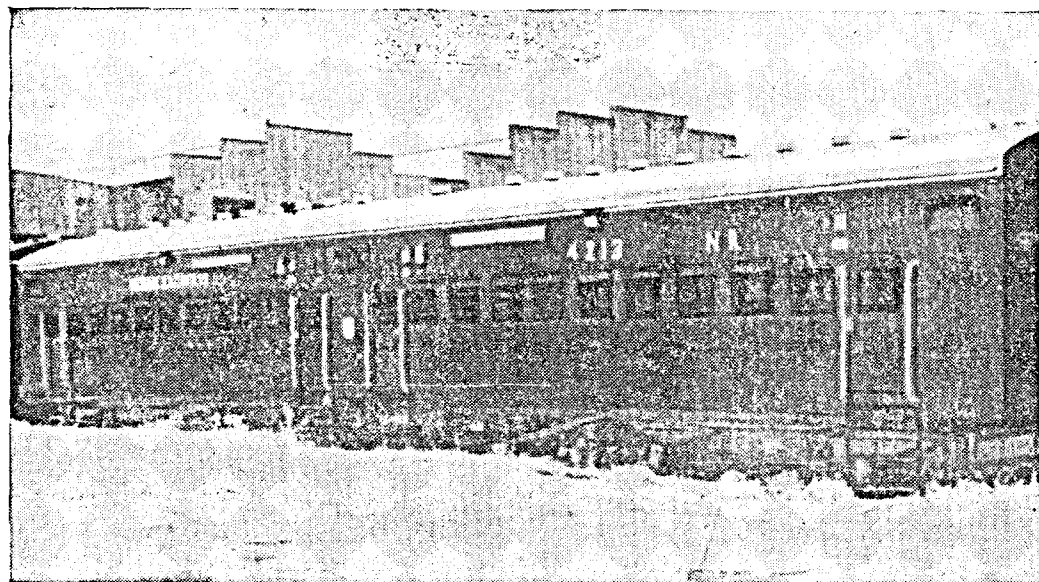
pleted shortly. Model experiments are also being conducted by the Central Water and Power Research Station at Poona on the suitability of the site proposed for the bridge. Approval was also given to surveys for the conversion of the Kurduwadi-Miraj Narrow Gauge and the Poona-Miraj-Kolhapur Metre Gauge sections to Broad Gauge. An urgent reconnaissance survey was also conducted of the Jaldhaka and Torsa River crossings on an alternative Assam Link route.

Shortage of funds and materials

"Honourable Members will observe from the details that I have just given that surveys of a large mileage have already been completed and those of other lines aggregating again to a considerable mileage are also in progress. When all these survey reports are received and examined, some of the lines might be eliminated on financial and other considerations. But even in regard to the rest, I see no prospect of their construction being taken in hand during the Second Plan period due to shortage not only of funds but of materials also. In these circumstances there can be no point in undertaking any fresh surveys, thereby dissipating our man-power, which is so urgently required for speeding up approved Plan projects. It will not, therefore, be prudent to sanction any new surveys during the year 1957-58, unless they are connected with an approved development project or required urgently on operational grounds or on strategic considerations.

"Of the twelve dismantled lines, the restoration of which was approved by the Central Board of Transport, eleven had been restored by 1955, and approval was accorded in 1956-57 to the restoration of the Rohtak-Gohana portion of the Rohtak-Panipat Link, the only remaining line. Owing to the limitation of funds in the Second Five-Year Plan it has not been possible to consider the restoration of more lines.

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(One of the Coaches—H. A. L. painted with SPARTAN Finishes)

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"The House is already aware of Government's anxiety to stabilise and strengthen the railway route to Assam. In 1947 the railway connection to Assam was cut off and the Government took immediate action to re-establish it along the narrow strip of Indian territory through the Northern Districts of Bengal by constructing three new railway links to join the old railway sections in this area. The old portions, Bagrakote to Mal and eastward to Madarihat, were built early in the century as branch lines by the ex B.D. Railway mainly to serve tea gardens. Before embarking upon any large scale measures to strengthen the old lines for present-day requirements, Government appointed a Committee of experts to suggest measures for stabilising the Assam Rail link route. Their report has now been received and is being studied. In the meantime all possible measures have been taken to keep the lines of communication intact. A very senior and experienced officer has been posted with special staff to assist in maintenance work during the coming monsoon and to start upon construction work for strengthening the route as soon as the working season begins.

Electrification schemes

"Honourable Members will have seen a reference in the White Paper presented in March last to the electrification of certain sections of the Indian Railways during the Second Five-Year Plan. There is a provision of Rs. 80 crores in the Plan for the electrification of about 800 miles of the Indian Railways, the sections included in the Plan being the Calcutta suburban area and the main line sections from Burdwan to Gomoh on the Eastern Railway, Igatpuri to Bhusaval on the Central Railway, and Tambaram to Villupuram on the Southern Railway. The necessity has since become apparent of extending electrification to the sections from Gomoh to Moghalsarai, Asansol to Rourkela, and Rajkharswan to Barajamda, involving an additional mileage of about 500.

The Plan was formulated on the assumption that the electrification would be on the direct current system adopted on the existing electrified sections near Bombay and Madras. In view, however, of the successful operation of electrification on the single phase alternating current system on the French National Railways, followed by the reported decision of many other advanced countries to adopt this system, investigations were made of its feasibility for main lines in India. These investigations were considerably facilitated by the kind loan by the French National Railways of the services of their electrical engineering experts. I take this opportunity to express the gratitude of the Government of India to the Government of France and to the French Railway authorities for this valuable assistance. It has now been decided tentatively to adopt this system for main line, electrification on Indian Railways also, due to its operating and financial advantages over the direct current system, and the technical details of this system are now under investigation.

"As in previous years, sustained efforts will continue in the current year to make railway travel more pleasant and comfortable, and a provision of Rs. 2.98 crores has been made for the purpose. A survey has now been completed of the amenities available at all stations and the extent to which they will have to be supplemented to reach the minimum standards of amenities prescribed for such stations. I need hardly mention that the full implementation of these measures will take time, depending upon the availability of materials.

Purchase of Rail materials

"As already stated, acute shortage of construction materials of almost all descriptions, and more specially, steel, cement, pipes and signalling equipment, prevailed during 1956-57. I mentioned last March that steps were being taken in conjunction with other Ministries for

improving the procurement of rails, sleepers, etc. It has subsequently been decided that the Ministry of Railways should take over the procurement of the specialised railways items of steel requirements, and a mission is being sent out to Europe and other countries to expedite the procurement of rails, sleepers, etc., the shortage of which is seriously hampering the implementation of the Railway Plan. The procurement of wooden sleepers has been considerably promoted by exploiting the usage of a greater variety of new species with and without treatment, by the relaxation of specifications, by increased supplies from the Andamans and by initiating measures for exploring the possibilities of the import of timber sleepers from Burma, Australia, Thailand, Malaya, Indonesia and Brazil. In spite of all these efforts, wooden sleepers can meet only about one-third of our total requirement of sleepers, and the Railways have, therefore, been forced to use metal sleepers which also cannot be procured in sufficient quantities. It is proposed now to use concrete sleepers also, in big yards to start with.

World Bank Loan

"The House must be aware that the Government of India have approached the World Bank for a loan to help finance the Railway Plan, and that, following the conversations in Washington last winter between the World Bank and a mission of Railway Officers, a team of experts was sent out by the World Bank to study conditions on Indian Railways on the spot. This team has submitted its report to the World Bank, and a mission including two Members of the Railway Board is proceeding to Washington immediately to finalise the loan negotiations. It is hoped that the loan will provide substantial relief from the foreign exchange difficulties besetting the Railway Plan.

"During the year under review there was serious damage due to abnormal floods, espe-

cially on the Northern, North-eastern, Central and Southern Railways. There were two cases of unfortunate accidents to trains carrying passengers at railway bridges due to the bridge approaches being washed away by high and unprecedented floods, one near Ariyalur on the Southern Railway and the second near Mahbubnagar on the Central Railway. Commissions of Enquiry were appointed to investigate into the causes of these accidents. The commissions' reports have been received and very carefully studied and the conclusions of the Ministry thereon are embodied in the notifications which have been published for general information.

Benefits to employees

"Turning now to other aspects of railway administration, I had occasion to mention in my reply to the Budget discussions in March that two or three alternative proposals were being considered for the introduction for railway staff of the pension system of retirement benefits in place of the existing provident fund-cum-gratuity system. I am now in a position to say that definite proposals have since been formulated which I intend discussing in the near future with the representatives of organised labour.

"Another matter mentioned during the March Session was the improvement of the channels of promotion of members of the Class IV staff in their own class and into the Class III Service. A committee has since been appointed to review the channels of promotion of these staff, with Mr. G. D. Tapase as Chairman, and a number of senior officers representing the Railway and Posts and Telegraphs Departments and the Planning Commission and two representatives of labour, as members. The committee is expected to start work immediately.

"The question of improved housing and other amenities for Railway staff has been in the forefront both in the first and in the second Five-Year Plans. A little over 40,000 staff

quarters were built during the first Five-Year Plan. About 15,000 quarters were built last year, 15,000 quarters more are again programmed for the current year and it is anticipated that at the end of the Second Five-Year Plan 64,500 new quarters will have been added to the number at the commencement of the Plan. The policy is to provide quarters not only for essential staff, who are liable to be called out for duty at any time of the day or night, and, therefore, are required to live near the places of their work, but also to other staff in areas where housing is difficult due to lack of private enterprise. In addition to building new quarters, improvements to existing quarters have been undertaken on a large scale, such as by substitution of better types of quarters for the old, and provision of amenities like water-borne sanitation and electrification.

"Though education is the responsibility of State Governments, Railway Administrations have, in the interest of the children of staff at stations where educational facilities were inadequate, opened a number of schools which are being maintained entirely from railway revenues. The necessity for the expansion of these facilities has formed the subject of discussion between the National Federation of Indian Railwaymen and the Railway Board, and a survey of large colonies has just been completed for the purpose of estimating the additional number of primary schools that should be opened to cater to the needs of the children of railway employees. Negotiations with local bodies and State Governments are at present being conducted to settle the terms on which the primary schools that are required will be opened.

"In addition to the opening of primary schools in large railway colonies where educational facilities do not exist, it seems desirable that some provision should also be made for meeting the educational needs of the children of railway employees stationed at outlying

places which have no schools in the neighbourhood and where the number of children of railway staff does not justify the opening of schools by or with the assistance of the Railway Administrations. I have decided tentatively that to start with, one residential school with primary as well as secondary classes should be opened in each linguistic area to cater for the needs of employees posted outside their own linguistic areas or at stations where adequate educational facilities do not exist or cannot be provided. My intention is that such schools should be constructed and run on an austerity basis. An investigation into this problem is being commenced forthwith.

"In his speech introducing the Budget for 1956-57 my predecessor mentioned the appointment of an officer in the Railway Board's Office to review the existing medical arrangements on Railways and to plan for future expansion. I am glad to say that this review has been completed and the plans for future expansion of medical facilities on Railways have been drawn up. An indication of the proposed expansion in some directions has already been given in the White Paper.

"I would like to refer in particular to the facilities for the treatment of Railwaymen suffering from T.B. In tackling this disease early diagnosis and treatment are extremely important. To enable incipient T.B. infections to be detected and treated in the initial stages of the disease, it has been planned to set up 80 Chest Clinics, and of these 33 are already in operation. We are at the same time doing all we can to augment the facilities for the treatment of advanced T.B. patients in Sanatoria. My predecessor stated in February 1956 that 220 beds had been reserved for Railway employees in different Sanatoria. As has been mentioned in the White Paper, this figure has now gone up to 646 beds sanctioned, which we propose to increase by March, 1961, to about 1,350.

Medical facilities

"In the past, the medical facilities provided on Railways concentrated mainly on the curative aspects of medicine. According to modern concepts, the preventive aspect of medicine is equally important. This has been recognised on Railways by the decision to convert existing dispensaries into health units and to build new ones. The necessity for devoting whole-time attention at the senior officers' level to health work has been recognised by the creation of a post of District Medical Officer of Health at the headquarters of each Railway.

"The proposal to which a reference was made while presenting the Budget in February, 1956, for the association of Surgeons and Physicians of repute with the headquarters hospitals of Railways is materialising. Arrangements are about to be completed for such specialists to be attached to the Northern Railway Central Hospital recently opened in Delhi.

"The House is aware of the pre-eminent position which the Railways occupied in the field of sports and athletics in the years gone by. For a few years during and after the war they were unable to devote much time and attention to such activities, but within the last four years they have, on the inspiration of my predecessor, Mr. Lal Bahadur Shastri, entered the field again, and I am glad to say they have restored their old traditions by winning the National Championships in Weight-lifting and Hockey. The championship in Hockey has been won after 27 years. More recently, the Central Railway won the Invitation Gold Cup, for which teams of all-India repute compete by invitation. In the field of athletics railwaymen have set up and improved upon all-India records and they have also represented

the country in international games. On my suggestion, the Railways organised during Railway Week this year exhibitions of photography, painting and handicrafts and also staged cultural programmes of drama, dance and music, in which a large number of artists drawn from among railwaymen and their families all over the country participated. I was greatly impressed by the wealth of talent among railwaymen and I expect such a cultural meet will hereafter be an annual event.

"Thus it will be seen that every endeavour is being made within the existing limitations of funds and other resources to ameliorate the living conditions of the railway employees in all possible ways. In doing so, we have to bear in mind the general standard prevalent in our country and work with this background. It must not be forgotten that we have undertaken a stupendous task in trying to raise the economic standard of millions of people as quickly as possible. This task can be successful only if all sections of our people give of their best, always bearing in mind the interests of the country above those of any particular group, section or state. The achievements of the Railways during the First Five-Year Plan and the dedicated work which has enabled railwaymen to record striking improvements in Railway operation leave no room for doubt that, in this critical period in the economic evolution of new India, railwaymen will be second to none in their devotion to duty and their spirit of sacrifice. I do not want to miss this opportunity to express my thankfulness to all railwaymen. I have full confidence that they will render even a better account of themselves in the fulfilment of the still bigger tasks lying ahead of them."

Progress Made by the Integral Coach Factory

(English Translation of a broadcast talk in Tamil on A.I.R., Madras, by K. Sadagopan, Chief Administrative Officer, Integral Coach Factory, on 13-4-1957)

You might be aware of the fact that the Government of India, Ministry of Railways, have established a coach building factory at Perambur, in the suburbs of Madras, with a view to attain self-sufficiency in the matter of passenger coaches, thereby avoiding the import of coaches from foreign countries for our needs. Production in the factory was inaugurated by our revered Prime Minister, Shri Jawaharlal Nehru, in October 1955.

The Government of India have fixed a production target of 350 coaches a year for our factory and it was originally planned to achieve this target in progressive stages in the course of five years from production start. Of these, 20 coaches were to be turned out during the first production year. From the production experience gained during a period of a few months since October, 1955 it has been possible to more than double the target of out-turn for the first production year and achieve a production of 43 coaches, thanks to the untiring efforts of the workers of the factory as also the whole-hearted co-operation of the Swiss Experts who are here to guide us in this stupendous task. It has also been possible to rearrange the whole production plan with a view to attaining the maximum production target of 350 coaches a year, one year ahead of schedule that is, in the fourth year of production instead of in the fifth year.

There are 1,169 components for the coach manufactured at the factory, out of which 1,120 components are either manufactured in the



Shri K. Sadagopan

Integral Coach Factory itself or purchased indigenously. The remaining 49 components are at present being imported from abroad. The Government of India are keenly exploring ways and means of manufacturing these 49 components also indigenously. A completely indigenous coach-shell manufactured in the Integral Coach Factory was turned out by our President on the 14th of August, 1956.

The factory will employ 4,000 workers when in full production. You might remember that a Technical Training School was started early in March 1954 to give proper training to our

workers in the assembly of these coach shells. On the 1st of August, 1956 a hostel, with accommodation for 250 students, was also opened as an adjunct to the school.

I need not dwell at length on the fact that a colony consisting of 400 quarters has been provided for essential staff and a school, a children's park, and a co-operative stores are also there within the colony area.

The coaches manufactured in the Integral Coach Factory have been furnished in other Railway Workshops, since furnishing facilities were not available in the factory itself. In view of the fact that, if these facilities also are provided here, a fully furnished coach could be launched from this factory itself, the Government of India have sanctioned a furnishing unit at a cost of Rs. 3.69 crores. The site for this unit is located close to the factory, south of the new Avadi Road.

The covered area of the workshops of this furnishing unit will be 5.5 lakhs sq. ft. and about 240 acres of land are being acquired for the purpose. Quarters for the essential staff will be provided within this area. The factory buildings will be of modern design with ample lighting and ventilation and have been estimated to cost Rs. 102 lakhs. There will be about 260 machines in this unit to furnish all the 350 coach-shells to be manufactured in the Integral Coach Factory when in full production.

The new furnishing unit will employ about 2,400 workers when in full production. It is proposed to expand the present Training School suitably at a cost of Rs. 4 lakhs with a view to train the technical personnel required for this unit. A colony of 200 quarters is also to be provided for the essential staff of the unit.

Machinery required for this unit is proposed to be purchased indigenously so that it would be a source of encouragement to industries in the Madras State and in the country. It has also been planned to achieve the full produc-

tion capacity in this unit before the end of the Second Five-Year Plan.

Schemes are afoot to give necessary training to the workers in interim furnishing sheds that have been improvised near the factory much ahead of the beginning of work in the furnishing unit. In fact the first coach furnished in the Integral Coach Factory itself was launched by His Excellency Shri A. J. John, Governor, Madras, on the 21st February, 1957.

I wish to give you some details about the facilities that are being provided in the furnished III class coach turned out of our factory. In these carriages there are four entrances on each side, two in the middle and one at each end. There are four lavatories also, two in the middle and one at each end by the side of the entrances. The seats are arranged transversely with one long seat for four passengers on one side and a single seat on the other side with a passage in between. An ample bunk for a heavy luggage rack and, above that, a light luggage rack are provided just over the long seats. Two lights are provided over each pair of seats facing each other and two night lights are also fitted on each half of the coach. The windows have two shutters, one of venetians and the other of glass, the whole being built out of Aluminium frames and extrusions.

After the attainment of independence, the Union Government have drawn up various schemes to hasten the progress of our country and work is going on with great speed in a variety of fields. The Chittaranjan Loco Works, the Integral Coach Factory at Perambur and the Chemical Fertiliser Factory at Sindri are examples of the efforts of the Government of India towards attaining self-sufficiency. The Government's only anxiety is that the country should become prosperous and rich and the standard of living of the people should be upgraded. For this purpose Five Year Plans have been drawn up and are being executed.

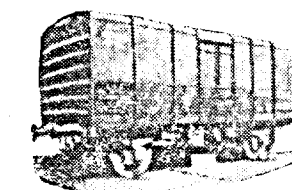
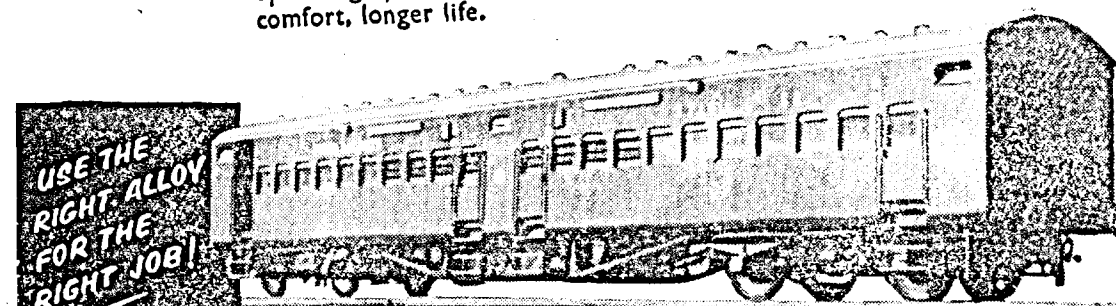
The Integral Coach Factory at Perambur, in its own humble way, is contributing its mite towards the country's progress. In the whole of the East, it is the biggest coach building unit. All the important foreign dignitaries who happen to visit our country from time to time honour us by coming to our factory also and their tributes to the way in which the factory is marching ahead are a piece of valuable encouragement to our workers. The method of work obtaining here has also been subjected to unstinted praise from experts. Our only prayer is that our workers should put their shoulders together in this common task

so that India could become a prosperous country taking an equal place among others in the comity of nations. The pace of production in our works is increasing day by day, thanks to the whole-hearted co-operation of our Swiss friends who are here to assist us and no less due to the untiring efforts of our workers.

If the construction of the furnishing unit is finished and it starts working in full swing, our factory will begin turning out fully furnished coaches in an endless stream and serve as an independent unit producing full-fledged passenger coaches to meet the country's needs.

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HUMPI (Vijayanagar)	Marvellous ruins of the old capital of the Never-to-be-forgotten Hindu Empire, Vijayanagar.
KODAIKANAL	The charming hill station near Madura.
MADURA	Capital of the Ancient Pandya Kings, noted for its great Meenakshi Temple.
MYSORE	The city of lights. The enchanting Brindavan Gardens are only ten miles from Mysore.
OOTACAMUND	The queen of hill stations in India.
RAMESWARAM	For a holy bath and its famous temple.
TIRUPATI	The seat of the Lord Venkateswara or Balaji. Here every day is a festival day.
TRICHINOPOLY	Noted for its shrines at Srirangam and Tiruvanaikaval.
TRIVANDRUM	For its famous art gallery, museum and zoo.

Chief Commercial Superintendent

News from Switzerland

*(Published through the kind courtesy of the Consulate-General
for Switzerland)*

Switzerland's foodstuff industry has won a battle

A very difficult problem has been solved, for the first time, owing to the efforts and research work carried out jointly by five important Swiss firms belonging to the foodstuffs branch. They have succeeded in perfecting an entire scale of saltless foodstuffs, which will now make it possible to follow a strict diet, under medical control but, henceforth, with the help of varied dishes possessing an agreeable taste. This new success on the part of Swiss industry, places the country in the van, in the domain of dietetics products.

