

Southrail news



Vol: III

1956

no: 1 April
1956

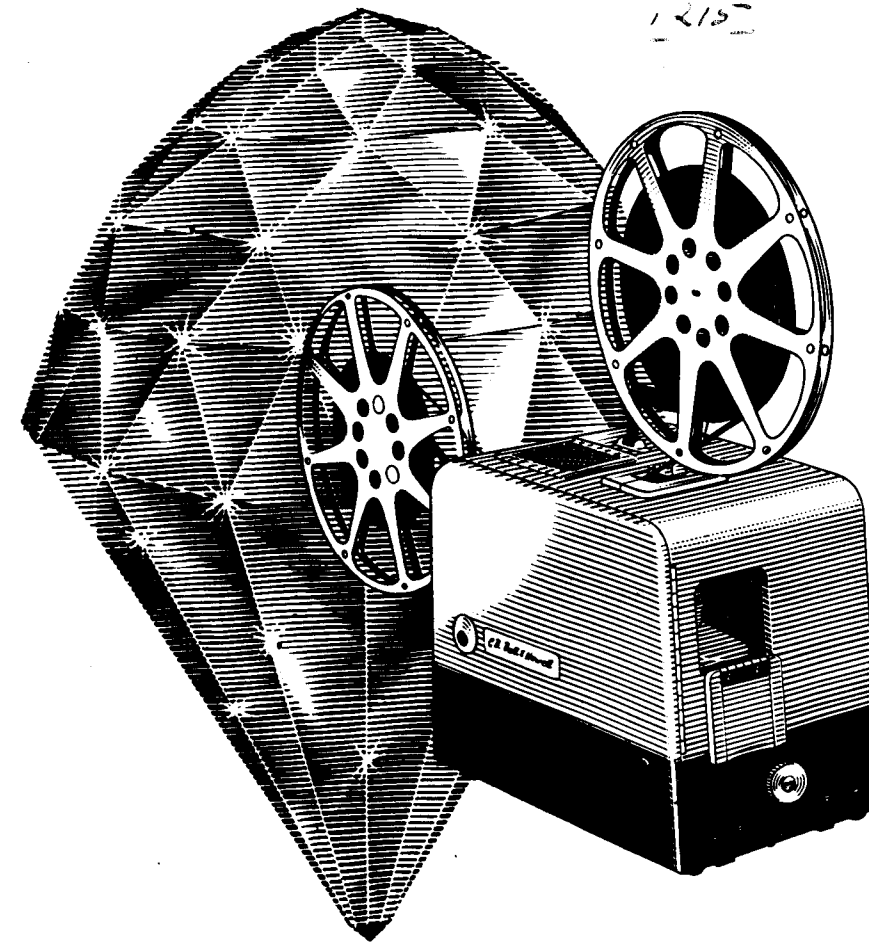
JL
X415m21, NSS SR.
NS6.2.1.
129192

RAILWAY WEEK

10th to 16th APRIL, 1956

The 'Railway Week' is being celebrated to mark the 103rd Anniversary of the inauguration of Indian Railways and to organise a kind of get-together among the Railway Staff and also for focussing the attention of the public on the various activities and achievements of the Railways, from 10th April to 16th April, 1956—on the Southern Railway the introduction of Breda coaches in the Suburban section during the Week, distribution of Free Business Reply Post Cards (at important stations inviting suggestions from the public regarding improvement in Railways), Sports, Picnics and distribution of Sweets for the children of Railway employees in Railway colonies are some of the special features of the Week.

THE NEW G. B.-Bell & Howell



Filmosound
'622'

The Jewelled
movement
16 mm

SOUND PROJECTOR

Extra dependability, longer life; these are the outstanding features of the '622' projector. The reason—sapphires. Among precious-stones, the sapphire is second only to the diamond for durability. So G. B.-Bell & Howell have designed the critical parts of the '622'

the shuttle

fixed guide rail

film tension clips

which bear the brunt of the wear—with sapphire inserts on their working surfaces. Exhaustive tests have proved that this increases their working life by 400%—and ensures longer life for the projector.

Outstanding NEW features of the
'622'

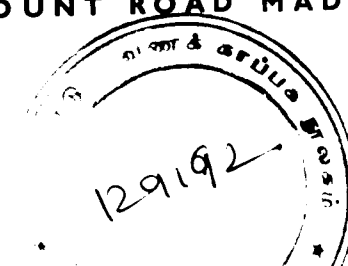
Sapphire inserts
Sapphire tipped
Shuttle } gives 400% longer
life to critical
parts.

Cam-shaft and counter gear combination—reduces wear and noise.
New type clutch—gives more positive action, reduces maintenance.
Improved governor end cap—obviates adjustment.
New style lamp house—for more effective cooling.
Improved speaker unit.

AMA (Private) limited
159, MOUNT ROAD MADRAS

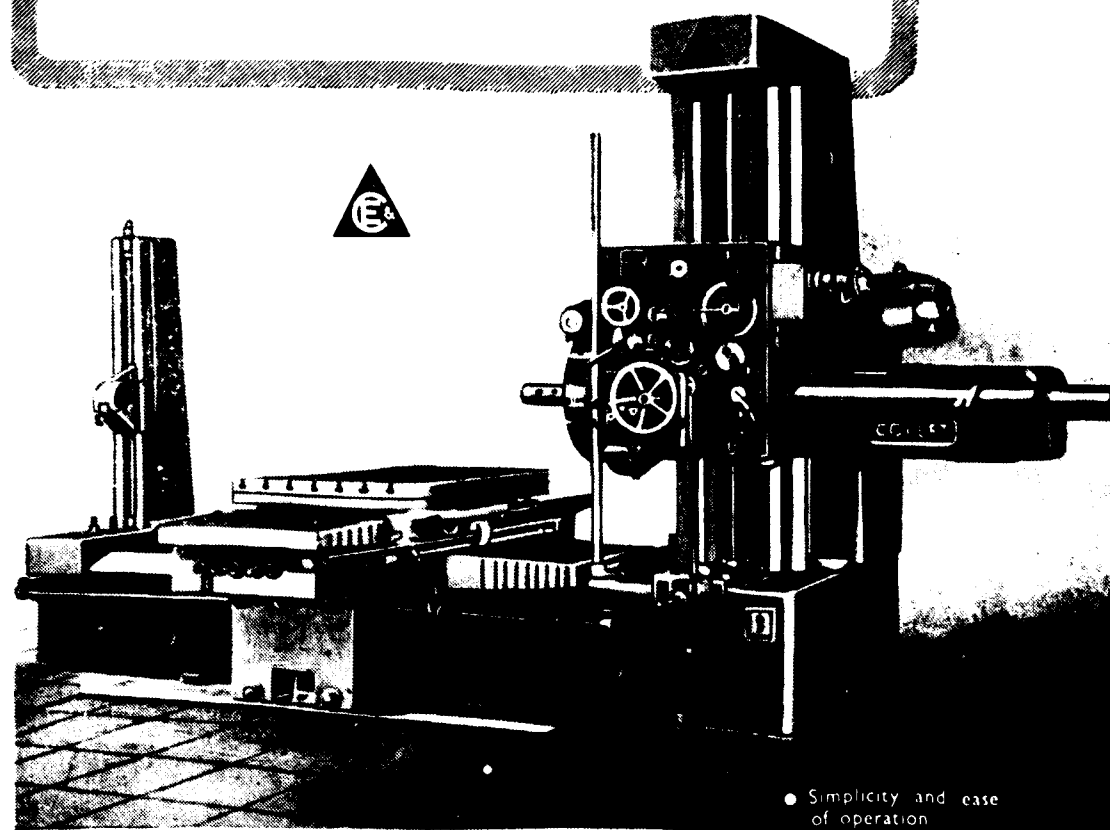
HEAD OFFICE:
BOMBAY
A

BRANCHES:
CALCUTTA, NEW DELHI



COLLET & ENGELHARD

**TABLE-TYPE HORIZONTAL
BORING AND
MILLING MACHINES**



Agents:

FRANCIS KLEIN & CO. PRIVATE LTD.