The construction of the highest dam of the world progresses

Switzerland needs a great deal of electricity. To meet this need it is constructing numerous hydro-electric dams on its mountains. It is now more than 5 years since the beginning of work on the dam of the Grande-Dixence in a side valley of the Rhone. This dam, with a height of over 900 feet, will be the highest in the world. The dimensions of this undertaking are vast—the mass of the dam will represent more than 6 million cubic metres of concrete. Situated at a height of more than 6,000 feet, it will hold back an artificial Lake of about 400 million cubic metres of water. This dam will by itself produce one-tenth of the energy Switzerland needs today. An interesting landmark in the work of building the dam was reached the other day, when the completion of the pouring of the second million cubic metres of concrete was celebrated. It is estimated that it will take the 1,000 workmen another ten years to complete this dam—the greatest single concentration of volume ever brought about by man.

Jubilee in Swiss industry

The Swiss factory of machine-tools, Oerlikon Buehrle & Co., near Zurich, has just celebrated its 50th anniversary. Founded in 1906, this factory passed into the hands of Mr. Buehrle, its present owner, who greatly developed it. Thirty years ago there were scarcely a hundred on the staff—today there are more than 3,500. This important Swiss factory manufactures machine-tools, arms, textile machines, compressed-air brakes and office-machinery and its products have an international reputation.

Switzerland builds largest alternators

A hydro-electrical station is now being built in Switzerland, which will partially supply power to the network of the Swiss Railways. This station is to be equipped with alternators which will be the most powerful ones in the world of such type. Built in Switzerland, each one of them will weigh more than 400 tons and the rotor will have an external diameter of approximately three meters.

Switzerland's precision industry leads the way

Being as she is, entirely without any raw materials and being obliged, nevertheless, to live from her industrial production, Switzerland is forced to produce what no other competitive country is able to achieve. In view of the fact that production on a large scale and at cheap prices is practically prohibited as a result of the smallness of her domestic market, all that remains for her to do, is to specialise in high quality and precision. In this connection, it may be of interest to cite an example which is practically unknown to the general public. It concerns the "Societe genevoise d'instruments de physique" in Geneva, whose special

boring machines are appreciated all over the world. Well, this firm has also acquired renown in another scientific domain, namely in that of metrology. The laboratories of the Societe genevoise d'instruments de physique were entrusted recently with a work which may be qualified as being of historical importance for metrology. It consisted in retracing afresh most of the prototypes of the standard-metre of which numerous countries are the depositories. This work is extremely delicate as it requires the attainment of great precision in the tracing of some ten thousandth part of a millimetre. The fact that it was a Genevese firm which was chosen to carry out this work, unique of its kind, is an honour which reflects on the whole of the Swiss industry of precision.

Interesting Swiss creation of world interest

A firm specialising in the manufacture of electric apparatus for precision measuring, has just launched a new instrument on the market, which will no doubt arouse great interest in the chemical industry and among the atomic physicists, throughout the world. This is a spectograph for nuclear induction, which will unquestionably render great services in regard to the microscopic analysis of elements, in atomic research work, and also in regard to the control of certain substances. This interesting Swiss novelty will be exhibited at the Swiss Industries Fair, in Basel, which will be held from the 27th April to 7th May 1957.

Swiss citizens vote by show of hands

"Landsgemeinden"—plenary assemblies of the people reminiscent of the old English folk moots—will be taking place in the two half cantons of Appenzell in Eastern Switzerland and the two of Unterwalden in Central Switzerland on April 28. Although the "Landsgemeinden" are not intended as spectacles, visitors to the district should not miss this opportunity of attending one of these Sunday assemblies, which give an impressive idea of the democratic institutions of the Swiss Cantons. In the Canton of Appenzell Ausserrhoden the meeting of citizens is convened at Hundwil whereas in Innerrhoden the venue is Appenzell, the purpose in both cases being to elect new government officials and to vote on various legislative proposals. In Obwalden the historic "Landenberg" at Sarnen with its Baroque "Schuetzenhaus" forms the background for the solemn assembly; at Nidwalden the citizens and the cantonal government meet for their deliberations on the walled square with its old chestnut trees known as *zu Wil an der Aa* in the vicinity of Stans. In Glarus the Landsgemeinde is not held until 5th May. On the other hand, Glarus has a patriotic holiday on April 4 in the form of "Naefels Procession", when a great day in the history of the Canton is celebrated by a procession to the battlefield of that name.

Procurement of Plant and Machinery for I.C.F.

BY

C. K. K. PILLAI,

Technical Section, Dy. CME's Office

First Procurement—Global

The I.C.F. was planned for a production of 350 unfurnished coaches per year on single (8 hours) shift working. In order to equip the factory with the plant and machinery needed to achieve this output, a sum of Rs. 2 crores was sanctioned by the Railway Board. It was decided that as a matter of financial prudence the actual procurement of the machinery should be undertaken in stages synchronising with the production schedule in the initial years. This procedure permitted adequate experience being gained of the performance of the plant procured in the initial stage so that order could be placed only for the really necessary and most suitable machines in the subsequent stages.

The first stage of procurement of machinery was intended for the manufacture of 250 coach shells a year. The list of machinery was prepared by a Swiss team of experts at Schlieren after carefully and thoroughly going into all the Schlieren operation cards and holding prolonged discussions with the manufacturers of machine tools in different countries. The list comprising 153 items and covering 559 units (after deleting all items to be obtained from indigenous sources) was approved by the Railway Board who decided that procurement action should be taken on the basis of global tenders under the agency of Schlieren. The Global tenders were accordingly released through the Indian Embassies in Europe and the High Commissioners for India in November 1953 and the tenders closed on 31-1-1954. About 1,800 tenders were received from about 550 firms in 17 different countries. The

technical scrutiny of the tenders was carried out by Shri K. Swarup, Dy. CME, Mr. W. Braem and Mr. H. Baenziger, then CTM and Dy. CTM—designate respectively assisted by a few Schlieren experts earmarked for deputation to the ICF under the Technical Aid Agreement. The Railway Board had also deputed Shri N. C. Deb, DF (E) to Schlieren with plenipotentiary powers to accept tenders directly at Schlieren on behalf of the Government of India. One great advantage of carrying out the disposal of tenders at Schlieren was that in a large number of cases personal discussion with the representatives of the tenderers for elucidation of technical details as well as other terms was possible.

As a result of the scrutiny of tenders 141 contracts covering 544 units were issued as detailed under :—

Country	No. of firms	No. of units ordered	No. of orders placed	Total value of orders £
Germany	40	152	78	500,926
England	11	68	23	130,130
Switzerland	18	312*	31	146,826
Czechoslovakia ...	1	6	3	5,828
Sweden ...	3	3	3	2,246
France ...	1	1	1	338
Belgium ...	1	1	1	6,612
Italy ...	1	1	1	825
Total ...	76	544	141	793,731

or
Rs. 1,05,83,080
(excluding subsequent amendments).

* Includes 260 Welding sets ordered on Brown Boveri, Baden.

Along with the machinery, orders were also placed for spares and cutting tools, due care having been taken not to have unduly large stocks of spares. The value of spares and tools ordered was about 2½% and 2% respectively of the value of the machinery. It was also possible to arrange for the delivery of the machines to conform to the requirements of the factory. The first 2 machines (2 Stanley Centre Lathes) were delivered in the I.C.F. on 8-11-1954 and the last machine (Sheet Straightening machine) on 30-6-1956.

One another feature of the orders was that in the following cases of big machinery, the suppliers agreed to depute their erection Engineers at their cost to supervise the erection of the machines in the factory.

(1) 1,000 Ton Hydraulic Press—Wagner & Co., Germany.

(2) Smithy Forging Hammers, Beche & Grohs, Germany.

Inspection of the machinery ordered abroad was entrusted to the Swiss Car & Elevator Manufacturing Corporation Ltd., Schlieren. Particular care was taken to see that payment towards the cost of machinery was made to the suppliers with the least possible delay.

First Procurement—Indigenous Machinery (First Phase and Supplementary)

Sixty-four machines (including 6 Rotary Air Compressors) were selected to be procured from indigenous sources initially. Of these, 58 machines were purchased through the Supply Department, Government of India and the balance 6, directly through our Stores Department. These have all been received in the factory.

It was not possible to forecast with great accuracy the requirement of machinery for the first stage of production of 250 coach shells per year. The technical officers of the I.C.F. in collaboration with the Swiss experts re-

considered the lay-outs in the individual shops and the sequence of operation and found it necessary to provide certain additional machinery to ensure adequate capacity for the first stage of production. A total of 45 additional machines was considered necessary and procurement action was taken from June 1955 onwards. The majority of the machines on this programme have been received.

Second Procurement—Global Orders

The second stage of machinery procurement was to step up the production to 350 coach shells per year. From 2-10-1955, the day on which the factory went into production, this matter was receiving close attention. Discussions were held both in the I.C.F. and the Railway Board regarding the procedure to be followed for the procurement of the additional machinery and the presence in India of Mr. W. Huber, Director, Swiss Car & Elevator Manufacturing Corporation Ltd., Schlieren-Zurich, was taken advantage of in this connection.

The list of machinery was examined item by item in the light of the experience gained of the working of the machines already installed in the factory and, wherever necessary, revised. The revised list was approved of by the Railway Board and as per that a sum of about Rs. 44 lakhs was provided for purchase of machinery immediately and about Rs. 18 lakhs for purchase of machinery required after gaining further experience. The Railway Board decided that the procedure for the procurement of machinery should be the same as adopted for the first procurement.

The list for immediate procurement consisted of 82 items of which 74 items (comprising 191 units) were to be procured on global basis and the balance, 8 items from indigenous sources. Tender documents were issued from February 1956 and closed on 15-3-1956 at Schlieren. 642 tenders were received from 166 firms in 15 countries,

Tenders were opened on 15-3-1956 at Schlieren in the presence of Sri R. G. daCosta, Railway Adviser to the H.C. for India in U.K. The technical scrutiny was carried out by Mr. H. Baenziger and Mr. J. Matthan, Dy. CME, Metre Gauge Coach Factory. The Railway Board had deputed Shri C. T. Venugopal, DF (E), with powers to accept tenders on behalf of the Government of India.

Eighty-two orders were accepted from 24-6-1956 to 17-7-1956 covering 191 units. The break up of the orders is as under :—

Country	No. of firms	No. of units	No. of orders	Value of orders £
Germany	22	54	34	110,143
England ...	0	23	15	61,991
Switzerland	10	88*	17	55,382
Czechoslovakia ...	1	9	3	19,626
Sweden ...	1	1	1	866
Italy ...	3	6	5	32,570
Austria ...	1	2	1	5,278
Poland ...	1	8	6	14,767
Total ...	49	191	82	300,623 or Rs. 40,08,307 excluding subsequent amend- ments.

With regard to the spares and cutting tools ordered along with the machines, the same principle as adopted in the case of the first procurement was followed.

It has been possible to have the major portion of the machinery delivered by the end of April 1957 and delivery of the balance will be staggered to the end of January 1958.

The inspection of these machines was again entrusted to Schlieren by the Railway Board. Upto the end of May 1957, 161 machines were inspected. So far 163 machines, including 4 not requiring inspection, have been shipped

* Includes 70 Welding sets ordered on Brown Boveri, Baden.

and of these 134 machines have been received in the factory.

Second Procurement—Indigenous machines

For the second procurement, 8 items comprising of 12 units were selected for procurement from indigenous sources. These twelve units plus 3 units, Bar pointing machine for which there was no suitable offer on global tenders and 2 bracket type drilling machines, are being procured from indigenous sources.

Third Procurement—Global Orders

As already mentioned above, the Railway Board had accorded sanction to the purchase of machines to the tune of about Rs. 18 lakhs after gaining further experience. This list was carefully screened by the Mechanical Department Officers in consultation with the Swiss Officers. The presence in India of Mr. K. Fuechslin, Director, Schlieren, was availed of to discuss the matter with him. Based on the performance of the machines during the last year and the actual Schlieren timings wherever available, the list was revised in order to balance the load to obtain full production of 350 body shells per annum. The revised list was submitted to the Railway Board and sanction obtained on 23-3-1957.

The list comprised :—

Nine items (129 units including 120 welding sets) for which tenders were called for in 1956 along with the second procurement "Immediate" orders and kept open till 31-3-1957 and 43 units to be obtained through sources other than global orders. Foreign exchange clearance for these machines was given by the Finance Department, Government of India.

Contracts for the 9 items were placed on the respective firms before 31-3-1957 as under :

Country	No. of firms	No. of units	No. of orders	Value of orders £
Germany	3	3	3	15,854
England ...	1	1	1	1,087

Switzerland.	2	124*	4	32,258
Poland ...	1	1	1	13,849
Total ...	7	129	9	63,093

or
Rs. 8,41,240

Out of the 43 units to be obtained through sources other than global orders,

6 machines are considered as 'Special' purpose machines.

14 machines are considered as essential and short delivery machines.

23 machines are considered as 'long delivery' machines.

43

Procurement action for these final lot of machines has been initiated.

Conclusion

The factory when equipped with the full complement of plant and machinery will have machines,

* Includes 120 Welding sets ordered on Brown Boveri, Baden.

obtained on global
orders ... 864 (including 450
welding sets).
through other
sources ... 174

Total ... 1,038

Broadly speaking, these comprise Lathes, Drilling machines, Milling machines, Shaping and Planing machines, Grinding machines, Testing machines, Shearing machines, Straightening machines, Press brakes, Hydraulic Press, Welding plant and machines, Oxy-acetylene cutting machines, cutting and filing machines, furnaces, Forging machines, Pipe Bending machines, Blasting plant, Woodworking machines, etc.

The mode of procurement of the machinery as outlined in the foregoing paragraphs has enabled the factory not only to maintain the production schedule but also improve on it. When all the machines are installed and start functioning, the factory's targeted production of 350 coach shells a year, will be a "FAIT ACCOMPLI."

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Some Practical Hints on Gardening (Part II)

Vegetative Propagation—(Contd.)

BY

M. V. B. MENON

Layering is another modified form of propagation by cuttings where the cutting is allowed to maintain its connection with the mother plant through a portion of its stem. Plants that are difficult to raise by cuttings may be propagated successfully by layering. A healthy branch is bent in the form of an arc, and is cut across through half of its thickness between two joints or leaf bases forming a slit 1 to 1½ inches in length; thus, a tongue is formed the lips of which are kept apart by inserting a piece of wood into the slit. This portion of the stem is covered to a depth of 2 to 3 inches with soil which is gently pressed round it and kept in position by means of a brick or other weight. The top portion of the branch is then kept straight by means of a stake. After two or three weeks a notch or cut is made in the stem immediately behind the joint preceding the one which is placed under the soil. The notch is deepened gradually as more and more roots are formed till the layered portion is severed from the parent plant. This layering can be done at any time of the year.

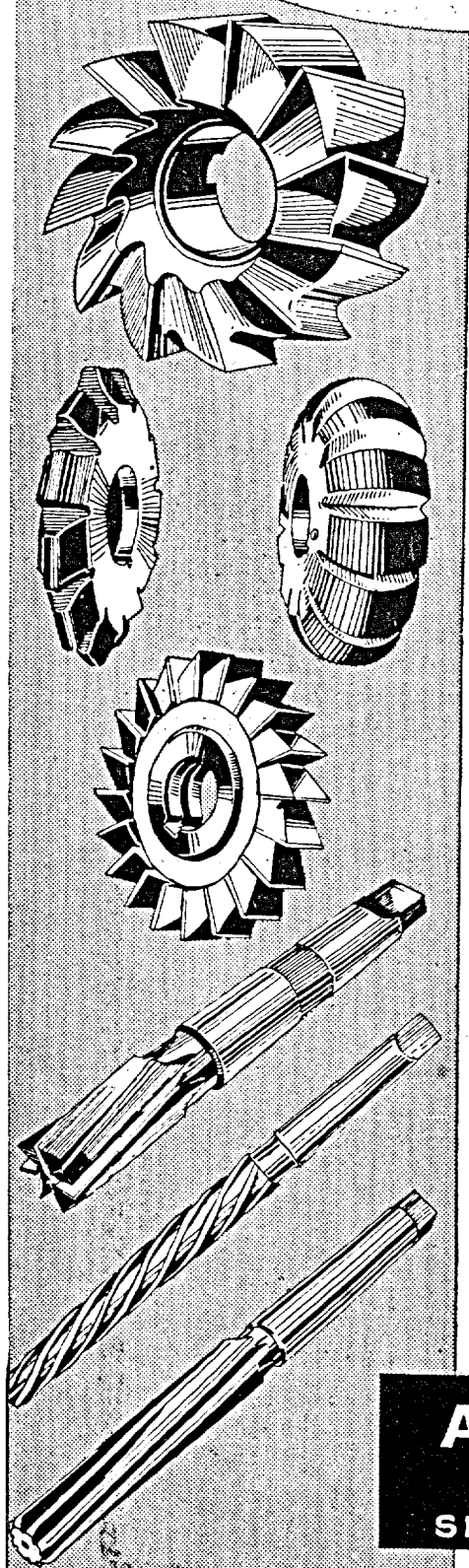
Division :—Plants that grow in clumps such as chrysanthemum daisy, violet, tuberose, etc., consisting of old plants surrounded by smaller ones are easily propagated by division. All suckers grow at the expense of the parent plant, getting their food from the plant till they themselves strike roots and are able to start independent existence. All these independent plants can be carefully taken without damaging the root system and reared in separate pots or beds.

Grafting is an operation in which two cut surfaces of the same or different plants are so placed as to unite and grow together. The plant on which grafting is done is called the

stock plant and the plant which is inserted in the stock is called scion. There are a number of methods of grafting such as erarching, tongue grafting, slit grafting, saddle grafting etc., and the principle involved in all methods is the same. This requires an experienced hand for successful results.

Erarching is the simplest form of grafting. Seedlings of the thickness of a pencil grown in pots are raised to the branches of the tree containing the stock and fastened firmly. Both the stock and scion are on their own roots. A scion of the same thickness as the stock is bent towards it and made supple. On the side of the stem of the stock where the stems touch a slice of bark 2 to 3 inches in length is taken within a thin layer of wood attached to it. A similar piece is taken off the scion where it meets the stock and the two cut surfaces are brought together face to face and then tied together with country twine and then bandaged with a paste of clay and cowdung. After some time, say 2 or 3 months, both scion and stock show signs of sprouting—when complete union has taken place, the stem of the scion is cut off gradually from the parent plant and finally severed off.

Budding is another form of grafting inserting a mature bud (scion) of the tissues of the stock plant in such a way that they are brought into contact with each other by the activity of the cells. As and when a new bud is formed, it gets more food from the soil and hence develops into a new shoot which later yields flowers and fruits. Budding is a cheap and quick method of making a collection of plants, particularly roses by some amount of practice and care.

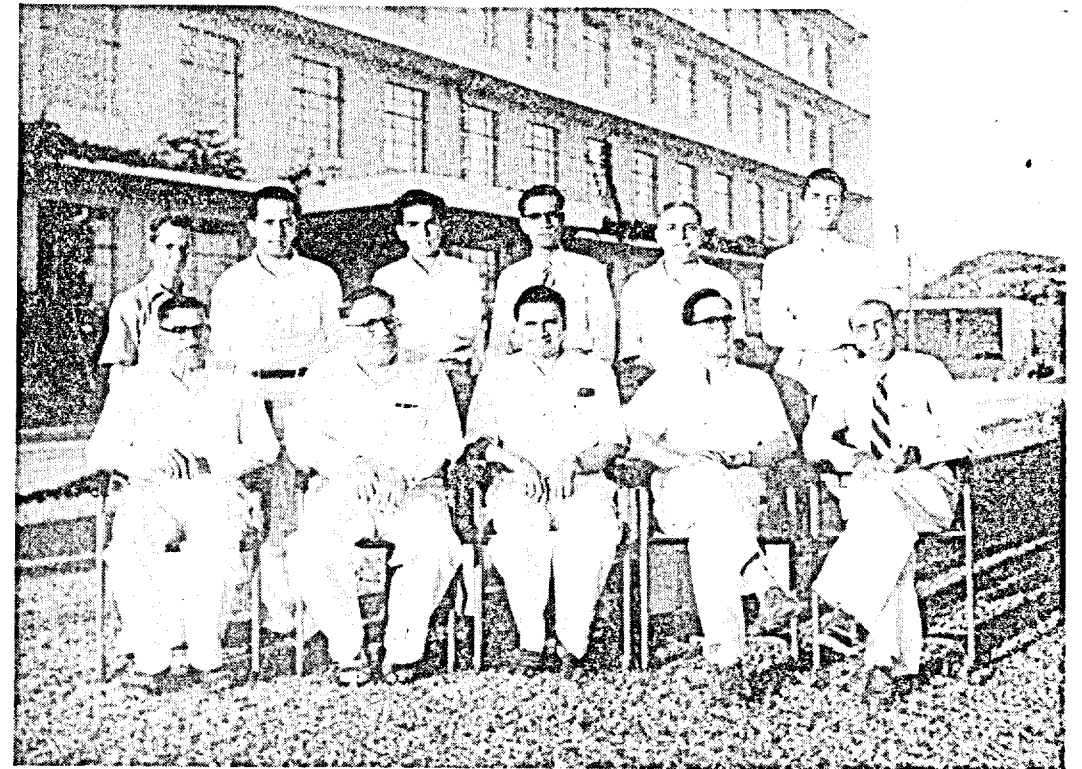


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Whither History?

BY

A. V. SUGAVANESWARAN

"Who is the great-grand-mother of Asoka?" asked Shanker, the worthy son of the History Professor. His friends blinked for a while; Shankar shouted with obvious delight, relishing the quandary in which his question had placed his friends: "Elementary, friends; Asoka is the grandson of Chandra Gupta Maurya; and Chandra Gupta is the son of Mura from whom he got the title of 'Maurya.' So Mura is the great-grand-mother of Asoka."

My brisk evening constitutional had already slowed down to enable me to hear this conversation. I was going farther away from the group of young boys when I heard the triumphant Shankar hurling his next question, "Who is the grand-nephew of Bairam Khan?"