1, ROYAL EXCHANGE PLACE, CALCUTTA-1

Showrooms: 13A, Government Place East.

- Simplicity and ease of operation
- Minimum of maintenance
- Maximum accuracy even after many years' service

NEW DELHI
29th February, 1956

I am glad to know that you will have the Second Annual Number of your 'Southrailnews' in April. I had occasion to glance through your previous issues, and I thought they contained quite useful information not only for the railwaymen, but for the general public also. I do hope it will continue to be a useful journal in the years to come.

Yours faithfully,
S. RADHAKRISHNAN
Vice-President.



NEW DELHI
16th March, 1956

I am glad to learn that the 'Southrailnews' is completing its second year of publication shortly. I have often emphasised the useful role which Railway Magazines can play in not only educating Railwaymen in the better performance of their duties but also in bringing home to the public at large the special problems or difficulties facing the Railways and the way they are tackled. I have no doubt the 'Southrailnews' is keeping this special need in view and I wish their Second Annual Number all success.

LAL BAHADUR SHASTRI
Minister for Transport and Railways.
India.



NEW DELHI
20th February, 1956

I am glad to learn that the 'Southrailnews' has completed two years of usefulness and service to the public in general and to railwaymen in particular and is on the threshold of the third year. The magazine has many features to its credit like Children's Corner, Sports, Women's Page, etc., which have drawn the praise of one and all. I congratulate all those that have been associated with the running of this magazine so successfully. I send my best wishes on the occasion of bringing out of the second annual number which I have no doubt will prove to be of absorbing interest.

O. V. ALAGESAN
Deputy Minister,
Transport and Railways, India.



NEW DELHI
28th February, 1956

I congratulate 'Southrailnews' on completing the second year of publication and have pleasure in wishing it many useful returns of the day

I am glad to know that the magazine has a progressive outlook and deals with varied topics of interest to the public, devoting special attention to planning in the Railway sector. The Railways under the Second Five-Year Plan face a most formidable task which can be accomplished only by the co-operation and hard work of the staff at all levels. It also requires sympathetic understanding by the public of the problems underlying the plan and their co-operative response to the needs of the Plan. The magazine is rendering a useful service by fostering esprit de corps among the staff and by helping towards a better understanding between the Railways and the public. I extend my best wishes to these endeavours.

G. L. NANDA
Minister for Irrigation and Power.



I am glad to learn that the 'Southrailnews' is shortly completing its second year of publication. I have seen some of the issues of this Magazine which I found to be both informative and interesting. I wish the Second Annual Number all success.

Chairman, Railway Board.



GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)
NEW DELHI
31st March, 1956

The 'Southrailnews' has completed its second year and I am glad to note that it is publishing its Second Annual Number. The importance of a good publicity medium for enlightening the public of the great work the Railways are doing in the development of the country cannot be over-emphasised. I am happy to note that the journal has fulfilled this role effectively and has maintained its objective of fostering esprit de corps among members of the Railway staff and better understanding between the Railway and the public.

I wish the journal all success.

P. C. MUKERJEE,
Member, Engineering.



With the March 1956 issue, 'Southrailnews' Magazine has completed its second year of publication and the current issue (April Number) is our Second Annual Number. The patronage of our advertisers, subscribers and the earnestness and enthusiasm on the part of our contributors have in a large measure contributed to the success of this monthly Magazine. As advised by the Railway Minister, every instance of good work done and every important event on the Railway, found a place in the Magazine. During the year 1955-56, special columns were devoted to Anti-Corruption drive.