This set me thinking. Are we studying history as it should be read? School boys reading Indian History in isolation cannot correlate events with what is happening elsewhere in the world. No doubt, the good history student reads about Buddha and perhaps retains quite a bit even long after leaving school. But how many people know that when Buddha was teaching a way of life in India, Confucius and Lao Tse were doing much the same thing in China or that Zoroaster also probably lived in the same period. How interesting it is to know that Euclid the great mathematician and Hannibal the mighty General of Carthage were contemporaries of Asoka! The Golden Age of the Guptas attracts us as much for its historical account as for its fabled lore of Vikramaditya. Early in the seventh century three glorious empires flourished in India. Harsha ruled from Kanauj, Pulekesin headed the Chalukyas at Vatapi and Narasimha Varma, the builder of Mahabalipuram, was the Pallava king at Kancheepuram. The naval

glory of the Chola Kings, the architecture of Chola and Hoysala ages, the light of learning radiating from Nalanda and the grandeur of Krishna Deva Raya's Vijayanagar—all these and much more make pleasant reading. Who is not thrilled by the valours of Shivaji, the Maratha General who outwitted many a powerful Moghul army of far greater size than his own? Akbar, like Ashoka, shines as a saint among kings—a king of kings. Is not history which teaches us these and much more worth a little more attention, a little more study and a little more thought than what it receives to-day?

Men of great learning and wisdom, thinkers, writers, travellers, poets and great artists crowd the pages of our history. Nagarajuna and other great Buddhist scholars, Sankaracharya who revived Hinduism and travelled all through India, achieving remarkable success in various fields before he died at the age of 32, Bharavi and Dandi the Sanskrit scholars, Thirunavukkarasar, the Tamil poet in the Pallava Court, Kalidasa and Aswaghosha, Kalhana the great historian and a hundred others are worthy heirs to the rich and eternal culture of the Vedas and Upanishads, Ramayana and Mahabharata. Kashyapa Mathanga, the first great traveller in recorded history who trekked from India to China through Kashmir and Central Asia including Pamir, the roof of the world, in 65 A.D., showed the way to a large number of travellers, Chinese and Indian, in succeeding centuries; Hiuen Tsang and others followed in his wake. The eternal glory of Ajanta and Ellora and the great temples of Konarak, Kancheepuram, Tanjore, Madura and a hundred other places dotted all over India bear testimony to a people who must have reached the acme of human achievement in various fields.

It is a real pity that so vital and living a subject as History is taught as a dead subject—as dead as the kings and others whom it describes. Crammed with dull descriptions of wars and dynasties with innumerable dates and disjointed details, history is today a subject which "youth loathes and age forgets". It is necessary to teach history in the early stages in a way attractive to children. Stories of great men of Indian history interestingly told could be a good beginning. Later on these stories could be connected up to give a continuous account. It is as important to tell the students how men lived and worked and thought, what the social conditions were and the cultural developments, as it is to teach conventional ideas about kings and wars. While Indian History is studied, it will give better appreciation to the student if some brief account of the outside world is also given so that the student may understand the events of Indian History in the larger context of world events. The aim of teaching history should be to make every man a better citizen, equipped to carry his responsibilities well by the knowledge of human evolution through the ages.

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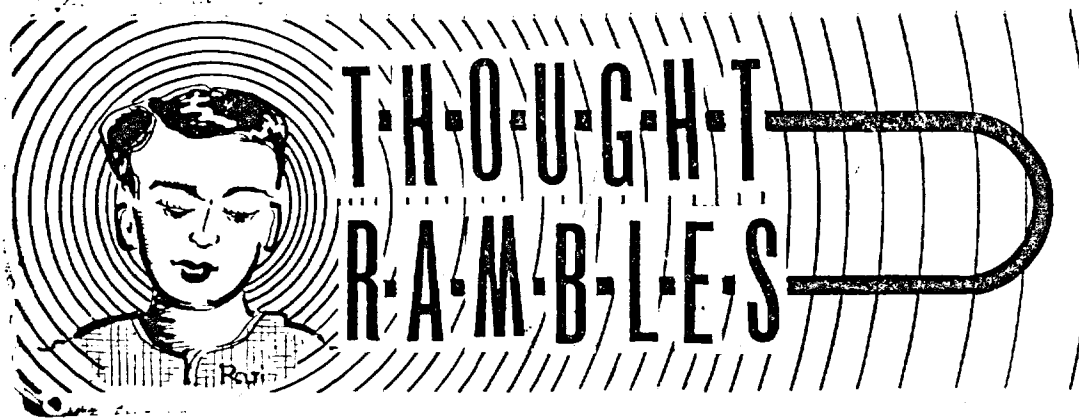


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Foreign Eyes

(S. R. SRINIVASA RAGHAVAN)

I have been a reader of "The Hindu" for well over a decade. I have found it a little conventional and conservative as one of our great leaders called it. But like an old woman (as referred to by that leader) it gives us sober company in the rattle-tattle of our lives. In the Sunday edition of the paper articles of varied interest and curious anecdotes find a place.

Recently, in one of its Sunday editions, there was a very interesting article by a foreigner, on his memories of train travel in India. The writer gave an impression of being a frank and forthright gentleman and curiously enough, he had extolled some of the normal occurrences that happen around here, in our country, which, in the past had been the objects of contempt for foreigners. I give below a few sentences from the article for you to see the general trend.

"I feel I should close this article by a description of that most marvellous scene in all the world : an Indian Railway Station ; but I am afraid that is too broad a scene for my compass to-day. There, one's friendship can extend to the children, the railwaymen, the most courteous and helpful Station Masters. Nor must I forget to mention that most comfortable of your institutions, the Railway retiring room,

which so often awaits a tired traveller, coming from the train. India is full of kindly, friendly people ; not least are they to be found in or near her trains."

I hope this is sufficient for one to give the impression that his country was a veritable desert and for one from his country, travel in India with its varied interests, gives a soothing comfort.

Of course after Independence, as a country, we have built up a large amount of friendship with all the nations of the world through the hospitality and fellow-feeling that are inherent in us. We may strike foreign eyes as being a little unclean as a people but we have our hearts. Are we not a race with traditions that have ingrained a love of God and tolerance, that are found nowhere else except in our country, in such a measure?

In earlier days we were a bit shy of our traditions but now it seems that we have come into our own and are even tending to feel proud of them.

Reverting to that article, I felt I could read the author's character—if one could read the character of an individual from his writings. I found him quite unsophisticated of mind,

full of admiration for the simplest things we would normally ignore. Perhaps he had a good soul and belonged to that class of people who have an abundant goodwill towards the life they chance to see around them.

The variety of individuals he had occasion to meet in our much-maligned third class compartment surprised me. He writes that one of his main objects in India was to meet people and talk to them and that he had found

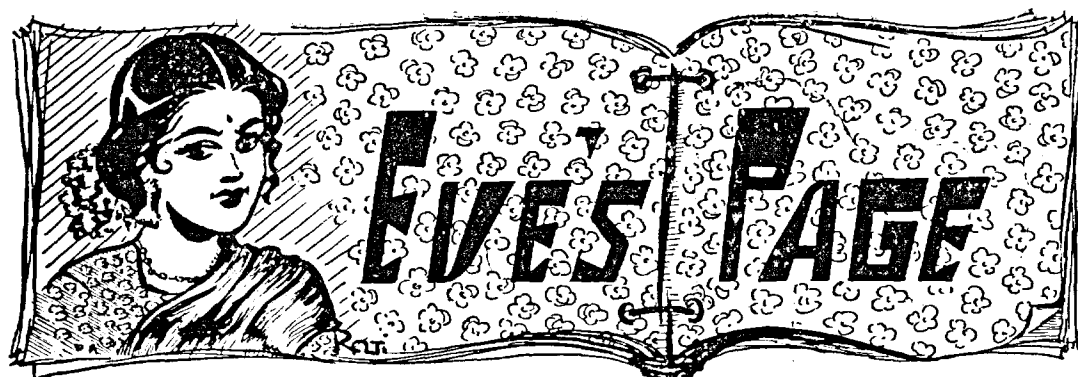
the train just the place to do that while we swing along to our destination. A professor, a doctor, an engineer, a politician, a businessman, a peasant, a social worker—ah! what a variety of them!

Coming from a country where according to him equality was the motto, he could only express such kindly things towards our trains and our people.

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Ladies in Company

BY

AMBUJAM

At the very outset I beg a certain amount of indulgence on the part of readers of the younger generation towards the criticism I think of offering over the general attitude of women when in company.

Though I am not much of a "social worker" as it is understood in these civilised days, I have had many occasions to observe the behaviour of women while they collect together for any social function, marriage or party. My feeling is that men mix more freely since they possess a give-and-take attitude towards life. They reconcile themselves to any shortcomings they happen to come across more readily and in fact forget that there are any shortcomings at all. As for the enjoyment of a situation, they are fuller in their appreciation and in truth offer more congratulatory opinions than the occasion deserves.

Once a group of ladies, wives of the elite of the town, conducted the anniversary celebration of their club. A distinguished woman who was a doctor by profession and a political worker of fame was to preside over the occasion. Four chairs were arranged in one of which the President took her seat. The President of the Club, a lady on the wrong side of fifty, took

one seat and the other two seats were occupied by the two secretaries of the Club. There was a third secretary to the Club and I was surprised to find her vanish while the function was about to begin. Somehow the celebrations went on and, after the function, I went to the residence of this third secretary on my way back home. On enquiry I wondered how such a sufficiently old lady could sit in a corner of her house and shed profuse tears for not having been provided with a seat on the dais, at the celebrations. I thought she could have herself had a chair arranged and taken the place she vied for.

On another occasion our distinguished Prime Minister visited our town to open a hospital there. The hospital had been built out of the munificence of a rich woman of the place and the local womenfolk, wives of officers and the local gentry, participated in arranging for the rather unique occasion—you know our Prime Minister's visit to such a town as mine could happen only once in a lifetime. The arrangements were perfect but unfortunately the Prime Minister's visit to that function was one of the many functions that are usually arranged on such occasions. Naturally the duration allotted for the hospital opening was very meagre. At

last the Prime Minister arrived. There was an understanding that a particular lady was to garland him. At the moment she was at a distance in the crowd and, as occasion demanded, another lady busied herself and performed the much-coveted garlanding. You will be surprised to know that this resulted in a permanent enmity between the two ladies in question, the fortunate and the unfortunate, which in effect brought forth a feud between two groups of women in the town supporting the two rivals.

I am a sufficiently aged woman belonging rather to the past generation and in fact have no prejudices and passions towards modern womenfolk and their excusable imbecilities. After all it is human to be tickled in situations,

right and wrong. So nobody need think that I am a hag with very conservative ideas. A life of observation should permit of some expression, shouldn't it?

In the neighbourhood of my residence there is quite a nice family consisting of a gentleman, his wife and his sister. Normally his wife and his sister are very friendly. They accompany each other in their occasional outings and laugh and smile at and with each other. The sister is a young widow having surrendered all the minor pleasures of life. But she used to get a little prejudiced whenever the wife of her brother bought flowers to deck herself with. I felt that the feeling was just from the inside, somewhere deep down, that could not be dispensed with.

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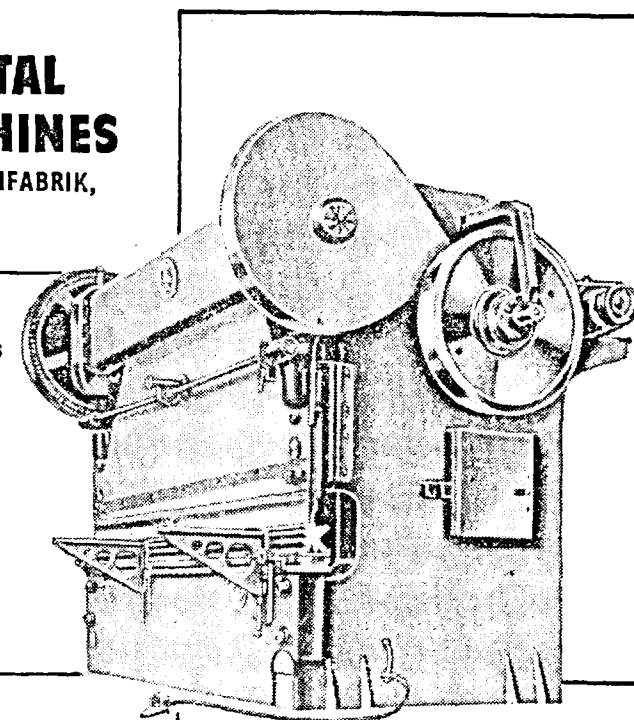
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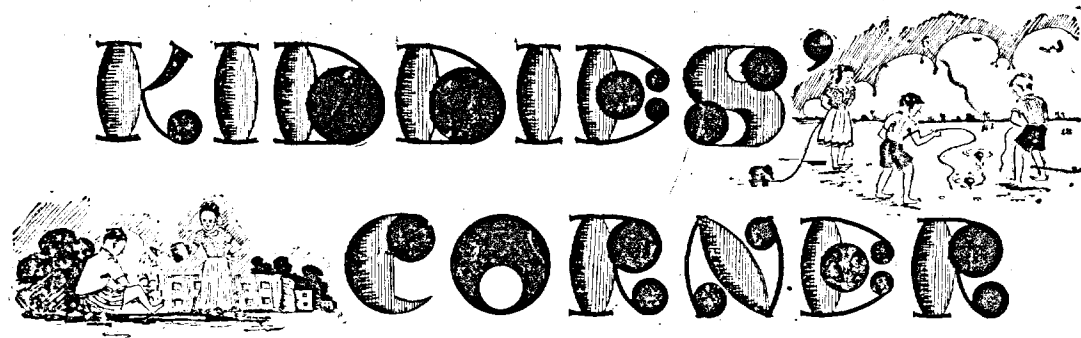
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The Mango Tree

BY

HARSHA

A group of children used to play under a mango tree on the borders of a river which used to ply towards the sea, year after year with waters flowing full. Every mango season there was a profundity of fruits on the tree. There was no owner for the tree and, as it was far away from the town there was no molestation by any people, except the children that played under the tree every evening. The children used to come everyday from the town to that spot for playing, as they found it was the most suitable place for their frolics.

Naturally, during the mango season, all the mangoes became the children's property, and they pelted stones, making the mangoes fall and ate them to their heart's content. The children were few in number but the mangoes were many and so a lot of the fruits were left over in the tree itself to wither and fall down without any use to anybody.

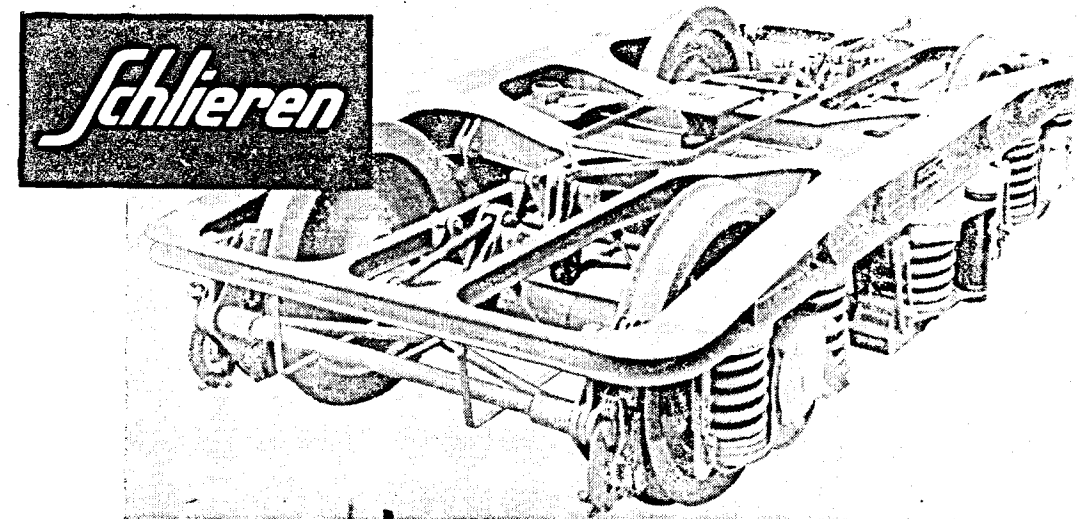
One year, during the season, the children, took it in their heads to fell all the mangoes in the tree, and they began in right earnest to hit at the mangoes with stones. One by one the fruits fell down, till at last, only one mango was left in the tree. It was on the top-most branch of the tree and perhaps did not fall within the ken of the children's eyes. It was

left over there to take its course of fruiting. Every child ate the fruits to its bellyful, but there was something left over which they took home for the preparation of pickles, perhaps to suit the tastes of elders at home.

In a few days' time a traveller on the way came to take rest under the tree. After a sound sleep for a few hours, the lonely mango on the top branch struck his eye and his tongue watered a little. He decided to get up the tree and have the mango for himself. He got to the branch, plucked the fruit and got down. After eating the fruit he washed his hands in the river beside and continued his journey.

The next year the season came and the children lifted their faces in great expectancy for fruits on the tree. Lo! they found that there was not one mango where they used to find branches full of them. They were greatly disappointed and cursed their stars for the calamity. They played nevertheless but with long-drawn faces and with no enthusiasm. That season was a very bad season for them. One day, an old passer-by came to the tree while the children were playing and enquired of them of the speciality in that place. The children wittily told the man about the tree that was barren and the old man said "The life-fruit

of the tree has gone and so the tree is barren today." The children were perplexed and they went home with the news to their parents. The parents too could not understand the position and they collected themselves together and visited the spot where the tree stood in all its majesty but devoid of any fruits. They decided that the wood of the tree would serve as good fuel. So the tree was felled down and served as fuel for a month. The children cried for sometime for the calamity and stopped going to the place.

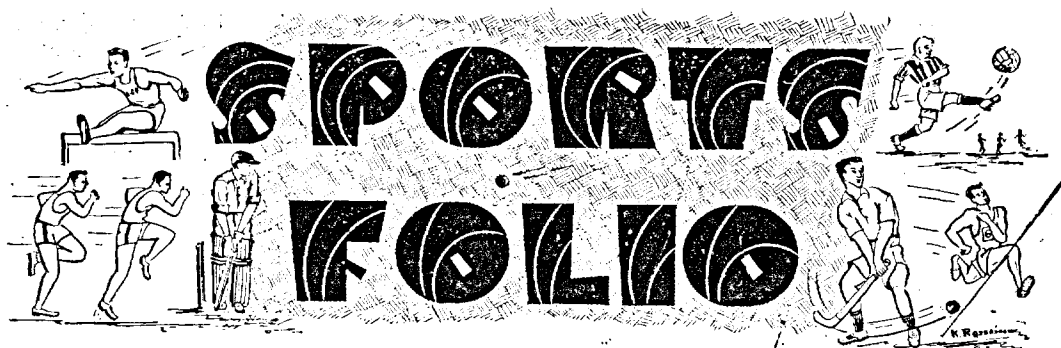


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Tare weight: 5.7 tons
Wheel base: 2500 mm
(8' - 2 1/4")
Helical springs

Swiss Car and Elevator Manufacturing Corp., Ltd., Schlieren-Zurich (Switzerland)



Graded Chess Tournament Conducted by State Chess Association

The Madras State Chess Association conducted Graded Tournaments in Chess for the year 1957, in the Chennapuri Andhra Maha Sabha Hall, Madras, in April 1957. The following four players were selected to represent the Integral Coach Factory Sports Club through the Integral Coach Factory Institute :

1. SHRI S. VAIDYANATHAN,
Basic Fitter, M.W.
2. SHRI S. BALASUBRAMANYAM,
Senior Clerk, Dy. COS. Office.
3. SHRI GOPINATH,
Mistry, Millwright.
4. SHRI K. NATARAJAN,
Chargeman, "A" Shop.

Mr. S. Vaidyanathan played in the "A" division, while the remaining three played in "B" division. In all 35 players participated in the tournament which was conducted according to the Swiss system. Each player had to

play 7 games to be able to score a maximum of 7 points.

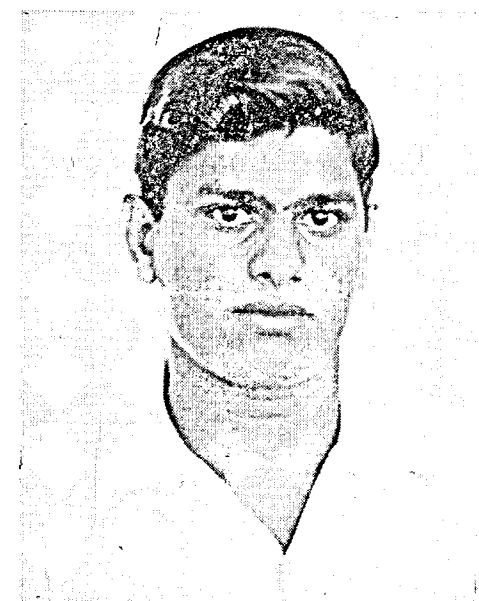
Mr. S. Vaidyanathan scored 4 points out of 7 and he was placed fourth in the order of merit.

Mr. S. Balasubramanyam won the first place in the "B" division, scoring 6 points out of a possible 7.

Messrs. Gopinath and Natarajan scored 4 points each respectively.

Even at the very first attempt in participating in the tournaments conducted by the State Chess Association our players have done well.

The ICF Institute, with the best intention of serving the interests of the Chess Fans of the ICF, have equipped the Institute with a fine collection of books on chess. The Chess Fans are, therefore, requested to avail of this opportunity and establish a name for the ICF in the field of Chess.



SHRI SUBRAMANIA KRISHNASWAMY RAMANATHAN, Instructor attached to the Technical Training School, was born on 20-6-1934, in Malabar District in a musician's family. He had his education in the Ramakrishna Mission High School and passed his S.S.L.C. examination in 1950. He had his technical education in the Central Polytechnic and got his Mechanical Engineering Diploma in 1953. He was awarded a Cup for securing the First rank in the Diploma examination.

He served as an Engineering Apprentice in the Madras Port Trust and joined the Technical Training School in March 1954 as one of the Fitter trainees in the First batch to be recruited for the I.C.F. He completed his basic training in September 1954, creditably, carrying away the General Proficiency Prize for the Fitters' trade. In March 1956 he was selected as an Instructor by the Railway Service Commission and was appointed as an Instructor in grade Rs. 150-225 on 1-9-1956, after completing his training. He was promoted as Instructor in grade Rs. 200-300 on 10-5-1957.



SHRI ANTONY NELSON WILLIAM was born in Madras on 1-4-1934. He had his education in St. Mary's High School, Madras and during the school days had the unique honour of captaining the School Teams both in Hockey and Foot-ball and leading them to victory in the Inter-School Championships.

Due to lack of finance, he had to discontinue his studies in 1954, but he retained his interest in sports and games.

He joined the I.C.F. as a Sainik in the Railway Protection Force in 1955. He has been a member of the I.C.F. Foot-ball Team and has been acquitting himself creditably as a Full-back. He is very regular in attending training classes and has always shown keenness to learn anything that will better his prospects.

He is fond of music and playing on the Guitar is his favourite hobby.

He is a good Sportsman, his favourite games being Cricket and Volley-ball.

1. In a hundred yards' race Sohan, giving Mohan a lead of half a yard, beat him by one-fifth of a second ; but Mohan with a lead of $4\frac{1}{2}$ yards beat Sohan by one-fifth of a second. What is Sohan's time for the 100 yards ?

2. A person drove his Car up an incline of half a mile at 30 miles per hour. How fast should he drive down an identical half mile to average 60 miles per hour for the whole distance ?

3. Ratnam bought a rupee worth of oranges. If he had had five more for the money, the price would have been 20 naye paise a score cheaper. How many oranges did he get ?

4. 'MEDALS' stands for a number. When 'MESS' is taken away the remainder is 'MOOEOR' but when 'DATE' is added the total is 'MEEEDA'. What are the digits for which the letters stand ?

5. Five schoolboys were once asked by a visitor about their ranks in the recently concluded test. The replies received by him from the boys were confusing but he found out their relevant ranks when he was told that each boy had made only one true statement.

The statements made by them were :

Ramu : " Bhimu was second and I was only Third".

Kamu : " You will be glad that I was first and Somu stood second".

Somu : " I was third but poor Kamu was last."

Bhimu : " Damu was only fourth but I came out second."

Damu : " I was fourth and Ramu was first."

What was the correct order in which they were placed ?

6. My uncle Radhakrishnan is a famous philanthropist and for a city orphanage he subscribed an amount of Rs. 5,040 last year and Rs. 5,340 this year. The annual cost of maintenance works out to Rs. 360 for each child over 12 years of age and Rs. 300 for a child under 12 years.

In a casual talk I asked him whether he had contributed Rs. 300 more this year with a view to maintaining one more child under 12 ; but he replied that it need not be so and added that may be he had subscribed for more of the older ones.

How does the number of children for whom he has paid for this year compare with that of last year ?

Solutions to last month's Brain Teasers

1. Only five rungs would still be submerged because the ship also rises with the tide.

2. The original strength of the regiment was 83.

3. Fifteen men were in the party.

4. He reached the station at 09-15 hours.

5. 'B' and 'C' are the daughters of 'A' and therefore the mothers of 'D' and 'E' respectively ; hence 'X' has no nephews but two nieces in 'B' and 'C'.

6. The shoe-maker lost 160 rupees and the pair of boots.



1. "Sammy dear!" said the wife to her husband, "Why are you screwing up your nose when I tell you that my Ma has come over here for rest. Poor old Ma! she's feeling seedy."

"What did you say, Seedy?" replied the husband. "Take care that she does not plant herself here for good."

2. Moorthy to his neighbour :—"Your wife used to sing and play on the harmonium a lot. Now we do not hear her at all. How's that?"

Neighbour :—"She hasn't the time. We have two children."

Moorthy :—"Well, well! After all, children are a blessing!"

3. The proud father of a triplet phoned upto the local press to publish the event. The reporter at the other end could not hear properly and hence said, "Will you please repeat that?"

Angrily retorted the father "I would not, if I can possibly help it."

4. The newly wedded husband with a bandage on his head was being enquired by his friend, "I say Shamoo, how did you get that lump on your head?"

"Gosh" replied Shamoo, "My wife and I had our first argument and she gave me a blow with the frying pan."

His friend enquired further, "But how is it that a frying pan could produce that much damage?"

Said the husband in reply, "To my bad luck, it contained one of her dishes."

5. Small son to his father, "How do they catch lunatics, Daddy?"

Daddy busily engaged in reading newspaper: "With make-up, lipstick and silk clothes and if you have any more doubts ask Mummy."

6. A newly trained pilot was piloting a passenger plane to Singapore. While the Plane was high up over the Malayan jungles the pilot lost control of the Plane and decided to break the news to the passengers.

"Something has gone wrong with the controls, please. I shall anyhow try to land the Plane somewhere soon."

"But we shall crash, shan't we", enquired one among the scared passengers.

"Of course we shall crash, but don't worry," replied the pilot in a cool tone and continued, "It'll be alright. I'm told there are rubber plantations below."

7. The Officer had given leave to Swamy to attend his mother-in-law's funeral. He was very much annoyed on hearing that she was not dead and so he demanded an explanation from Swamy.

"Sorry, Sir," said Swamy in a low tone, "I did not write in my application that my mother-in-law was dead; I simply wrote that I'd like to attend her funeral."

Personnel Notes

Our Felicitations to

1. Shri A. V. Sugavaneswaran, District Controller of Stores promoted to officiate as Deputy Controller of Stores with effect from 13-5-1957.
2. Shri D. R. Naha, Assistant Electrical Engineer, promoted to officiate as District Electrical Engineer with effect from 6-5-1957.
3. Shri S. Krishnamurthy, Assistant Controller of Stores, promoted to officiate as District Controller of Stores with effect from 13-5-1957.
4. Shri K. K. B. Panikker, Depot Store-keeper promoted to officiate as Assistant Controller of Stores with effect from 13-5-1957.
5. Shri N. Devarajulu, Workshop Instructor in scale Rs. 150-225, Tech. Training School, promoted to officiate as Workshop Instructor in scale Rs. 200-300 with effect from 10-5-1957.
6. Shri J. Damodaran, B.T. Instructor in scale Rs. 150-225, Tech. Training School, promoted to officiate as Workshop Instructor in scale Rs. 200-300 with effect from 10-5-1957.
7. Shri S. K. Ramanathan, B.T. Instructor in scale Rs. 150-225, Tech. Training School, promoted to officiate as Workshop Instructor in scale Rs. 200-300 with effect from 10-5-1957.
8. Shri S. Srinivasan, B.T. Instructor in scale Rs. 150-225, Tech. Training School, promoted to officiate as Workshop Instructor in scale Rs. 200-300 with effect from 10-5-1957.
9. Shri A. Balakrishnan, B.T. Instructor in scale Rs. 150-225, Tech. Training School, promoted to officiate as Workshop Instructor in scale Rs. 200-300 with effect from 10-5-1957.
10. Shri R. Vinayakamurthy, Draftsman in scale Rs. 260-360, Mech. Drawing

Office, promoted to officiate as Head Draftsman in scale Rs. 300-400 with effect from 26-4-1957.

11. Shri T. Chandrasekharan Nair, Draftsman in scale Rs. 260-350, Mechanical Drawing Office, promoted to officiate as Head Draftsman in scale Rs. 300-400 with effect from 26-4-1957.
12. Shri M. Narayanaswamy, Draftsman in scale Rs. 150-225, Mechanical Drawing Office, promoted to officiate as Head Draftsman in scale Rs. 260-350 with effect from 26-4-1957.
13. Shri N. H. Krishna, Draftsman in scale Rs. 150-225, Mechanical Drawing Office, promoted to officiate as Head Draftsman in scale Rs. 260-350 with effect from 26-4-1957.
14. Shri J. Sreeramulu Chetty, Draftsman in scale Rs. 150-225, Mechanical Drawing Office, promoted to officiate as Head Draftsman in scale Rs. 260-350.
15. Shri T. R. Venkateswaran, Chargeman in scale Rs. 150-225, Production Department, promoted to officiate as Chargeman in scale Rs. 200-300 with effect from 29-4-1957.
16. Shri J. Kothandaraman, Chargeman in scale Rs. 150-225, Production Department, promoted to officiate as Chargeman in scale Rs. 200-300 with effect from 24-4-1957.
17. Shri P. Subramanian, Chargeman in scale Rs. 150-225, Production Department, promoted to officiate as Chargeman in scale Rs. 200-300 with effect from 24-4-1957.
18. Shri V. Masilamani, Chargeman in scale Rs. 150-225, Production Department, promoted to officiate as Chargeman in scale Rs. 200-300 with effect from 24-4-1957.

Our Welcome to:

The undermentioned Graduate Apprentices of the Shell Factory posted for training with effect from 21-5-1957:

1. Shri P. Govindan.
2. „ R. Easwaran.
3. „ S. Radhakrishnan.
4. „ R. Vasudevan.
5. „ K. S. Padmanabhan.
6. „ A. Sugavanam.

The undermentioned Apprentice Journeymen/ Apprentice Mechanics of the Metre Gauge Coach Factory posted for training with effect from 2-5-1957:

1. Shri S. Natarajan.
2. „ P. Pauckiam.
3. „ G. N. Narasimhan.
4. „ Suresh Ch. Varma.
5. „ Raj Kumar Tuli.
6. „ V. K. Narayanaswamy.
7. „ Dayal Singh.
8. „ S. V. Subramanyam.
9. „ Piare Lal.
10. „ T. N. Khanna.

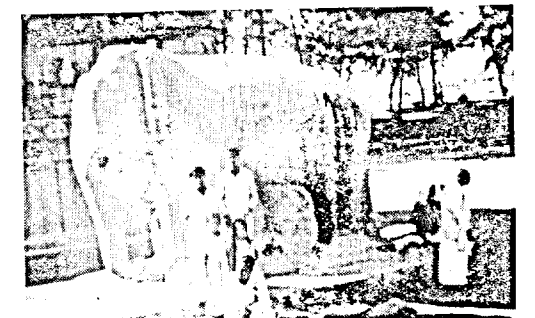
Handwritten notes:
 JL
 D. S. R. N. S. 1.9

MAHABALIPURAM SCENES

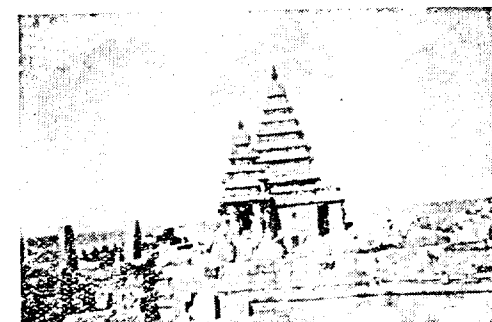
Photos by Shri P. N. Srinivasan, Peon, Mechanical Department



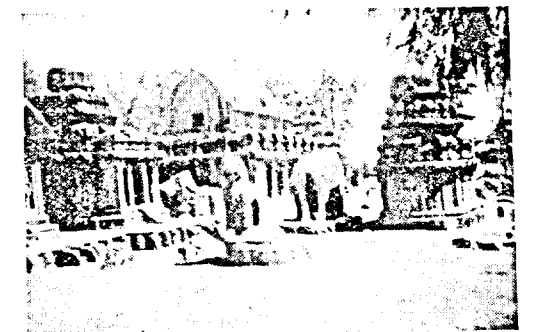
Archaeological Office



The Stone Elephant near the five Rathas



Shore Temple

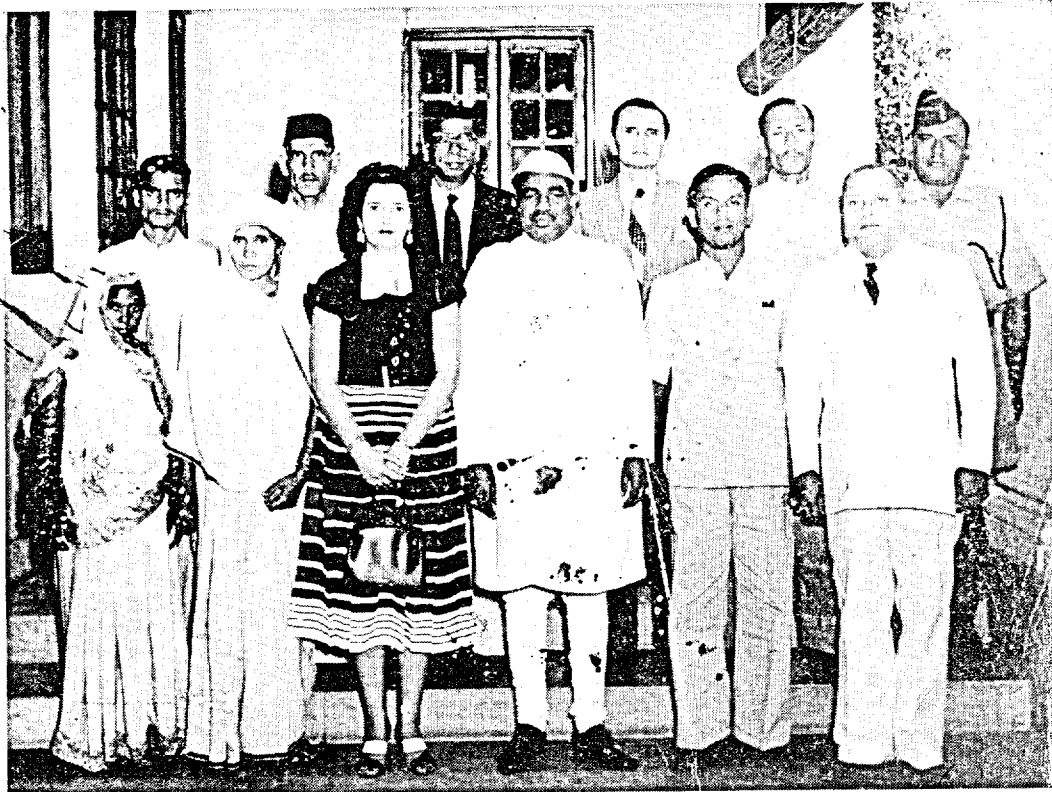
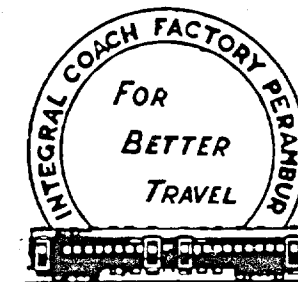


The five Rathas

RAILCOACH

VOL. I, No. 10

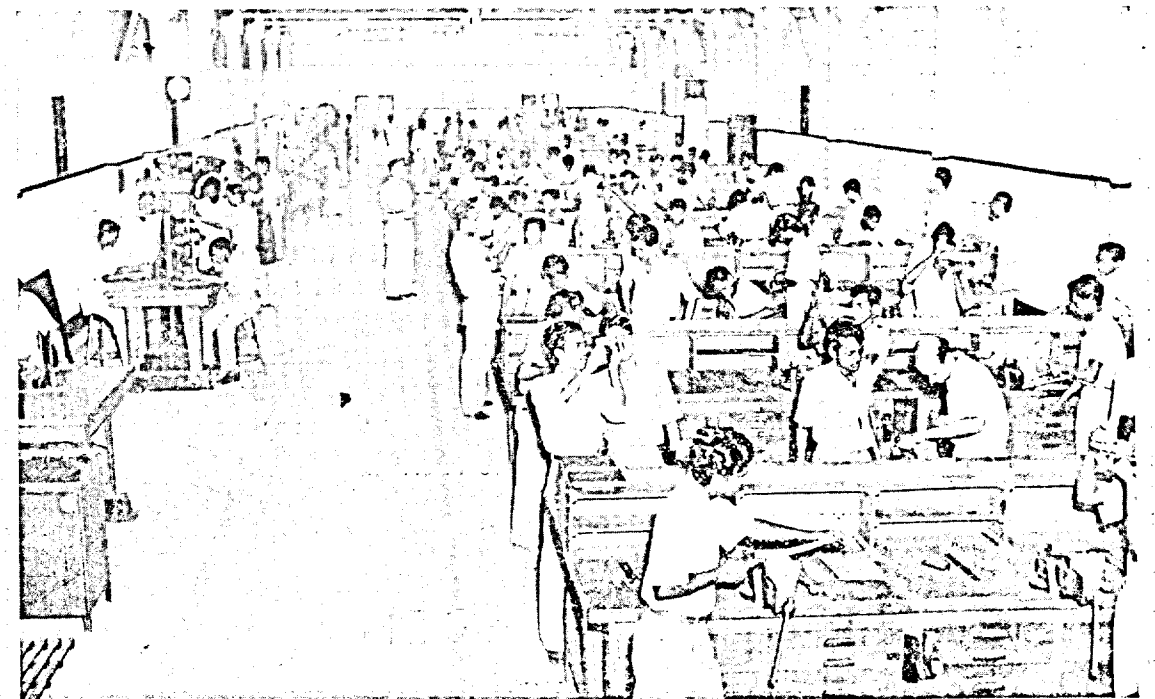
JULY 1957



Recipients of certificates of merit from various Railways photographed with the Railway Minister, Shri Jagjiwan Ram



Shri M. K. Kaul, General Manager, Northern Railway, signing the Visitors' book at the conclusion of his visit to our Factory.



Fitter apprentices at work in the Basic Training Workshop

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Published by the Integral Coach Factory
ISSUED ON THE 15th OF EVERY MONTH

Devoted to all Railway problems, Technical Matters
and other problems of General Interest

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The "Railcoach" circulates among Officers and staff of the Integral Coach Factory, General Managers and other important Officers of all Railways in the country, the Union Minister for Railways and Transport, the Union Deputy Minister for Railways and Transport, the Chairman and Members of the Railway Board etc.

TERMS

1. Blocks or lay-outs are to be supplied by the Advertiser or will be charged for extra.
2. Advertisement materials to reach the Editor before the 1st of every month for the month's issue.
3. Cheques should be drawn in favour of the Editor, "Railcoach", Integral Coach Factory, Perambur, Madras-23.
4. Texts of advertisements are subject to approval by the management.
5. A 5% rebate is allowed for 12 consecutive insertions.

Further particulars from

The Editor

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Integral Coach Factory, Perambur, Madras 23

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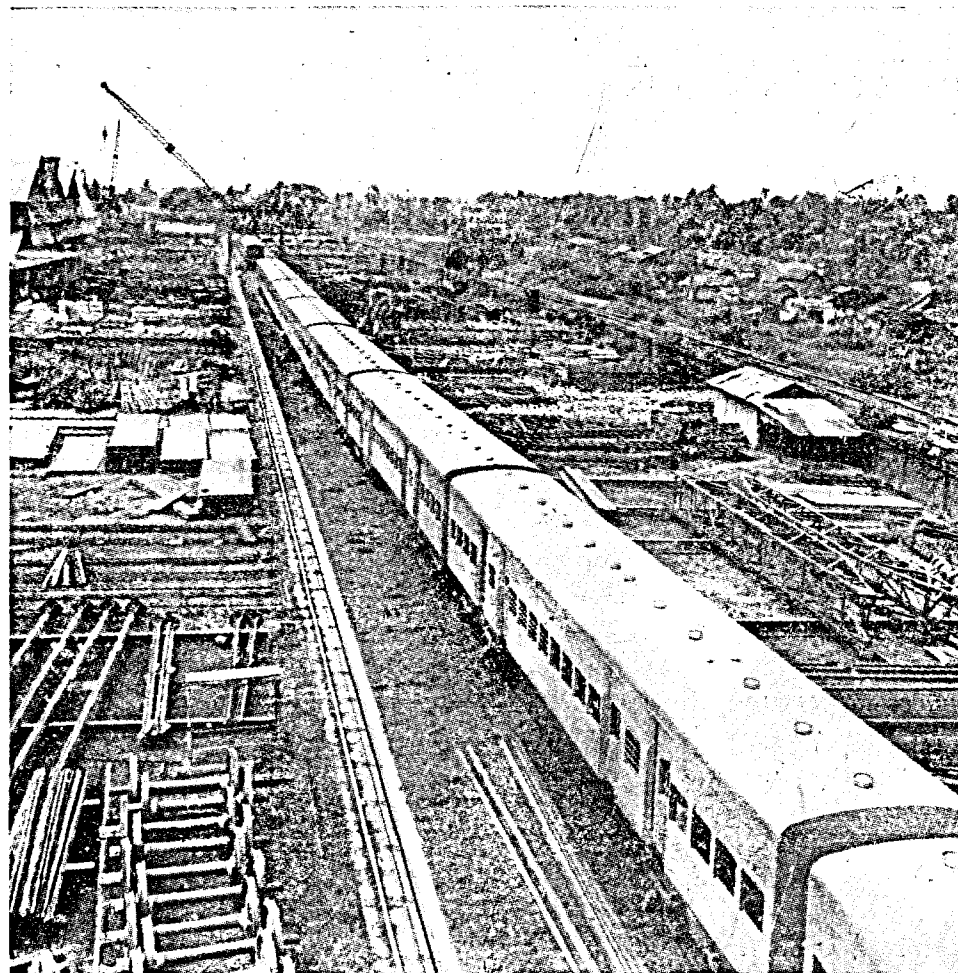
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(INTEGRAL COACH FACTORY MAGAZINE)

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All contributions must be clearly typed and doublespaced on one side of the paper only, and signed, not necessarily for publication, but as a guarantee of good faith.

Manuscripts and photographs, not accepted for publication, will not be returned unless the sender so requires. Intending contributors from outside our Factory, if they intend to get back unaccepted articles and photos, should send a suitably stamped and self-addressed envelope along with the material sent by them.

Contributions should be addressed to the Editor, not by name, and reach him not later than the 25th of every month for consideration for publication in the next month's issue.

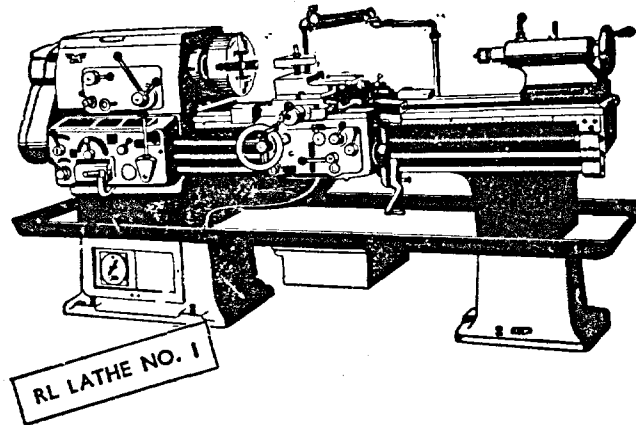
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FROM THE EDITOR'S DESK

FOURTH ASSEMBLY LINE GOES INTO PRODUCTION

With all humility it can be said that achieving production targets, ahead of the schedule laid down is becoming the order of the day with the I.C.F. The factory was originally scheduled to reach full production in the course of 5 years. It was planned that all the 6 assembly lines in the assembly shop should be working to full capacity by that time. The factory is only in its second year of production and the fact that 3 assembly lines are already working to full capacity and the fourth one has gone into production is no mean achievement. With His blessings and with the sustained enthusiasm of the workers there is no reason why full production should not be achieved very much ahead of the schedule.