One of the main objectives of the Magazine is to develop esprit de corps among all classes of Railway. It is gratifying to note that more of the Railway staff have come forward with their contributions and more literary talents which were latent in our staff have become evident. The twin aims of fostering of esprit de corps among all classes of Railway staff and the building of better understanding between the Railway and its users are being constantly kept in mind.

The Magazine solicits sympathy, enthusiasm, goodwill and understanding of the staff and the public which is so necessary to achieve success in our gigantic Second Five-Year Plan. On the threshold of the third year of the 'Southrailnews', I congratulate all those who have been associated with the running of the Magazine so successfully.

UNDISPUTED LEADERSHIP

The Hindu

A dignified editorial policy and truthful presentation of news during the past 77 years have earned for it a unique position in the Newspaper World. This Daily is the acknowledged leader in South India and enjoys the confidence of the readers in the vast sub-continent

A RELIABLE MEDIUM FOR ADVERTISERS

★

AT HOME OR WHILE TRAVELLING
YOUR BEST COMPANION IS

**SPORT
& PASTIME**

This colourful illustrated weekly published on Saturdays contains features and articles by eminent authorities on every known sport, pastime, recreation and amusement

EVER POPULAR WITH THE FAMILY

As. 6 PER COPY

PUBLISHERS:

M/s. KASTURI & SONS LTD.
MADRAS 2

QUALITY PRODUCTS OF MADRAS GOVERNMENT

SOAPS: Kerala Soap Institute, Kozhikode.

Toilet Soaps—Medicinal Soaps

Washing Soaps—Shaving Soaps

Shampoo—Industrial Soap

Domestic Cleaning Soap—Dental Cream
etc.

VITAMIN OIL: Government Oil Factory,
Kozhikode.

High Potency Shark Liver Oil rich in Vitamins
A and D (Superior to Cod Liver Oil)

ADAMIN (Capsules and Liquid)

12,000 I.U. Vit A & 1,000 I.U. Vit D. p/grm

SHARK LIVER OIL (Liquid)

1,500 I.U. Vit A & 100 I.U. Vit D. p/grm

SILK: Government Silk Filatures, Kollegal

FABRICS: — Sarees, Coatings, Shirtings,
Dhoties, Angavasthrams, Choli Pieces,
etc.

YARNS: 13 to 30 Deniers (Peacock
Chop)



Divisions of the Dept. of Industries and Commerce

GOVERNMENT OF MADRAS

EXPRESS NEWSPAPERS LIMITED

MARCH ON

THE INDIAN EXPRESS

The Largest Circulated English Daily in India
Simultaneously published from Madras, Bombay and Delhi

Circulation—1,07,864 copies per issue

THE SUNDAY STANDARD

The Largest Circulated People's Week-end English Newspaper
Simultaneously published from Madras, Bombay and Delhi

Circulation—1,21,915 copies per issue

THE DINAMANI

The Largest Circulated Tamil Daily
Published simultaneously from Madras and Madurai

Circulation—70,104 copies per issue

THE ANDHRA PRABHA

The Largest Circulated Telugu Daily from Madras

Circulation—51,900 copies per issue

THE DINAMANI KADIR

Illustrated Tamil Weekly from Madras

Circulation—41,368 copies per issue

THE ANDHRA PRABHA ILLUSTRATED WEEKLY

The Largest Circulated Illustrated Telugu Weekly—Madras

Circulation—31,958

EXPRESS NEWSPAPERS LIMITED

Mount Road

MADRAS-2

SOUTHRAILNEWS

(Official Organ of the Southern Railway)

EDITORIAL NOTICE

VOL. III

No. 1

Editor :

K. SRINIVASAN

All contributions must be clearly typed and double-spaced 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 be returned only if the sender so requires and encloses the usual stamped, addressed envelope.

Contributions should be addressed to the Editor, not by name, and reach him not later than the 10th of the previous month.

The Editor does not assume any responsibility for the accuracy of the news supplied by correspondents or for opinions expressed by contributors. Opinions expressed in the Southrailnews whether editorially or by contributors should be regarded as having no official authority.

	Annual	Single
	Subscription	copy.
	Rs. a. p.	Rs. a. p.
Railway Employees ...	3 0 0	
Others ...	4 8 0	0 6 0

Subscribers are requested to inform the management of the change of address, if any, well in time to avoid misdelivery of copies.

Railway employees drawing a salary of Rs. 200 and over, can pay the subscription through their salary bills, and others should remit the full amount by M.O. to

THE EDITOR
Southrailnews

18A Mount Road Madras 2

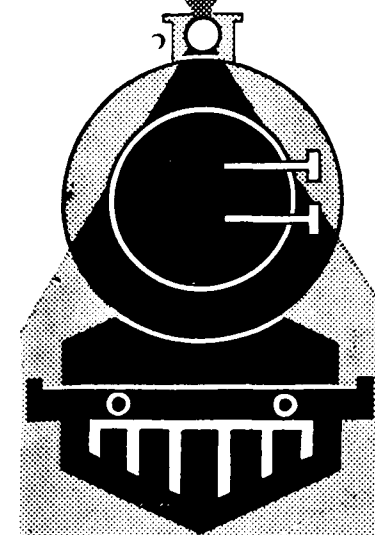
Mazda

Train Lighting Lamps

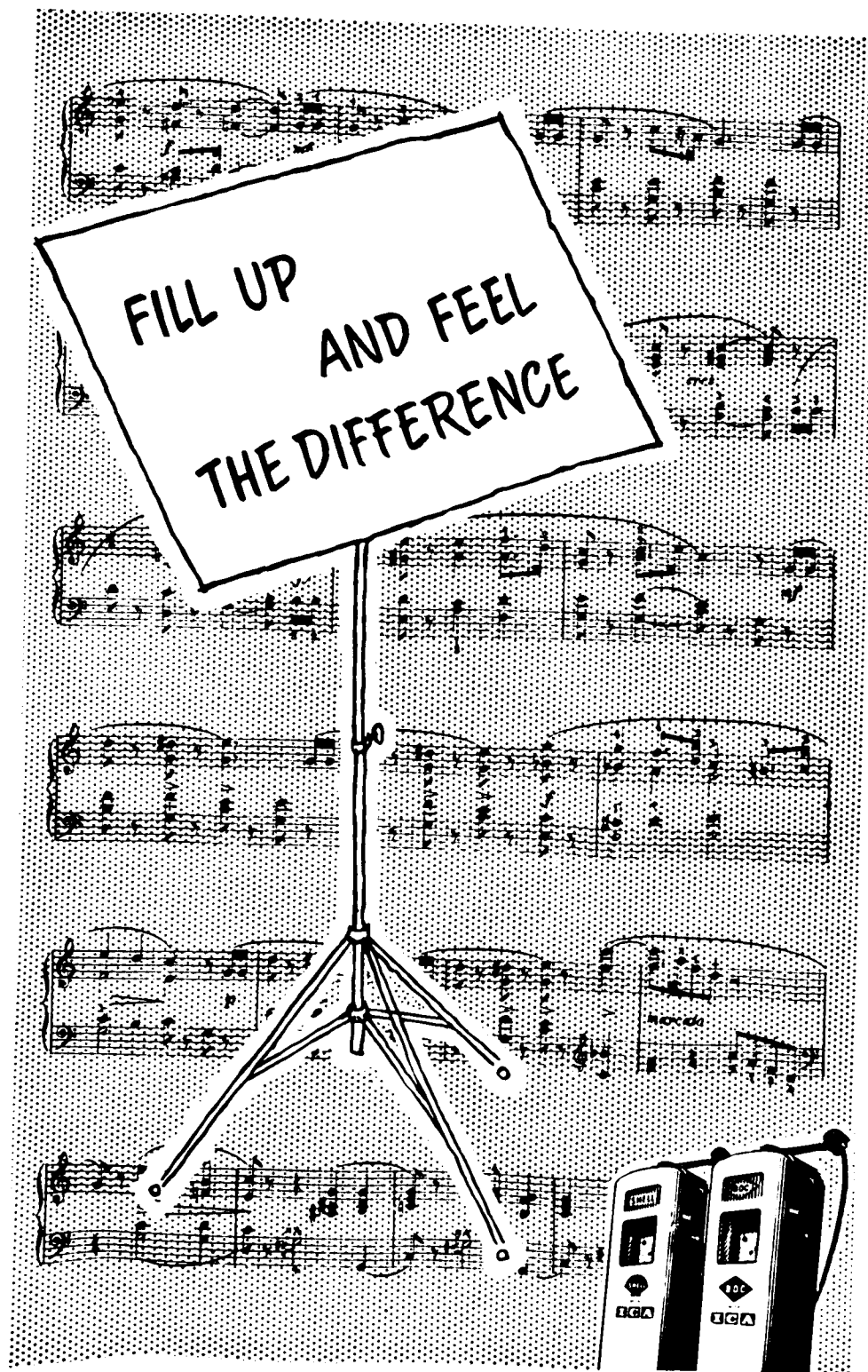
Made in India for
The British
Thomson-Houston
Co. Ltd.