* * * *

Elsewhere in this issue we have referred to the cash award made to Shri J. Sundara Babu by the Chief Administrative Officer. The fact that a temporary Khalasi of only 6 months association with the I.C.F. has displayed such a keen sense of duty is a proof of the zeal and enthusiasm with which every member of the I.C.F. family is discharging his duties. We take this opportunity to record our appreciation of the enthusiasm and initiative displayed by Shri J. Sundara Babu and we are sure that he who has made a name for himself within six months of his service will, in the long career before him, win for himself many a laurel.

* * * *

SUGGESTIONS INVITED

We had in the past invited the attention of our readers to the formation of the Screening Committee for examining suggestions and inventions received from staff. The Chief Administrative Officer, whilst speaking in the Institute on 27-9-56 drew the attention of the staff to the formation of the Screening Committee and mentioned that suggestions are welcome from any member of the staff, that every suggestion received will be carefully considered and that every accepted suggestion will be suitably rewarded. We are sure the readers will be aware of the cash award of Rs. 50 made for an accepted suggestion, the details of which were published in our December, 1956 issue. We have to record that, though suggestions are being received, we are of the opinion that with the talent available in the I.C.F. a more significant contribution is not difficult. We are confident that the staff, who have proved that they are capable of doing good work, will come up with a number of useful suggestions.

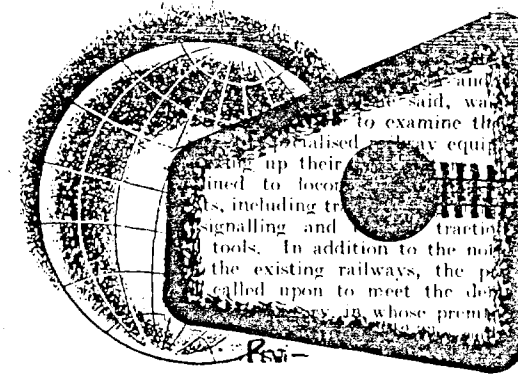
Suggestions can be addressed direct to:

THE SECRETARY,
SUGGESTIONS & INVENTIONS COMMITTEE,
INTEGRAL COACH FACTORY,
MADRAS 23.

* * * *

MONTHLY OUTTURN

	Target figures		Actual figures	
	K. D. coaches	Indigenous coaches	K. D. coaches	Indigenous coaches
June 1957	5	8	7	7
Cumulative total for the first three months of the second year ...	24	12	17	26



NEWS AND NOTES

New Churchgate station opened

Shri Jagjivan Ram, Minister for Railways, formally opened the new Churchgate Station in Bombay on June 9, 1957 before a distinguished gathering by pulling a lever which electrically drew aside a curtain and gave the green signal. Shortly after the function, a special train carrying the Railway Minister and other distinguished guests rolled out of Churchgate Station.

The Rupees sixty-five lakh project for constructing a spacious station building had been completed in a record time of 8 months.

The function was held in the spacious concourse hall of the station. The whole station including the platforms had been tastefully decorated for the occasion.

Welcoming the Railway Minister and the large number of guests, Shri M. Ganapati stated that by completing the work of the new Churchgate Station, he had fulfilled the promise given to the passengers that the new station would start functioning before the onset of the monsoon.

Tracing the history of the old Churchgate Station, Shri Ganapati stated that the old station built in 1876 and remodelled in 1931 was a small one and not meant for dealing with 3 or 4 lakhs of passengers every day. At that time, the total number of passengers using the station was hardly a lakh. Even up to 1939-40, the number of passengers who used



Sri Jagjivan Ram, Union Railway Minister pulling the lever to open the new Churchgate station.

Churchgate did not go beyond 1.3 lakhs per day or about 48 millions per annum. Even then, Churchgate Station became totally inadequate to meet requirements. By 1955-56, the suburban traffic reached the peak figure of 5.15 lakhs per day or a total of 178 millions per year. It was clear, therefore, that Churchgate Station which was remodelled in 1931 for dealing with a lakh of passengers per day would no longer meet the requirements of nearly 5 lakhs of passengers per day.

Shri Ganapati then requested Shri Jagjivan Ram to declare open the station.

The Railway Minister announced that schemes for constructing "prestige buildings" and "waiting stations" were being scrapped so that all available funds and material resources could be diverted for "opening up new areas not linked by rails."

About the new Churchgate Station itself, the Minister said, it was a "necessity to cope with the heavy suburban passenger traffic handled by the Western Railway."

The main work pertaining to the remodelling of the station which commenced in October last year had been completed with the construction of the ground floor of the station building including the platform and the yard at an estimated cost of Rs. 80 lakhs (including Rs. 28 lakhs spent towards the cost of land). The balance of Rs. 50 lakhs would be spent on the construction of seven floors of the building for office accommodation together with the parcel office, to be completed in the next few months.

He reminded the people that he had not held out any promise that overcrowding in the trains would be reduced. He said that the main problem facing the country in the coming years was movements of foodgrains, finished goods and other essential needs of the people.

The Minister also referred to the acute shortage of essential materials like steel and cement which held up development projects. He said that a high power commission was currently touring European countries to explore

the possibility of buying steel required by the country.

Shri Jagjivan Ram then pulled the lever which electrically drew aside the curtain and gave the green signal for the first train to start from the new station.

Railway Minister meets States' Chief Ministers

Suggestions for the construction of new railway lines and proposals for achieving the maximum co-ordination between the Railways and the State Governments to ensure greater safety in rail travel were among the subjects discussed at a meeting between the Railway Minister and the Chief Ministers and representatives of the States held in New Delhi on June 5.

The Railway Minister, Shri Jagjivan Ram, in his opening remarks stressed the importance of safety measures in view of the approaching monsoon. He said that the Railways were themselves taking precautionary steps including posting of additional men, but it was desirable that the maximum co-operation should be forthcoming in this important task from the State Governments.

The meeting accepted a village vigilance scheme prepared by the Railway Board under which the Railways could enlist the co-operation of the villagers wherever Railway lines pass, for reporting unusual occurrences like heavy local rainfall, breaches or likely breaches of tanks, heavy floods, etc.

Sri Jagjivan Ram, Union Railway Minister addressing the meeting.



The meeting recommended the appointment of a Standing Committee in each State consisting of engineers from the Railways and the States. The Committee would meet periodically and keep under review the safety of the railway track in so far as this may be affected by the maintenance or new constructions of dams and irrigation works or by deforestation. The Committee would see that the railway embankment or other works do not endanger the safety of villages in the vicinity in times of floods.

The Chief Ministers and representatives of States dealt at some length with the requirements of their respective States for new lines or for the conversion of narrow gauge and metre gauge lines into broad gauge lines. The Railway Minister indicated that he had already approached the Planning Commission for additional funds to enable the Railway Ministry to undertake the construction of some new lines in areas which needed to be opened up in the interests of the country's economy. The Minister pointed out that even assuming that additional funds were available, two serious handicaps would remain non-availability of foreign exchange and shortage of construction materials, particularly steel.

The Railway Minister asked for the co-operation of the State Governments in increasing the availability of wooden sleepers from within the country, which at present amounted to barely one-third of their requirements. The balance had to be made good by imports of wooden, iron and steel sleepers from abroad involving a drain on our foreign exchange. A suggestion considered by the meeting was that the Railway Ministry should fix quotas of sleepers to be supplied by the various States and the States should try and work to these quotas.

The meeting also considered the question of speedy acquisition of land for urgent railway projects and the expeditious payment of compensation for land acquired. Suggestions were

considered for minimising delays in the payment of compensation to the tenants after land had been acquired. The Railway Minister requested the State Governments to ensure that the quantum of compensation payable by the Railways bore some relation to the compensation paid by the State Governments themselves for similar land acquired for their own purposes.

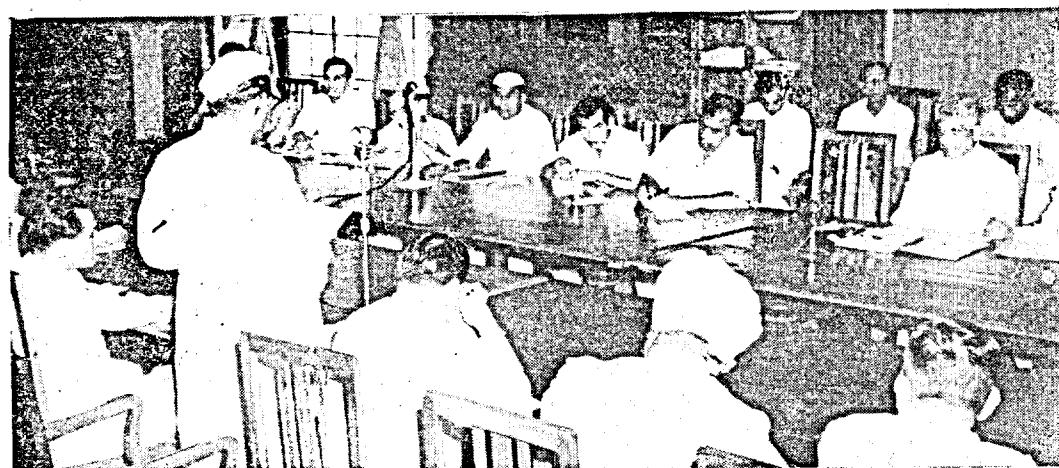
The Railway Minister also called for the co-operation of the State Governments in the field of education for the Railwaymen's children. He said that education was a State subject but the Railways never the less supplemented the efforts of the State Governments in providing additional educational facilities for their employees' children. He said that the co-operation of the states was needed in matters like recognition of schools set up by the Railways. The Railways on their part, were willing to contribute towards the maintenance of schools set up by the State Governments in or near the Railway Colonies to which Railwaymen's children were admitted.

The meeting also considered suggestions for combating anti-social practices like ticketless travelling, alarm chain-pulling and beggar and hawker nuisance in trains. A suggestion was made that the co-operation of village panchayats should be sought and the publicity campaign to eradicate these evils should be stepped up.

Some Chief Ministers urged that there should be some more frequent contacts between the Railway authorities and the State Governments. In this connection, the Railway Minister said that he would ask the General Managers of the Railways to periodically meet the States Chief Ministers and other concerned Ministers so that a mutual exchange of views may take place on common problems affecting Rail transport.

Promotion on Railways

The Union Minister for Railways, Shri Jagjivan Ram, inaugurated the Class IV Railway



Shri Jagjivan Ram, Union Railway Minister addressing the Class IV Railway Staff Promotions Committee.

Staff Promotions Committee on June 3 at New Delhi. He requested the Committee to finish its work as early as possible, so that its recommendations might be studied and implemented before the close of the current year.

Shri Jagjivan Ram said that the attempt of the Committee should be to evolve a pattern of promotion for Class IV Staff, belonging to all categories, which would take them not only to the highest grade of Class IV, but would also take them on to Class III, from where, "they can be following the channels available for Class III staff and further proceed to Class II and Class I."

He said: "My intention is that it is not sufficient that a Class IV servant is merely taken on to a Class III post, like that of a record sorter on Rs. 55-85 and then left there without any further avenues of promotion. The post of record sorter should not be the end. It should be the means to a further and higher end."

The Railway Minister said the Committee had been entrusted with the task of prescribing appropriate tests for the various promotions that they might recommend. The tests need not necessarily be theoretical, but should be designed to ascertain whether the employee knew the duties of the job, promotion to which he aspired.

The Committee had also been asked to draw up schemes for training courses which would fit the staff for promotion. It might be possible to fix the training courses to precede the test because without such training they might not at all be able to pass a test, he said.

Shri Jagjivan Ram added, "I am aware that scales of pay are not unconnected with avenues and prospects of promotion. But it is a vast subject which will need consideration by a different forum. The Government are already seized of the matter and will in time take such steps they considered necessary."

Japanese Team's survey for underground Railway for Bombay

A Japanese team of consulting engineers recently carried out an on-the-spot study of the proposed underground railway project in Bombay and will submit their report in about three months' time.

The *Best* Committee and the Bombay Municipal Corporation approved in March this year, the acceptance of the joint tender of Messrs. Higashi and Tsujii, advisers to the Tokyo and Osaka Rapid Transport Systems, appointing them as consulting engineers for the project.

The survey lasted six weeks which included the test-boring at several places along the proposed route in order to study the subsoil conditions.

It is stated here that the Japanese experts had expressed the opinion that the soil conditions in Bombay for constructing an underground railway were very much more favourable than those in Tokyo or Osaka, which would, therefore, result in the reduction of the total cost of the scheme.

Mr. Tsujii is understood to have said that the cost of the scheme would be Rs. 3 crores per mile of double-track construction, out of

which about Rs. 2 crores would be on civil engineering works and Rs. 1 crore on rolling stock and other mechanical and electrical engineering works.

The "cut-and-cover method" of construction with R.C.C. box type of subway, with a central pillar, is proposed to be adopted. The approximate depth and width of the tunnel would be 18 feet and 26 feet respectively and the maximum depth from the surface to the bottom of the tunnel would be about 30 feet.

The Japanese team had collected the statistical data of the traffic on the *Best*, Central and Western Railways for detailed study. It was stated that there was enough traffic to warrant the construction of an underground railway in the city. Mr. Tsujii mentioned that proper estimates, operating costs, etc., would be worked out after his return to Tokyo in conjunction with Mr. Higashi, who is an electrical engineer, and that they expect to complete the final report in about three months, after which he and Mr. Higashi would visit Bombay and present the report personally and give necessary explanations to the *Best* Committee.

Development of South Eastern Railway under Second Plan

The Railway Board, has ordered a survey of the Vizianagaram-Waltair section, a distance of about 42 miles, for doubling of tracks at an estimated cost of Rs. 2.5 crores. Disclosing this at a Press Conference at Calcutta on June 14, Mr. A. K. Basu, General Manager, South-Eastern Railway, said that he would shortly meet the General Manager of Southern Railway, Mr. T. A. Joseph, for discussing various problems affecting both railways with particular emphasis on measures to be taken to break the bottleneck on the Waltair-Vijayawada sector.

Mr. Basu said that the South-Eastern Railway had also constructed three new berths in Visakhapatnam port at an estimated cost of Rs. 2 crores. One was a general berth and the other two, oil berths, out of which one was already in commission and the other would be commissioned next month. Before the end of the Second Plan, Mr. Basu said, they would construct five new berths at the port out of which three would be for oil and the other two for general purposes.

Mr. Basu said that the Second Plan of the South-Eastern Railway envisaged an expendi-

ture of Rs. 225 crores out of which Rs. 25 crores was earmarked for electrification of the Howrah-Kharagpur-Asansol-Rourkela and Rajkharwan-Dongaoposi sections and Rs. 50 crores for locomotives. The balance of Rs. 150 crores was to be spent for augmenting line capacity.

Mr. Basu said that the South-Eastern Railway had the heaviest development load among the country's railways and he therefore appealed to passengers to "bear with us" in any inconveniences they may be now suffering.

Nearly 500 miles of track, mainly for the requirements of the steel plants, would be doubled in the Second Plan.

New Third Class sleeping coach

The Indian Railways have decided to introduce shortly a new two-tier sleeping cum-sitting coach service for third class passengers.

In these coaches sitting accommodation will be provided on the lower berths, while sleeping accommodation will be provided on upper berths only.

At present third class sleeping accommodation is available on a number of routes in three-tier coaches.

The object of the new experiment is to see which type of coach is more popular with the public so that the future plans may be made accordingly.

As in the case of the existing third class sleeping service, a charge of Rupees three per night per berth will be levied in the new coaches.

The new service will operate on the following pairs of trains: Madras-Bangalore Mail; Delhi-Lucknow Express; Howrah-Puri Express; Mehsana-Bhavnagar Express; Lucknow-Kathgodam Express; Delhi-Bikaner Mail and Madras-Trivandrum Express.

In each of these new coaches there will be sleeping accommodation for 24 passengers on the broad gauge and for 16 on the metre gauge. A novel feature in the broad gauge coaches will be a separate luggage room where heavy luggage can be stored.

Steel purchasing mission

Shri K. P. Mushran, Member of the Railway Board and Leader of the Steel Purchasing Mission for Railways, left for London on May 28, by an Air India International plane.

The four-member Steel Purchasing Mission is going abroad to secure 776,000 tons of steel track material for the Indian Railways.

Shri Mushran told reporters at Santa Cruz Airport that this was the minimum requirement for the expansion work of Indian Railways under the Second Five-Year Plan. Unless this tonnage was secured immediately, the plans for expansion could not be executed.

Shri Mushran stated that the Mission would try to purchase the required material at the cheapest possible rate on reasonable terms.

The Mission will be in U.K. and the Continent for two months and, if necessary, will visit U.S.A. and Canada.

" Outstanding work " by Railmen

Employees of the Jamalpur Railway Workshops in Bihar have won an additional set of railway passes as a result of " outstanding work " done by them.

The Eastern Railway had fixed a target of 330 locomotives to be overhauled at Jamalpur Workshops during 1956. The actual output however, was 401, about 20 per cent higher than the target.

In token of its appreciation for this work, the Railway Board has decided that each worker should receive during the current calendar year an additional set of railway passes.

Railway wagons from Australia

Australia is supplying 2,000 railway wagons as her contribution under the Colombo Plan.

The wagons will be included in India's programme of rehabilitation and development of her railway system which is estimated to cost the equivalent of pounds Australian 900 million.

Railway staff college at Baroda

The capacity of the Railway Staff College at Baroda is to be nearly quadrupled under a scheme of expansion sanctioned by the Railway Board at a cost of about Rs. 17.5 lakhs.

The college, at present, has capacity for training only 30 officers at a time. Under the

expansion scheme, the capacity will be increased to 110.

This expansion has been found necessary to meet the growing need for trained officers in connection with the Railway expansion programme during the Second Five-Year Plan period.

Bold act prevents accident

Early on the morning of the 5th December 1956, while Shri Omkar Harchand, a Yard Khalasi of Bhopal, was walking along the railway track on the Central Railway, he saw a shunting engine heading for the level crossing gate near the station. A moment later the engine crashed through the gate. As the engine passed him, Shri Omkar Harchand noticed that there was neither Driver nor Fireman aboard. He ran after the engine, boarded it and, reversing the lever, brought it to a stop, thereby averting what might have been a major accident.

For his presence of mind and bold action, the General Manager of the Central Railway granted him a special reward of Rs. 50.



Khalasi Rewarded for Display of Keen Sense of Duty



Shri J. Sundarababu receiving a cheque from the Chief Administrative Officer

Shri J. Sundara Babu, who joined the Furnishing Shop of the I.C.F. as a Khalasi in December, 1956, was booked to accompany furnished coach No. 3790, earmarked for Northern Railway, on its trial run from Madras Central to Arakonam. The trial was scheduled to take place on the 19th June and on arrival at Central Station he found that the coach had been attached to a train proceeding to Bezwada instead of to Arakonam. His efforts to draw the attention of the yard staff to the mistake and have the carriage detached were of no avail. At this juncture, he noticed the Chief Adminis-

trative Officer alighting from the Bangalore Mail, which had just arrived and he promptly brought to his notice the mistake committed. The Chief Administrative Officer then arranged for the carriage to be detached and attached to the correct train. But for the timely action of Shri J. Sundara Babu, the entire arrangements for conducting the trial would have been upset resulting in considerable inconvenience. The Chief Administrative Officer appreciated the keen sense of duty displayed by Shri J. Sundara Babu and sanctioned a reward of Rs. 25 to him.

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Inauguration of Khandwa-Takal Section on Central Railway

Dr. Kailash Nath Katju, Chief Minister of Madhya Pradesh inaugurated the Khandwa-Takal section of the Khandwa-Hingoli Metre Gauge Rail link on the Central Railway on the 18th June, 1957.

The construction of the 187.23 mile long Khandwa-Hingoli link was sanctioned by the Railway Board on the 1st of March 1954. The construction work was inaugurated by Shri Lal Bahadur Shastri, then Railway Minister, on the 17th March 1954. The Khandwa-Takal section which has just now been opened is 18.6 miles in length. The total amount so far spent on the project is a little over 3.5 crores of rupees.

Welcoming the Chief Minister of Madhya Pradesh, Shri M. N. Chakravarti, General Manager, Central Railway, said :

“I am privileged to welcome you here in our midst on the auspicious occasion of the opening of the first 18.5 mile long section from Khandwa to Takal of the Khandwa-Hingoli metre gauge rail link.

“As you know the work of construction began just over 3 years ago, the starting point having been this very place—Khandwa.

“The Central Railway serves a number of States—Madhya Pradesh, Bombay, Andhra Pradesh, Uttar Pradesh, Mysore, Rajasthan, Punjab and Delhi. Out of its route mileage of 5,300, nearly 1,400 miles lie in this one state of Madhya Pradesh. Much of the coal, lime, limestone and cement and the abundant agricultural and forest produce of Madhya Pradesh is transported by the Central Railway to consuming centres all over the land.

“This railway thus serves very substantially the State of Madhya Pradesh through which it extends in the form of a closely integrated network.



Dr. Kailash Nath Katju, Chief Minister of Madhya Pradesh pulling the lever to inaugurate the Khandwa-Takal Railway link, on the Central Railway.

“The new link from Khandwa to Hingoli will be 187 miles long and about one-fourth of this will lie in Madhya Pradesh, the remaining being in the Bombay State. When this link is finally forged, the gap which at present exists between the Northern and Southern metre gauge systems will be closed. The serious operational problems presented by the separated systems will end. On completion of the link, a metre gauge wagon will be able to travel right through from far off Tinsukia in the north-east corner of India down to Trivandrum or Tuticorin in the South.

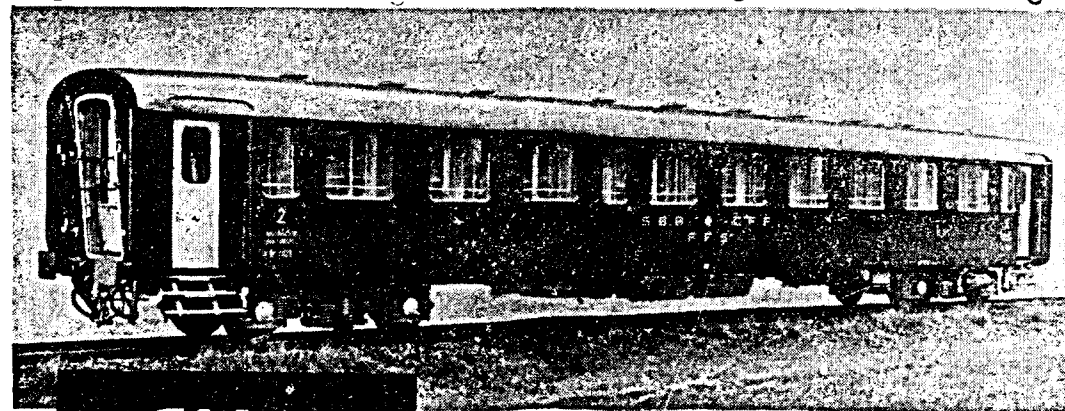
“The section of line that is being formally opened today lies in one of the most fertile tracts of the Nimar District and follows the valley of the Abna, the Sukhta and the Lakhora rivers. The new line will help to develop the

area served by it, thereby bringing prosperity to the people who dwell in the rich hinterland."