Represented by
**ASSOCIATED
ELECTRICAL
INDUSTRIES
(INDIA) LTD.**

Calcutta
Bombay
New Delhi
Madras
Bangalore
Coimbatore
Nagpur



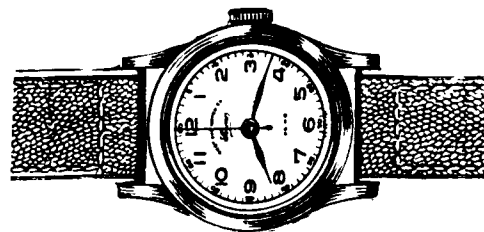
AK-135



Craftsmanship



The high reputation enjoyed by 'West End' Watches for over 75 years, is due, among other things, to the superb Craftsmanship which goes into their production.



ALL-PROOF SOWAR PRIMA SPECIAL
CENTRE-SECOND
10 1/2" Medium Size

West End Patent Everbright Steel	Rs. 180
Rolled Gold, with Steel Back	220
9-ct. Solid Gold, Heavy Substantial Case	405
18-ct. Solid Gold, Heavy Substantial Case	600

WEST END WATCH CO.

BOMBAY

CALCUTTA

CONTENTS

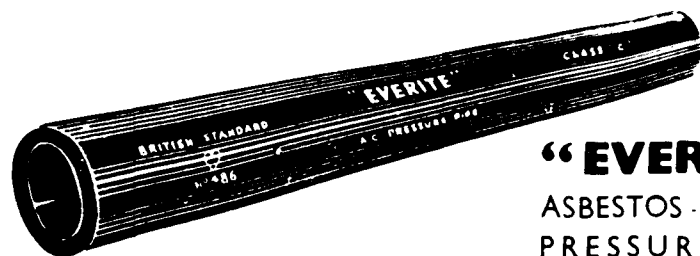
APRIL 1956

Messages	... iii
Editorial	... 1
Notes and Comments	... 5
World of Railways	... 15
Ahobilam in Andhra	... 21
Spherical Roller Bearings in Railway Axle Boxes	... 25
Gandhi Mandap at Raj Bhavan, Guindy...	29
Signals of the Sea	... 33
A 'Hillman' on the Plains	... 36
Action for Accidents	... 39
Appraising the Applicant	... 43
On Courtesy	... 46
Axle Counting Equipment for Railway Signalling	... 49
Keeping the House Tidy	... 51
Railway Stores Department and the Second Five-Year Plan	... 55
Women's Page	... 59
Medical	... 63
How Railways are Tackling Tasks, Bristling with difficulties	... 67
Children's Corner	... 73
The Prevailing Pachyderm	... 76
Improved Methods of Flat Shunting	... 77
Sport	... 81
S. R. News	... 91
First Seven Coaches Move out of I.C.F....	99
Book Review	... 102
Now you know it	... 105
S. Rly. Children's Camp	... 106
ECAFE Delegates in Madras	... 109



talking of pipes...