Inaugurating the section Dr. Katju said :—

"I am very happy that the first section of 18 miles from Khandwa to Takal has been completed and it is now ready for traffic. I am told that another section 20 miles long from the Hingoli end is being completed and would become ready for traffic in a couple of months. It is my earnest hope that within a couple of years the entire rail link between the north and the south would be completed. We may expect that then one could make his home in the metre gauge compartment from Gauhati to Kanyakumari without the bother of transshipment at any point or to have to bother the poor

coolie and undergo the various other inconveniences now being experienced. I still remember the Grand Trunk Express train of old which ran from Peshawar to Mangalore, and another train from far off Pathankot to Madras. This latest development of Railways in Madhya Pradesh is a happy augury as it connects up vast regions through natural barriers. Fortunately, now most of the steel required for our purposes becomes available from Bhilai, Rourkela, etc. Khandwa should be justly proud of this achievement. It has the unique distinction of being the starting point of this unique vital link. The engineers have done a great job in the field where there is absolutely no social life."



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What Makes A Good Workman

"Life is wonderful in itself. That is why you cannot be a good workman and at the same time be a bad boy at home. If you are good in one thing you cannot be bad in the other. You cannot remain good in one sphere and be bad in other spheres. You can be quite certain about this. So I feel that the greatest thing for you to learn is to constantly look into your own self and see as to what sort of a person you are as a whole. It does not matter as to what others speak of you. If you practise to think and ask yourself, "What sort of a person am I," when you are alone, then you will begin to realise the effect yourself," observed Shri C. T. Venugopal, Director of Finance, Railway Board, while addressing the apprentices of the Technical Training School.

The Director of Finance (Expenditure), was on a visit to the I.C.F. and opportunity was taken of that visit to request him to address the apprentices under training in the Technical Training School. A meeting was arranged on 2-7-1957 in the spacious auditorium of the Technical Training School and there was a gathering of about 400 persons comprising of Trade Apprentices, Apprentice Mechanics, Graduate Apprentices and staff of the Technical Training School. Shri C. T. Venugopal who was accompanied by Shri K. Sadagopan and Shri K. Swarup, was received on arrival by the Principal, Shri K. Santhanam and conducted to the dais.

The Principal requested the Chief Administrative Officer to introduce the speaker. Shri Sadagopan introducing the speaker, said that Shri Venugopal is a supreme example of man, worthy of study and emulation as he had voluntarily and deliberately sacrificed all the comforts in life, which he can well afford to enjoy, and dedicated himself to service to his fellowmen. He added that the best way to show our gratitude to him would be to order

ourselves in the way in which he has put himself as an example.

Shri Venugopal then rising amidst cheers said that he always loved coming into contact with young people as he felt the future rests with them. After paying a tribute to Shri Sadagopan and Shri Swarup, he dealt with the various points which go to make a man great.

He said that to become great one should pay attention even to the smallest of details and that he was happy to note that in the case of training given in I.C.F., attention is being paid even to small details. He particularly referred to the attention paid during training for keeping tools and accessories in their places and maintaining order on the work bench and carrying out the various operations in the correct and orderly manner.

After explaining that an organization can be successful only if there is team spirit, he observed that the Training School is the right place to develop that ability as that is where boys from different parts of the country with different education and up-bringing meet and have to work together. He said in the I.C.F., there is an added advantage as the staff have to work with their foreign brothers who have come to help them. Referring to the team-spirit in I.C.F., he said that he was very happy to say that the I.C.F. is a wonderful model of team work. He advised the trainees to develop the habit of loving people, appreciating other's feelings, avoiding anger and avoiding being impatient.

Continuing, Shri Venugopal said that the most important thing in life is that one has to be good within himself if he has to be good with out. After making the observations mentioned in the opening paragraph, he com-

mended to the apprentices the following experiment :—

"I request you all to try this. This is nothing very vague. It is nothing very philosophical. Everyone should think about oneself for about 10 minutes after he gets up. If you begin the day with 10 minutes of silence, you will be able to spend the rest of the day well. What do you think of in this ten minutes of silence? Think of the highest and the best; that which you think is the very best. If you constantly practice this, then you will begin to see more and more of

yourself. If you are able to see your innerself, then you will become a greater and greater man. I repeat that you should be good all the way through. You are all learning here and so you should learn this also."

Sri Venugopal concluded his speech by saying that all should realise that everyone in this organization is important and that each one should do his allotted task diligently, and that the task by itself does not make one great and the other small.

The meeting came to a close with a vote of thanks by the Principal.

Successful Training Program Depends on Ability of Instructors

(This article is digested from the April issue of the Technical Digest and re-printed with the kind permission of the United States Technical Co-operation Mission in India—Ed.)

An industrial training program is only as efficient as the instructors who do the training. The following article is adapted from a report expounding eight new principles of training from Research Institute of America, Inc., 589, Fifth Avenue, New York-17, New York.

Obviously, the trainer must know the job before he can teach it to others. His first preparatory measure then is to make a detailed outline of the main steps required to do a particular job. This job analysis provides the basic structure upon which the training program must be built. The trainer should never assume that he is aware of everything the job entails. He may know the whole better than the separate parts.

As an employee goes through the job in slow motion, the trainer can write down the elements of the operation. The following approach has been found useful:

Draw a line down the centre of a sheet of paper to make two columns. At the top, name the job. Below that, head one column "Main Steps", the other "Notes." List one after the other in the first column every action that takes place in the operation of the task. Do not rely on memory but actually watch the job as somebody goes through the steps. Jot down in the right hand column opposite the appropriate action every aspect of it that should be brought to the attention of the employee—the special knacks, tricks of the trade, or hazards, anything that makes the job easier to learn or teach. Often too many unnecessary steps are included in this analysis. Remember that the goal is a des-

cription of the job in sequence, providing the material necessary for the next step, the actual training.

Many supervisors have to delegate the training responsibility to some member of the work group. This selection is an important factor in the success of the program. Many people lack the patience and the personality required to teach others.

Here is a list of characteristics necessary for a successful instructor. The supervisor should check himself or the person he assigns to this task.

1. *Desire to Teach.*—People who do not like the teaching assignment will probably fail. A person who enjoys teaching finds it easy. The personnel records may reveal unsuspected teaching aptitudes of someone in the group.

2. *Working Knowledge of the Job.*—This does not mean that the trainer must be an expert. This expert may know the job better than anyone else, but be completely incapable of teaching. Two other faults may handicap him: (1) He may wish to exhibit his own skill, discouraging the trainee. (2) He may be overtrained so that he is no longer consciously aware of some of the things he does on the job. Therefore he cannot fully communicate all aspects of the operation to a trainee in a way the learner will understand.

On the other hand, some experts are excellent teachers and should not be discarded as a possibility without checking.

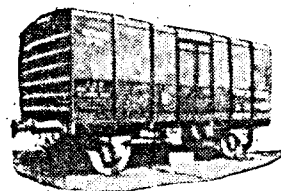
3. *Ability to Make Himself Understood.*—Some people have difficulty in communicating

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what they know. They have a hesitancy of speech, or talk too rapidly, or use language too technical for the learner to understand. These people are not successful teachers.

4. *Patience.*—Teaching requires an objective, patient personality. An emotional employee should not be selected as the instructor. Beginners always find learning painful and fatiguing. However, few things will diminish the difficulty and fatigue like the kindness and patience of a good teacher. Trainees must feel that the instructor wants to help them, is interested in their growth, patient with their mistakes and pleased by their success.

5. *A Sense of Humor.*—Trainees are kept attentive by a sense of humor. The wise

teacher knows that 45 minutes of study with 5 minutes of laughter is worth twice as much as fifty minutes of straight instruction. When individuals laugh together they cut down artificial barriers between teacher and learner, worker and leader. They become instead a group of equals enjoying themselves. Humor creates a bond which makes teaching easier.

6. *Time to Train.*—A good instructor is likely to do a poor job if his schedule is already over-burdened. The supervisor or foreman should see that the important function of training gets the proper amount of time and attention. That may mean shifting some of the regular work load away from the instructor.

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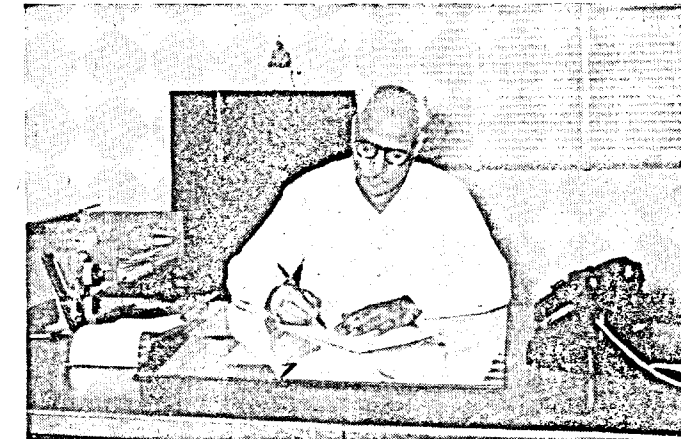
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A Trip To Badrinath

BY
SHRI G. N. UPADHYAY

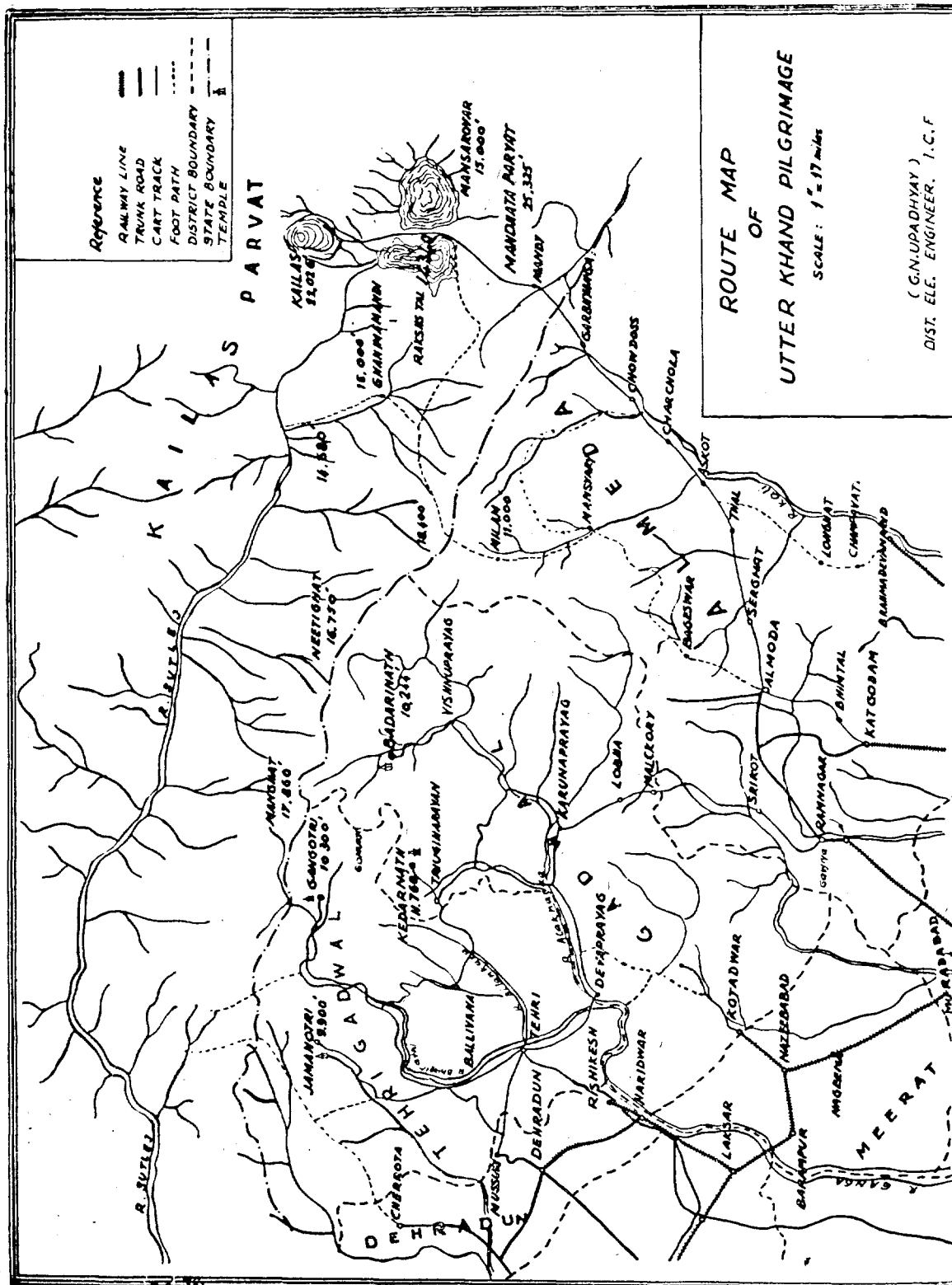


Shri G. N. Upadhyay back at his desk after his recent trip to Badri

Hindus, who have not heard of Badrinath can only be a few, as a trip to Badrinath for a devout Hindu is like a trip to Mecca for a Muslim and a trip to Jerusalem for a Christian. Badrinath, which along with Jagannath Puri in the East, Rameswaram in the South and Dwarka in the West forms the four Great Dhams of Indian Shrines, is the least accessible of the lot. Situated in the interior of the Himalayas, one has to cross difficult terrain under relentless weather conditions to get there. Such a combination of unfavourable conditions make a pilgrimage to Badrinath a great personal risk. However, these have not deterred people from undertaking the pilgrimage. From time immemorial people have been making the trip conscious only of the fruits of the labour.

Apart from the religious aspect, a trip to Badrinath is an experience in itself. It is generally considered that wealth and might are the sources of power. A trip to Badrinath will convince that wealth and might are of no consequence and it is only faith and grim

determination that count. While on the pilgrimages one can engage coolies to carry him or his belongings but he has no alternative but to spend the nights in the mud huts built at places en route. Both high and low have to spend the nights in the mud huts and we see how basically all human beings are equal. Pilgrims walk together in groups, rich and poor, all alike and there we find a true spirit of comradeship. The temple situated on the banks of the river Alakhnanda and surrounded by snow-topped mountains presents an awe-inspiring sight. In the temple precincts there is a warm spring where pilgrims take their bath before going into the temple. This appears to be a merciful provision by the Almighty for it is difficult to explain how a hot spring came to be in existence at an altitude of over 10,000 feet in the midst of snow clad mountains. The warm spring has a soothing effect on the body and it has a refreshing effect not only on the body but also on the mind. The whole atmosphere is so calm and so sublime that in the presence of the Almighty



pilgrims forget themselves and are conscious of only the Supreme being. One forgets all the difficulties encountered to reach the place and it can be said with certainty that, that experience is well worth all the trials.

There are other places of pilgrimage in that region and a trip to all these holy places is generally referred to as Uttarakhand pilgrimage. The places worth visiting, details about the places and the order in which they are generally visited, are as follows. The map on page 22 will be helpful in giving an idea of the location of the different places and following the routes to be taken to the different places of worship.

Jamanotri.—The place where the river Yamuna is supposed to originate. It is at an altitude of 11,000 feet. It is 120 miles from Rishikesh, 80 miles of which is covered by bus and the balance by foot. There are a number of warm springs en route.

Gangotri.—This is about 134 miles from Deva Prayag and is at an altitude of 10,300 feet. This place is worshipped as the place of origin of the river Ganges, as the actual place of origin is very much interior in the Himalyan ranges and out of human reach.

Fourteen miles from Gangotri is Gaumukh, which takes its name from the cow mouth shaped outlet through which Ganges flows.

Kedar Nath.—Saivaites attach great importance to this shrine and worship it as the abode of Lord Shiva. The place is situated on the left bank of Mandakini and is at an altitude of 11,500 feet. Pilgrims proceed from Rishikesh to Rudra Prayag by bus and cover a distance of 54 miles between Rudra Prayag and Kedar Nath by foot.

Generally the trip is undertaken from Rishikesh and can be conveniently completed in 2½ months. If the weather be favourable then the trip can be completed between 1½ to 2 months.

If there is time left and health permits, then it will be well worth to visit Mansarovar and

Mount Kailas. The importance of these places being :

Mansarovar.—This place is 35 miles short of Kailas and is at an altitude of 14,900 feet. There is a lake 45 miles in circumference. It is generally believed that swans are seen on the Mansarovar lake but pilgrims, who had been to Mansarovar have not confirmed this belief. There is another big lake nearby of name Rakshas Tal.

Kailas.—This is about 238 miles from Almora and is situated in the heart of the Himalayas, in the Tibetan territory. This is situated at an altitude of 22,980 feet. This place is considered to be the abode of Lord Shiva.

Whilst quite a number visit Badrinath, it is only a lesser number of pilgrims undertake the Utter Khand pilgrimage and still a lesser number visit Mansarovar and Mount Kailas.

Being in the Himalayan region these places are accessible only for about 6 months in the year, i.e., between May and October. The temple at Badrinath is open for worship only between the second week of May and middle of October each year. The best time to commence the pilgrimage will be between middle of April and middle of June.

Pilgrims proceeding into Badrinath direct from Rishikesh take the bus to Pipal Koti and cover the 38 miles from Pipal Koti to Badrinath by foot. At Pipal Koti ponies and other forms of conveyances are available for people who cannot walk the distance. This does not mean that the entire distance can be covered without walking even a single foot. At many a place pilgrims have to go only in single file, there being the mountain face on one side and sheer falls on the other.

Generally pilgrims carry their luggage on their backs and for those who cannot do so can engage coolies to carry them. At

Pipal Koti there are number of contractors who can make all arrangements for transport.

Merely because one has to carry his belongings it will not be correct to go either lightly dressed or to have very little protective clothing. It is very cold and the cold is aggravated by rains en route. Hence it is advisable to have warm clothing on and to carry blankets. The essential items that one should take are given below, purely as a guide to those who wish to undertake the trip.

- (a) Two blankets and a light bedding.
- (b) One sweater.
- (c) Torch.
- (d) 5 lbs. ghee.
- (e) A pair of canvas shoes.
- (f) Walking stick with spikes.
- (g) Umbrella.
- (h) Dried fruits and biscuits.

The journey is commenced in the morning and the nights are spent in the mud houses built at 2 or 3 miles intervals, en route. There are also inspection bungalows and rooms can be booked by arrangements with the Executive Engineer, Paurie.

During the journey it is advisable to purchase provisions and cook one's food rather than take what is readily available. One should avoid taking cold water and as far as possible take only hot tea throughout the trip. From experience it is seen that average expenses per day for journey from Rishikesh to Badrinath and back is about Rs. 6 per head.

It is suggested that each pilgrim should take with him a gross or two of good sewing needles and threads to be given away as gift to the villagers, who are met en route. The villagers greatly appreciate this gift, as they have a lot of sewing and darning to do on their padded garments and they seldom come down to the plains where alone such things can be bought.

Leaving Madras on the 4th May, 1957 we reached Rishikesh on the 9th. Leaving Rishi-

kesh the next morning at 6:00 hours, by bus we covered 63 miles and reached Kirti-Nagars Sri Nagar in the evening. Resuming the journey the next morning we covered a distance of 68 miles and reached Pipal Koti that evening. Because this portion of journey was covered by bus it need not be imagined that the going was easy. For most of the distance there are no regular roads and the bus has to go on hilly tracks with numerous ups and downs. At quite a number of places the bus has to skirt along the mountains with precipices of 800 to 1,000 feet depth on the other side of the road. One comes across a number of tributaries of the Ganges and the roar with which they rush along the Ganges below have a frightening effect on the bus travellers above. The bus drivers have to be very careful as even the slightest lapse on their part will lead to disaster.

The 'patha yatra' from Pipal Koti to Badrinath was started on the 11th May, 1957 and we reached Badrinath on the 14th evening. The distance covered each day and the places where we spent the nights were :—

11-5-1957	Up walk	4 miles	to Garur
			Ganga Chatti.
12-5-1957	Do.	11 miles	to Zada-
			kula Chatti.
12-5-1957	Do.	9½ miles	to Ghat
			Chatti.
14-5-1957	Do.	13½ miles	to Badri
			Nath.

Miles ... 38

It will be seen that it is not possible to cover the distance at a uniform rate as the terrain to be traversed and the climate are the deciding factors.

Badrinath is a small town with Posts and Telegraphs Office, hospital and other facilities. Dharmasalas and other lodging places are available in plenty. There are a number of hops, but being a difficult place to get at, tems are generally expensive.

We spent the first day in performing various ceremonies and on the second day had Dharsan of Shri Badrinarayan. Both these days we had bath in Tapta Kund (warm spring). The Chief Priest, H.H. Rawal Sahib has a separate pond for taking his bath and the manner in which he proceeds to perform his religious duties, accompanied by all paraphernalia, is a very impressive sight.

The return journey was started at 9:00 hours on the 16th May, 1957 and we reached Pipal Koti on the 18th May, 1957 covering the intervening distance as shown below :—

16-5-1957	10½ miles	Binayak Chatti.
17-5-1957	10 miles	Singa Dhar Chatti.
	11½ miles	Tongri Chatti.
18-5-1957	6 miles	Pipal Koti.
	38 miles.	

We reached Rishikesh on the 21st May, 1957 and after spending 3 days at Banaras returned to Madras on the 29th May, 1957, the whole trip being completed in 25 days.

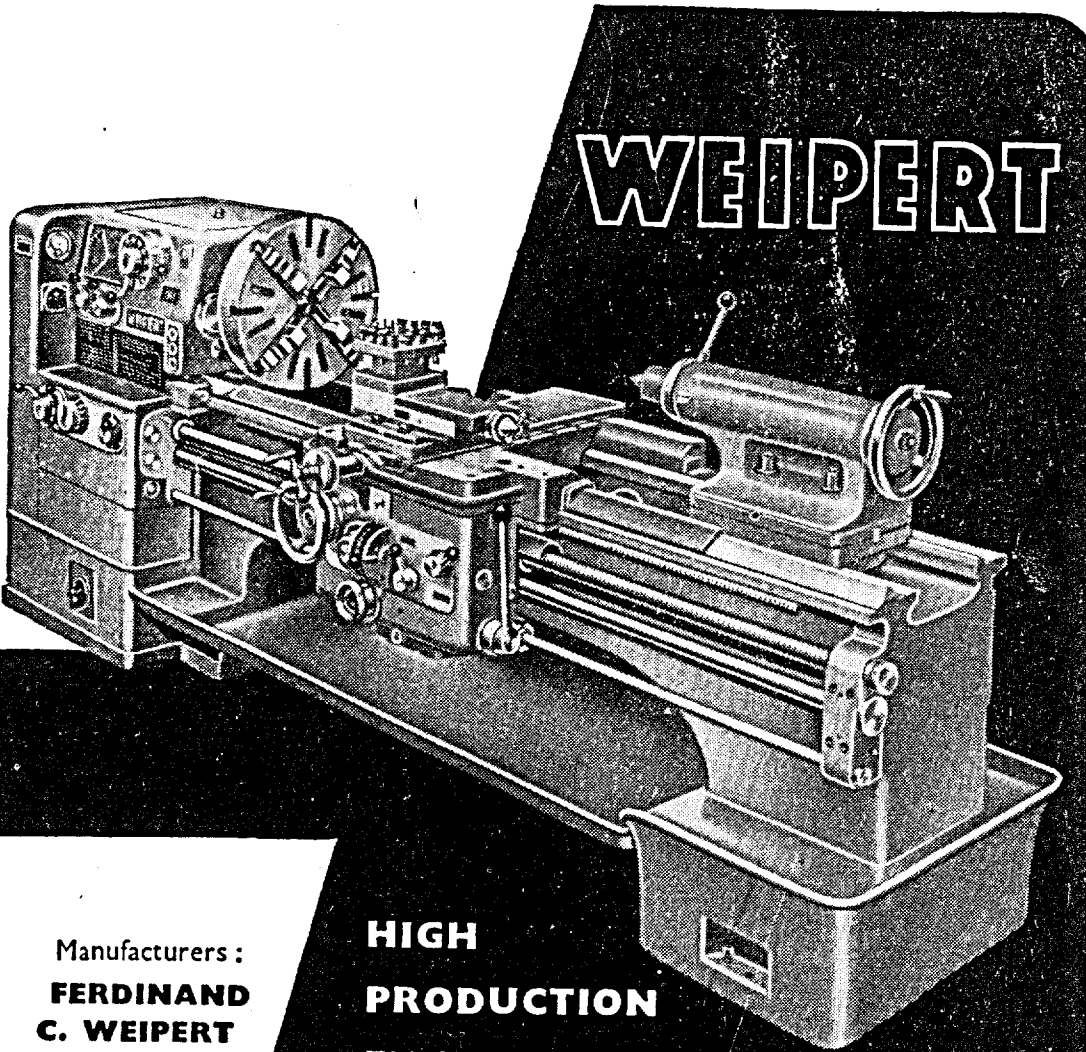
The trials and tribulations to be undergone would appear to prove that wealth and power have no value and that for realisation of the Supreme bliss, one has to toil and make himself worthy of it. The ordeals to be endured are perhaps intended for one to shed off his

vanity and attachment to worldly riches. The trip with its numerous lessons, culminating in the supreme feeling of happiness has a purifying effect on a person as a whole and one, who returns from such a trip, cannot help being the better for it having come back with a broader outlook and realising that all human beings are basically equal.

If I make a reference here to my father, at whose instance the pilgrimage was undertaken, it is more to show that without His blessings nothing is possible as how else could a man of 80 years of age walk the entire distance from Pipal Koti to Badrinath and back and return home safely.

To those who are desirous of making a trip to Badrinath, I would recommend the following books for study. The list is not complete but from experience I found these books to be the most useful ones.

1. Badrinath—The Land of Wisdom by Swami Pranavendra Saraswati, Badrinath.
2. To Badrinath by Shri K. M. Munshi, Bhawan Book University, Bombay.
3. Badri Kedar Yatra Guide—Published by Bhai. Harnam Singh Sohan Singh, Bookseller, Hardwar.
4. Pilgrim to Badri and Kailas by Swami Sivanand, Rishikesh.



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Party in the I.C.F. Institute

A pleasant party was got up by the I.C.F. Institute at 5.30 p.m. on 1-7-1957 to meet Shri C. T. Venugopal, Director of Finance, Railway Board.

The Chief Guest, on arrival, was received by Shri N. G. Pillai, Secretary and the Members of the Institute Managing Committee. Light refreshments were served in the auditorium of the Institute and then the guests adjourned to the open air theatre, where a dance per-

formance had been arranged. The dance recital by Kumaris Vijayalakshmi and Hema Malini was greatly appreciated by the Chief Guest and vast gathering numbering about 500.

Shri C. T. Venugopal during his speech commented on the team spirit and enthusiasm prevailing amongst the members of the I.C.F. family and wished the organisation to grow from strength to strength.



Kumari Hemamalini

Catholic Employees of I.C.F. Observe Thanks-Giving Day

The catholic employees of the I.C.F. celebrated their First Thanks-Giving Day at our Lady of Lourdes Shrine, Perambur on 12th May 1957. About 200 catholic employees of the factory with their families took part in the function.

The statue of St. Joseph, the Patron of Workers, was carried in a decorated car around the shrine and the members followed in procession. At 7.30 a.m. a Solemn High Mass was sung by the Rev. Father Andrew Durai Raj, S.D.B., acting Parish Priest. This was followed by General Communion and Benediction of the Most Blessed Sacrament.

The members then adjourned to the Institute for Breakfast. Shri M. Harris of Shop No. 25, the Organizer then spoke. In explaining the significance of the celebration he said that it

was an occasion for offering their thanks and expressing their gratitude to the Almighty for what has been achieved by them in the factory, which would not have been possible but for His blessings. He said that all the members should remain faithful and steadfast to their duty, country and leaders. He added that results could be achieved only through prayer and devotion to the Holy Family, whose picture they had received as a souvenir. He also said that they must specially pray for the protection of St. Joseph, the Patron of Workers.

The acting Parish Priest, Rev. Father Andrew Durai Raj speaking next congratulated the assemblage and said that they should not fail to thank Him for all His blessings.

The function came to a close with a vote of thanks by Shri L. W. Brown of Shop No. 16, the President of the Association.

Visitors To The I.C.F.

An American Machine Tool Advisory Group consisting of Messrs. George E. Merryweather, Roy M. Jacobs, Paul F. Hawkins and Robert E. Fleming accompanied by Mr. Frank Wilson of the Technical Co-operation Mission in New Delhi and Shri R. K. Kirloskar, General Manager of Mysore Kirloskar, Ltd., who are touring round the country in connection with surveying our industrial progress and studying particularly the needs of the Machine Tool Industry, visited the Integral Coach Factory on the 4th July 1957. They were taken round the Technical Training School, the site of the furnishing annexe and the workshops of the Factory. They evinced keen interest in the progress being made and, at the conclusion of their visit, Mr. George E. Merryweather

the leader of the team recorded in our Visitors Book as under :

"Congratulations on a magnificent training program and as well planned a car plant as I have ever seen. Best of luck."

* * * *

Shri N. K. Roy, Additional Member, Works, Railway Board inspected the Factory on the 24th June 1957. He paid a visit to the site of the Furnishing Annexe and went round the interim furnishing sheds in the neighbourhood for temporary furnishing.

* * * *

Shri S. K. Chowdry, First Secretary in the High Commission for India at Wellington, visited the Works on the 25th June and was taken round the Technical School and Shops.

* * * *

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NOTICE

CONCESSIONAL RAIL-CUM-ROAD AND RAIL-CUM-AIR RETURN TICKETS TO SRINAGAR, VIA PATHANKOT

With effect from the 1st April, 1957, concessional Rail-cum-Road and concessional Rail-cum-Air Return Tickets for First, Second and Third Classes are issued from the undermentioned stations to Srinagar.

Madras Central	Devangere	Mangalore
Nellore	Kolhapur	Coimbatore Jn.
Tenali	Sangli	Salem Jn.
Guntur	Hubli	Trichinopoly Jn.
Powerpet	Belgaum	Madura Jn.
Ellore	Bellary	Tanjore Jn.
Rajahmundry	Guntakal	Chidambaram
Cocanada Town	Cuddapah	Trivandrum Central
Masulipatam	Chittoor	Tuticorin
Bangalore City	Anantapur	Tinnevely Jn.
Bangalore Cantt.	Ernakulam Jn.	
Mysore	Cochin Harbour Terminus	

2. These concessional return tickets will be issued upto and inclusive of the 31st October, 1957, available for THREE months for completion of the return journey, from the midnight of the date of issue of the ticket or, where tickets are issued in advance of the journey, from the date of commencement of the outward journey.

3. No break of journey on the outward trip is permissible on these return tickets but break of journey is allowed on the return trip, subject to the usual conditions governing break of journey on ordinary tickets.

4. Bases of fares.

(a) Rail-cum-Road Return Tickets:

First and Second Class—1/1-3 single journey fare over rail plus Rs. 27/- for onward and return journey over road.

Third Class —1/1-2 single journey fare over rail plus Rs. 27/- for onward and return journey over road.

Note:—Children over 3 years and under 12 years of age will be charged half the above fare for the rail portion and the full fare of Rs. 27/- for the road portion of the journey.

(b) Rail-cum-Air Return Tickets:

First and Second Class—1-1/3 single journey fare over rail plus Rs. 76/- for onward and return journey by air.

Third Class —1-1/2 single journey fare over rail plus Rs. 76/- for onward and return journey by air.

Note:—Children over 3 years and under 12 years of age will be charged half the above fare for the rail portion and Rs. 38/- for the air portion of the journey. Children below 3 years will be charged for the air portion only, at Rs. 8/- per child.

5. Further information may be had from the Station Masters or from the Chief Commercial Superintendent, Southern Railway, Madras-3.

CHIEF COMMERCIAL SUPDT.

Our Government

BY

M. V. B. S. SARMA

Friends always questioned me whether my family is run on democratic principles or otherwise. I am taking this opportunity to explain to those who are interested, the intricacies and complexities which I encounter in running this highly complicated domestic machinery.

I am by self-appointment the Prime Minister. We have no question of elections; the expense, excitement and the mudslinging as a consequence do not have a place in our economy. The Home portfolio is held by my wife, as also Law and Order, in which the Home Minister has unfettered powers. The father-in-law is in charge of Legal affairs but he is a minister in absentia. He tenders legal advice by post. Finance is split into two—Receipts and Payments. The Prime Minister is in charge of the first part while the Home Minister is the paymaster with full powers on the ways and means of expenditure. The Prime Minister has a nephew and he is the Parliamentary Secretary. Upto now no charge of nepotism for his appointment has been made against the Prime Minister. Ours is a flexible system of Government and there is a common respect for individual's dignity and liberty and because of this we have too many encroachments on other's domain, which we generally resolve by arbitration or by a majority vote.

The nephew is in charge of the Protocol arrangements. His business is to get taxis for the visitors, arrange parties, fix up the menu for the day, get all the provisions necessary for the larder, etc. His continual stay in the Intermediate course due to solid differences of opinion between himself and the examiners has given him more knowledge than is necessary for his job. However, he has made vast

researches in market analysis, the protein and chemical content of the vegetables, etc., that he buys the same vegetables which he likes everytime, and asks us to believe in his supreme wisdom and rest contented. The Personal Secretary which is another designation of the Parliamentary Secretary does not draw salary but is only an honorary worker. However, there are very clear indications as to the sources of his income when we make a random sampling of prices quoted by him and those ruling in the market. Discretion is better part of valour and admitting the inexactitudes in his statements of account, he is a cheaper secretary by all means and a conscientious one too!

In our Government, the accounting and auditing functions are not separate ones. Both are discharged by the wife. I have to admit the anomaly but in the larger interests of domestic peace and harmony, this inherent defect is ignored. The Home Minister's accounts are neither kept nor audited while the Prime Minister's accounts are subject to a very close scrutiny. Necessary vouchers have to be furnished and the Parliamentary Secretary is the final authority in deciding whether a particular voucher is spurious or genuine.

Committees are no new things for us, for we constitute committees for various purposes. For buying provisions we constitute one man committee with the Parliamentary Secretary. As a member he has all the rights and liabilities of an agent. Everyday for our lunch we constitute a three-member committee. The Prime Minister can offer friendly criticism and advice which are generally not accepted. Consisting

as it does of self, wife, Parliamentary Secretary, the three-member committee is characterised by extreme catholicity and team work. If the wife wants to buy sarees, a one member mission is created on credit or cash with one or several shops. If the Prime Minister wants anything generally a three-member committee with Prime Minister, Personal Secretary and Home Minister is constituted. A strict monetary limit of Rs. 5 per article and Rs. 20 on the aggregate on any one occasion, the occasions being restricted to three in year, is imposed.

We have an excellent budgetary system; the budget period being one month. In relation to the receipts and income the expenditure is adjusted. We have limits for almost all types of expenditure. The estimates for the current month are based on the past actuals adjusted to the probable changes and unforeseen circumstances. The Prime Minister's portion of the expenditure is one marked by austerity, the Home Minister's portion is one marked by luxury and the Parliamentary Secretary being a *via media* between the two. In addition to the secret reserves he creates for himself, he has an allowance every month besides his school or college expense.

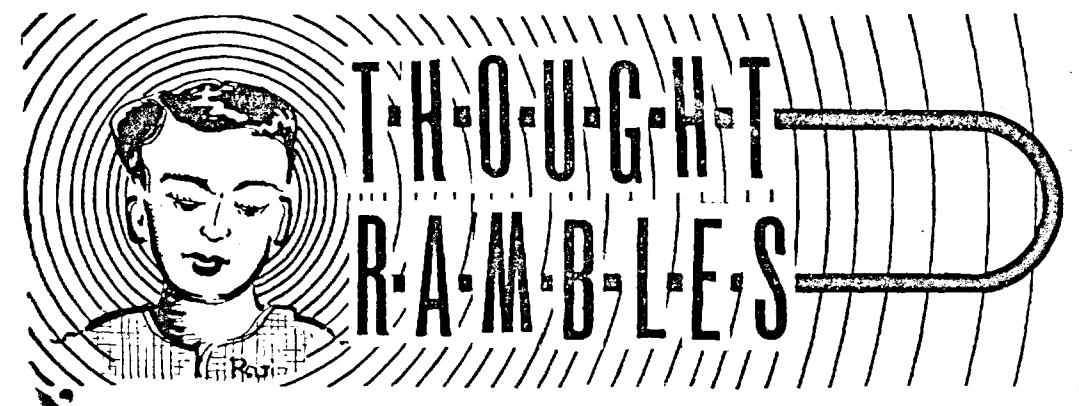
Instead of making this paper look like a long lesson in Civics, I will take you into the more humane regions and the lighter sides of the government.

It is a known fact to the Home Minister that the "P.M." is a bit partial and absolutely potty over her because of her looks. The "P.M." has the Casanovah's blood in him and it was in one of those moments he made the conquest. With one or two affairs to his credit, when he first saw her on the beach, his heart jumped, raved and thundered. From

that moment, the "P.M." started tailing the object with methods still unknown to Scotland Yard. With the uncanny insight and the unusual habit of a preying animal he bombarded her with his corporeal presence in all places, whether it was in concerts or colleges or coffee houses. To the Home Minister, then, he was merely one of the many hounds that stalked her footsteps and this one only looked like a more robust, pertinacious young dog. He was more of a nuisance than anything else. Her classmates began to make jokes about her and then only she decided to take a serious notice of him. The initial observation struck her that he would be eligible provided he had other qualifications.

Again he met her on the beach. Fortunately for him there was nobody nearby. A love scene, a passionate pleading by the lover was enacted on the sands (in Cecil de Mille's proportions) with the setting sun on the horizon. All the lines which Antony uttered before Cleopatra, came to him without effort though he forgot them completely in the examination hall. Possibly he would have bettered Shakespeare from the way his Goddess responded. She was a lawyer's daughter and knew the pitfalls of an affair without a marriage. She said that he should apply at the proper quarters for her hand and for her part she could recommend his application if and when it was referred to her. That left him high and dry. He tried to take another look at her to see for the first time how she would suit for wife and got satisfactory confirmation.

His infatuation became an obsession and he had to seek out the lawyer. It was thus that our 'government' under "due processes of law" was constituted and established.



On Students and Books

BY

S. R. SRINIVASA RAGHAVAN

The formation of the Book Industry Council of South India recently was the occasion for many interested intellectuals to ventilate their thoughts on Books and Men. One article dealt with books for the masses, another with reviewing books and a third with authors and publishers. The most stimulating was a piece by a highly cultured woman who wrote on the reading habits of students.

I cannot claim a sound knowledge of the intellectual levels of modern students, but I crave permission to say that it is at the lowest nowadays. Actually modern students of the lower middle class have practically no reading habits at all; and students belonging to the upper middle and high-brow classes have unfortunately very low class inclinations, even in the choice of books. Even amidst books of detective fiction there are standards and the general liking, so far as I have seen, is for third rate stuff.

Due to one reason or the other our academic facilities are very limited and students have to crowd themselves into the very few colleges that are available. During my college days the ratio was one master for forty students,

but now, I understand that the ratio is one for two hundred. Naturally, deterioration is inevitable.

My fear is that the "Vicar of Wakefield" and the poems of Shelley can no longer be popular. These authors might perhaps be left in the background, dubbing them as belonging to a past century. But are we sure that modern students understand, much less like, T. S. Eliot, the present poet-laureate of England?

The lady I referred to in the beginning of this article concluded her thought-provoking piece with the remark, "so perhaps we might with benefit undertake research into the reading habits first of teachers themselves."

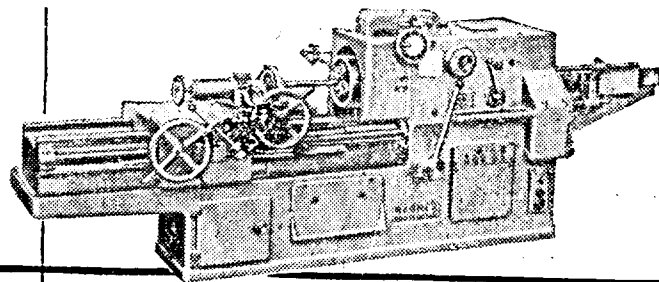
* * * *

Readers may kindly permit me to talk a little about my own experience in relation to books. I started reading at the Intermediate stage and somehow have had an inclination for serious literature. From then on till date my tastes have never changed. Somehow I have abhorred all trash and, the more serious a book, the better I have liked it.

But one thing is certain. Certain inclinations are innate or God-given, as men of the older generation would like to call it. For men who believe in a destiny, relating both to mental and physical existence, the behaviour of modern students would not be a surprise.

In spite of the fear that I may be called conservative, I make bold to opine that finer values are receding into the back-ground and the cash nexus, with its associated ornaments, is replacing it.

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News from Switzerland

(Published through the kind courtesy of the consulate-general for Switzerland, Bombay)

The Seventy-fifth Anniversary of the Gotthard Railway

An ultra-modern 15-unit Swiss Federal Railways train left Lucerne in the early morning of June 18th with 600 guests of honour to Switzerland's sunshine corner, the Ticino Canton, where the official festivities of the 75th anniversary of the St. Gotthard Railway was held at the capital city of Bellinzona. Among the southbound travellers there were 240 to 250 members of the two houses of Switzerland's Federal Parliament. Other invited dignitaries included representatives of the Cantonal Governments and local authorities of towns in the vicinity of this important trans-Alpine trunk line, the Swiss and foreign press, public and private transport companies, chambers of commerce and several European railway companies. The St. Gotthard cantons are prepared special welcome celebrations for the occasion. Uri, for instance, greeted the guests of honour at its lakeport towns of Fluelen on the southern end of Lake Lucerne and gave them a change to marvel at the authentic "puffing bill" train creeping out of the almost 10 miles long St. Gotthard tunnel at Göschenen, its southern gate, as it did on June 1st, 1882. It was on that day that the St. Gotthard route was opened as one of Europe's outstanding North-South rail links. At Airolo, at the southern entrance to the tunnel, a salute to the 117 victims of the St. Gotthard tunnel project took place in front of the memorial which was erected for them there. The piercing of the tunnel was achieved on February 29th, 1880, after 2,726 days of hard work inside the mountain.

An interesting novelty in the European Railway Traffic

Recently the railway companies of seven European countries, including Switzerland, decided to build up a network of special trains between seventy of the most important European centres. From the beginning of June these new "Trans-Europe Expresses" will be put into service. They will all be of the same make up; more than 100 yards long, they will each have a 2,000 H.P. diesel engine, three first class carriages, with 114 seats, and a dining-car with 32 seats. They will be able to reach the speed of about 90 m.p.h. and, for example, do the run between Basle and Paris in only five hours. Two important Swiss firms built 5 of the trains, and so once again Switzerland has been called upon to collaborate in this rail transport innovation.

New locomotives will increase the output of the Gotthard line

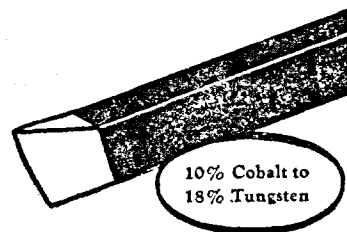
The Swiss railways have decided to buy 24 new locomotives for the Gotthard lines. Because of the great traction power of these engines, auxiliary engines can be done away with. The new locomotives will raise the efficiency of the line by about 30%, and will allow of an increase in the speed of goods trains from 22 m.p.h. to 40 m.p.h.

A new improvement of the wrist watch

The watch-bracelet is such a simple and rational instrument that it would seem difficult to bring any further important perfectioning to its outward appearance. Nevertheless, a Swiss firm now announces an interesting novelty, namely an automatic watch, without any

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winder. This, as you know is the little rowel-like device used for winding up the watch and for setting the figures at the right time. An automatic watch does not need to be wound up, but one must be able to do this when not wearing it, and also in order to put the time right. In this new model, however, these two operations are performed by the action of the rim of the watch-case, that is to say by the little metal circle surrounding the glass.

Apprentice school against technicians shortage

In all industrial countries there is a shortage of technicians and qualified craftsmen. And in Switzerland, as everywhere else, private enterprise is paying particular attention to this problem. In conjunction with the building of a new factory, the Societe Genevoise d'Instruments de physique (a Geneva firm making physical instruments) has increased the size of its new apprentice school. The school, which was founded as long ago as 1935 and provides practical and theoretical training, has been enlarged so that the number of apprentices, which is now 45, can be increased to 80. The apprentices undergo a four year period of training, and at the same time do practical courses in the factory itself. At the end of this time they are ready to work as qualified craftsmen in a factory for high precision machine tools.

Kerala Samajam Anniversary

The Fourth Anniversary of the Ayyanavaram-Perambur Branch Kerala Samajam was celebrated on 29th June 1957, in the I.C.F. Institute, with the Malayalee employees of the I.C.F. taking a prominent part. Dr. C. R. Krishna Pillai, a veteran Doctor of Madras was in the chair.

The highlight of the occasion was the staging of a drama entitled "Gnan Oru Adhikapatanu" (I am an unwanted surplus) written by Sri Ponkunnam Varky, a well-known writer of Kerala. All the actors, with the exception of the feminine cast, were staff attached to the I.C.F. The theme of the drama centred around the ravages of wars, particularly on human beings, and the imperative need for peace.

Dr. Krishna Pillai, in his speech commended the dramatic skill of the actors and expressed

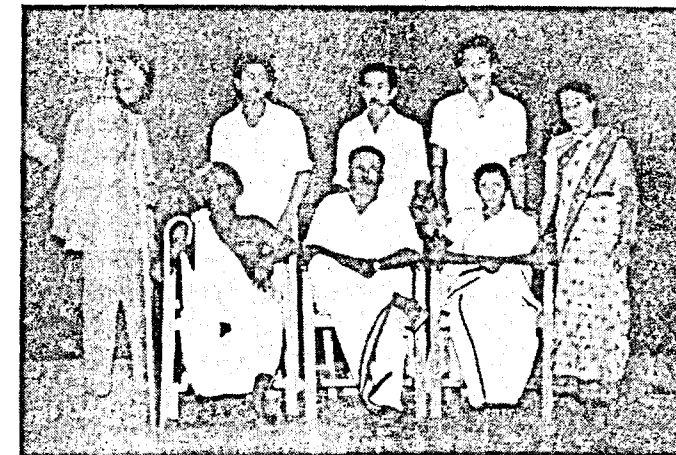
that the Malayalees in Madras should join hands with the Tamilians and work for the welfare of the Madras State.

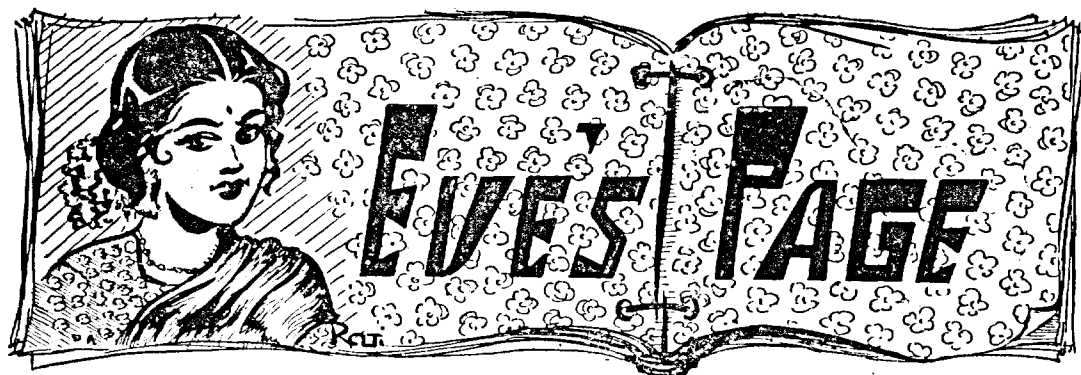
The function came to a close with the singing of the National Anthem.

The undermentioned staff of the I.C.F. took part in the drama.

Sri A. B. Nair, Workshop Instructor	...	...	Mullukadan Pachu Pillai.
Sri K. N. V. Nair, Senior Clerk	...	...	Asan.
Sri Jaisen, App. (VII Batch)	...	...	Balan.
Sri Madhavan, App. (VI Batch)	...	...	Dhamu.
Sri Sadasiva Gurukkal, App. (V Batch)	...	...	Sadanandha.
Sri Haridas, App. (VII Batch)	...	...	Divakaran.

The photograph below shows the actors who took part in the drama.





On Women writers

BY
"AMBUJAM"

The literature of the world has been partly enriched by distinguished women literateurs. As in other fields they have contributed their mite to the progress of mankind. Women writers have brought in a peculiar humanism and delicacy into the orchards of the world's poetry and prose. They have been the cause of a subtle turn in thinking embracing the labyrinthian minds of the "other sex", as man call it.

Like George Eliot some might assume male names, but inwardly they are utterly feminine in their thoughts and expressions. The best prose and poetry produced by a male writer is a little rigid and opaque. They have the terseness and clarity peculiar to their race but I feel they lack the delicacy of the works of the feminine muse.

The first woman author I read was Mrs. Henry Wood. It was "East Lynne". I felt it was a little voluminous but like Tolstoy's "War and Peace" it was a huge temple with many minor shrines inside. The main theme was the portrayal of a woman's feelings and the complications rendered by her contact with the world and society.

Jane Austen was more robust and the life and times she wrote about were full of the aristocratic verve. Bath, the coastal city of holiday-makers, became famous under the

tip of her artistic pen. About ten years ago I happened to see a film based on her novel "Pride and Prejudice" which is the most famous of her works. Walter Pidgeon and Greer Garson, now, old timers, portrayed the main parts and it was almost a wonderful screen version of the novel.

Nearer home Mrs. Sarojini Naidu has given us earfuls and soulfuls of her lilting poetry, the bangle-seller hawking his ware and the catamarans reaching out far into the sea under the celestial embrace of a moon-lit sky. Poetry came as second nature to her and the charm of her expressions can never be over-estimated. She was aptly called the nightingale of India. If Toru Dutt, that prodigy given by Bengal, talked fluently in her poetry of things and men of far away. Mrs. Naidu made us think of the here and now. Her portrayals were of scenes easily available all around us and familiar to every one.

The Brontes, who also belonged to the past century lived a life of seclusion, far from the reaches of human contact (in the crowded sense), and poured their thoughts into tapestries of variegated charm. Most of the readers will be familiar with that masterpiece of Emily Bronte, "Wuthering heights".

My thoughts are a little meandering and I may kindly be permitted to go off the stage with this for the present.



1. Vasu met his old college friend coming along with a pretty little girl. Vasu said to his friend, "Hallo! how do you do? It's long since I met you; isn't it?"

The friend replied, "Yes, Vasu it is so." Vasu continued and said "But who is this child?"

The friend promptly answered, "Don't you know Vasu that I am married, she is my child".

"Oh, I see" said Vasu and continued, "What is her name?". For this the child jumped up and said, "My name is same as my Mother's."

Vasu atonce said, "Oh, your name is also Shanti."

How could Vasu know the name of the child in spite of the fact, that he does not know that his friend is married?

2. Two planes *A* and *B* were flying to Palam; *B* was travelling a mile a minute faster than *A*. When *A* was 306 miles from Palam, it was leading *B* by 35 miles; but *B* arrived there 6 minutes before *A*. What were their respective speeds? (considering that their speeds were constant throughout).

3. Muniratnam had an outing with his four children to the nearby town for a visit to an amusement park. In the merry-go-round as the children were scared of riding the horses, Muniratnam decided to give them a seated

ride round and said to them, "I shall give all of you four rounds each in such a way that each of us will stand out by turn thereby having a total ride of five rounds."

If their respective total ages were 80, 73, 66, 78 and 45 years in each of the round, find their individual ages.

4. My two friends Jaggu and Lalloo have one habit uncommon, i.e., one of them always speaks the truth like his father and the other evidently is like his father in speaking falsehood. Once I met them together with another boy whom I guessed must be the brother of one of them. On my asking the boy whose brother he was of the two, he replied in a language unknown to me. Thereupon I asked both Jaggu and Lalloo who gave the following statements:—

Jaggu:—"The boy said that he is my brother".

Lalloo:—"The boy said that he is my brother".

Which of the two is correct taking that the boy also is like his father?

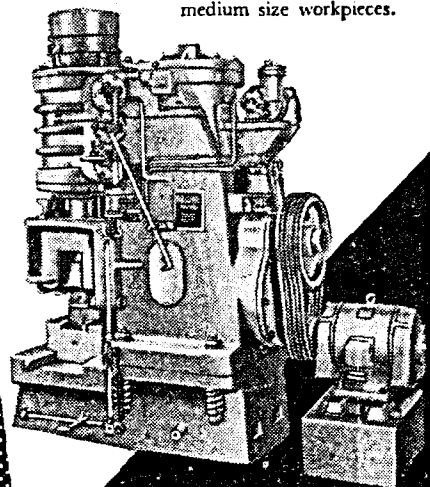
5. Five boys sat for a competitive examination. In each of the five subjects 60 marks in all were awarded and were divided among the five boys in such a way that no boy scored zero in any subject. Curiously enough each boy was first in one subject, second in another subject, third in another and fourth in yet another. However the aggregate marks differed and hence the boy with maximum aggregate

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was selected. Their results were announced contained facts which were not very clear. The report said :—Murthy took third place in Science but however in English he scored 27 marks against Kesavan's 26. Gopalan scored 12 marks in General knowledge and was last but one in Mathematics scoring only 2. Balan was last in Drawing with 10 marks. Shankar with 18 marks was third in Mathematics. Sattar was first in Drawing but last in General knowledge with 9 marks. The top mark in Science was 14. Who actually was selected and what were the aggregates of the winner and of his rivals ?

Solutions to last month's Brain Treasurers

1. Sohan's time is $9\frac{3}{4}$ seconds.
2. He could never average 60 m.p.h. as he had already taken one minute for the first half mile.
3. Ratnam bought 20 oranges.
4. MEDALS—931675, MESS—9355, MOOEOR—922320, DATE—1643 and MEEEDI—933318.
5. The correct order was : (a) Bhimu, (b) Somu, (c) Ramu, (d) Damu and (e) Kamu.
6. Last year he paid for 16 children, i.e., for 12 at Rs. 300 each and 4 at Rs. 360. This year he paid for the same number of children but 7 of them at Rs. 300 each and 9 at Rs. 360, 5 children who were below 12 having completed their 12th year.



1. A bachelor to his married pal, "Hallo Ramchander, How easy to recognise that you are married. No holes in your socks now !"

Ramchander : " You are correct Shyam. One of the first things my wife taught me was how to darn."

2. A Motor Cyclist met with an accident and soon after a search was made in the crowd for a Doctor. However it was decided to carry the Motor Cyclist to the nearest Doctor. The first Doctor they met reluctantly said, "I am sorry, I cannot do anything as I am only a Veterinary Surgeon."

" You are the right man for me," shouted the patient, " I was an ass to have purchased that motor cycle and driven it in the streets."

3. Little boy to his mother at the beach : " Ma, may I go for a swim ?"

Mother : " Certainly not dear, it is far too deep."

Little boy : " But Ma, Daddy is swimming."

Mother : " Yes dear, but he's insured."

4. Wife : " What have you done with that book, " How to live hundred happy years', dear ?"

Husband : " Do you think I am a fool to keep such books in the house, when your mother is around here. I have given it away a day before your mother stepped into this house."

5. " Daddy " said little Prema, " When you see an elephant aren't you afraid ?"

" Of course not Prema " replied the father.

" Suppose a big giant comes before you, won't you be scared ?" continued Prema

" No ", replied the father.

" And when a Lion shows its open mouth ?" pursued Prema.

Father shook his head.

But little Prema persisted and said, " When there is thunder and lightning ?"

" No, No you silly child," smiled the father.

" Daddy " said the girl at last, " aren't you afraid of anything in this world except Mummy ?"

6. The sophisticated youth had arranged a pride party in his house. Before the commencement, he called his servant, who unfortunately was a rustic and advised him privately to behave like a big man's servant. He said to him " Look here Chotu, before my friends I shall call you Krishna and not by your shabby name."

The cool little Chotu said, " and me master, what am I to call you ?"

The master grew annoyed at his servant's pert question and said, " You, Idiot."

Chotu coolly replied, " Very good, Sir."

The Steel Plants Railway

The Second Five-Year Plan and the South Eastern Railway (Brochure brought out by the Public Relations Department of the South Eastern Railway).

The development of our country after independence has been ordered by Five-Year Plans drawn for the purpose and the whole nation is briskly executing the work as per programme. The Five-Year Plans, as the brochure rightly states, express, in physical terms, the earnest desire of the people to canalise the economic activity in the country in a direction which will be the most fruitful from the point of view of the maximum good for the maximum number.

The impact of the plans on the life of the ordinary citizen has been a little heavy but the collision is happily borne with a clear understanding of the immense volume of good that will result from it. The Government of India have taken a large amount of responsibility in financing and executing the plans, and naturally, they expect devoted service from their staff and hearty co-operation from the public.

The Railways, being the main mode of transport in this vast continent, have a very important role to play in the progress to be achieved through the plans. The various zonal railways, the Chittaranjan Loco Works, the Integral Coach Factory, etc., have their allotted tasks to perform.

The South Eastern Railway would seem to have a special importance under the Second Five Year Plan in view of the fact that the new Steel plants at Rourkela, Bhilai and Durgapur will have to be served by it and also because it covers large industrial centres like Jamshedpur,

Rightly has the South Eastern Railway been termed the Steel Plants Railway in the brochure.

The compact brochure deals with the origins of the Five Year Plans, the work done under the First Five Year Plan, the expenditure anticipated to be incurred under the Second Five Year Plan and the part to be played by the South Eastern Railway, particularly, with reference to the steel plants programmed to go into production during the Second Plan. A map showing the various industries served by the Railway and a few photographs have also been included with advantage. The electrification and dieselisation schemes proposed under the Second Plan have been briefly dealt with. Staff amenities receive their due share.

The brochure concludes with the following peroration which I quote here, as I feel it will remind us, of the I.C.F. family, of the immense burden, rather the great privilege, to be borne by us.

"In the pilgrimage to progress and plenty, Railways will have a very significant role to play and this will be the proud privilege of nearly 10 lakhs of Railwaymen in the country."

The following sentence appearing at the foot of page 8 does not appear to be correct: "To their descendants of today the pillar is a standing and silent reproach." However, this is a well got-up brochure which fulfils amply the purpose for which it was brought out.

—S. R. SRINIVASA RAGHAVAN



SHRI JABBAR BADSHA, selected by the Indian Hockey Federation for playing in the ensuing Youth Festival to be held at Moscow, was born in Madras in 1937 in a family, which had produced a number of good Hockey players. He was educated in the Madrasa-I-Azam and he was lucky to have his talent for hockey properly developed. He captained the School Hockey Team and from 1953 onwards has been representing Madras Hockey Association in the National Championships and other major tournaments. He was a member of the Madras Team, which became the joint holder, with the Services XI of the Rangaswamy Cup in 1955.

He joined the I.C.F. in 1955 as a Progressman in the Production Department and since then has been playing in the I.C.F. Hockey Team with great distinction,



SHRI ALAGIRISWAMY RAGHAVAN, our half Right Wing, in the Football Team was born at Madras in 1926. He had his education in Madras and during his school days played in many a Madras Schools Athletic Association Tournaments with distinction. He started his career in the B. & C. Mills and later in 1951 joined the Southern Railway. Both in the B. & C. Mills and in the Southern Railway he was in the Football XI and participated in all representative matches played by those teams. He represented Madras State in the National Football Championship held at Calcutta in 1952. He also has the distinction of having represented Combined Railways against outstanding soccer teams in Calcutta.

He joined the I.C.F. in 1955 and he is now working as a Khalasi in Shop No. 18. He has been a great asset to the I.C.F. Football Team and is largely responsible for the many Football trophies won by the I.C.F. Team.

Obituary

We regret to record the premature death of Mr. K. Satyamurthy who joined the I.C.F. Accounts Office as a probationary Accounts Clerk on 30-8-1956. He was a promising young man of amiable disposition, discharging his duties satisfactorily. He had proceeded to his native place Trichinopoly on a week's leave and was drowned in the Cauvery on the 18th June, 1957 while taking his bath.

Our heartfelt condolences to the members of the bereaved family.

Personnel Notes

Our felicitations to—

1. Shri P. Karunakara Menon, Draftsman in scale Rs. 150-225, Mechanical Drawing Office, appointed Probationary Draftsman (Mechanical) in scale Rs. 260-350 with effect from 27-5-1957.
2. Shri K. Ramachandran, Chargeman, in scale Rs. 200-300 promoted Chargeman 'A' Grade in scale Rs. 260-350 with effect from 22-6-1957.

3. Shri A. Ramadas, Chargeman, in scale Rs. 200-300, promoted Chargeman 'A' Grade in grade Rs. 260-350 with effect from 22-6-1957.

Our welcome to—

1. Shri B. S. Ganesh, Draftsman in scale Rs. 150-225, DSTE's Office, Sholapur, Central Railway, transferred to this Factory and posted Planner and Estimator in scale Rs. 200-300 in P.E's Office with effect from 7-6-1957.



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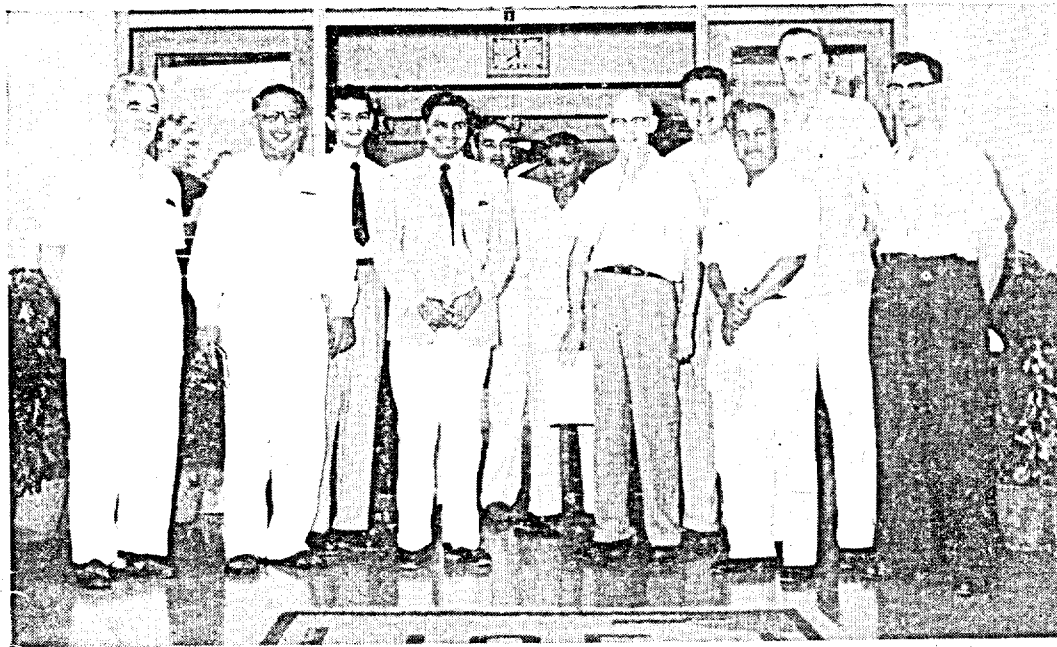


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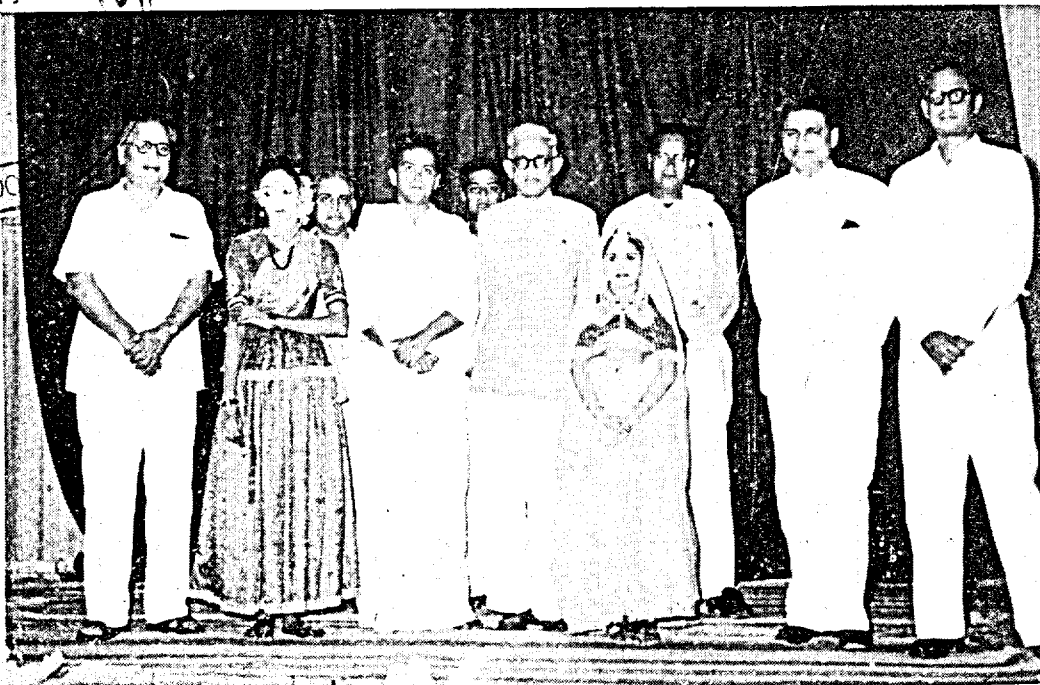
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An American Machine Tool Advisory Group accompanied by Mr. Frank Wilson of the Technical Co-operation Mission in New Delhi visited the Integral Coach Factory on the 4th July, 1957.

Shri C. T. Venugopal, Director, Finance, Railway Board with the artists who gave a dance in the function got up by the I. C. F. Institute. The Patron Shri Sadagopan and the President Shri K. Swarup are also seen in the picture.



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