There are all manner of pipes, but there are no better pipes than "Everite" Asbestos-Cement Pressure Pipes for the conveyance of water under pressure. They are light but strong and easy to handle. They do not corrode nor rust and they are the perfect answer to corrosive soils.



"EVERITE"
ASBESTOS-CEMENT
PRESSURE PIPES

*have been giving excellent service in India for over 20 years
and in Europe for some 50 years.*

ASBESTOS CEMENT (Private) LIMITED

BOMBAY, CALCUTTA, MADRAS, PODANUR & NEW DELHI



0.21

SOUTHRAILNEWS

VOL. III

APRIL 1956

No. I

ABOUT OURSELVES

WITH March 1956 issue, our magazine completed its second year of publication. 'Southrailnews' April, 1956 issue marks the commencement of the third year. The advice given by the Railway Minister that all important events and every instance of good work should be published in the magazine, is being followed. It is gratifying to note that more of the staff are taking keen interest in studying the magazine and sending contributions of articles to the same.

The patronage of our advertisers and subscribers and the enthusiasm and interest on the part of our contributors have in a large measure contributed to the success of the magazine. Besides April, 1955 Annual Number, one Special Number was published on Independence Day, 1955. Another Special Number was published on 2nd October 1955 on the occasion of the inauguration of the first rail coach of the I.C.F. by the Prime Minister. October 'Southrailnews' was published on Mahatma Gandhi's birthday. All these special numbers were well received by the public, the staff and the press. The fostering of esprit de corps among all grades of Railway staff and the building up of a better understanding between Railway staff and its users have been placed on a high pedestal. Articles on Planning and Amenities are regular features of the magazine. During the year 1956, special attention was devoted to conduct anti-corruption propaganda.

During the third year of our publication, we hope to expand our activities not only with a view to expound Railway's ideas on social education, but also to disseminate correct information about methods being adopted to check ticketless travel and corruption. As advised by the Railway Minister, the magazine will have in view the special need of the useful role railway magazines can play in not only educating railwaymen in the better performance of their duties but also in bringing home to the public at large the special problems or difficulties facing the Railways and the way they are tackled.

DEPARTMENTAL ORGANISATION IN INDIA

THE Railway Board exercises general control over all railway matters in India. It is organised on a functional basis, but is responsible only for the formulation of general policy, its detailed implementation being left to the General Managers of the seven individual railways in the Republic.

Within the railways themselves departmental or functional organisation predominates. Each railway is, in principle, divided into three Regions with departmental officers responsible to corresponding officers at the general headquarters for the working of their respective functions. The Central, the Eastern, the Southern and the Western Railways are strongly functional in organisation; in no case is there a Regional Manager, the departmental officers in the Regions taking their orders direct from the central headquarters.

The Southern Railway is representative of this type of functional organisation. At the general headquarters the General Manager, one S.D.G.M. and one D.G.M.(P), and a number of departmental functional officers are controlling. In each of the three regions there are officers responsible for traffic (commercial and operating) civil engineering, mechanical engineering and accounts, who carry out instructions received from the appropriate functional officer at the central headquarters.

There are commonly held to be two classical forms of railway organisation, namely, departmental and divisional. Departmental organisation envisages co-ordination of the various functions at the highest level, whereas with divisional organisation the co-ordination takes place at the lower levels. In the former case a number of functional officers at the headquarters accept responsibility for the organisation and working of their own

departments throughout the whole railway, co-ordination taking place through the General Manager. Divisional organisation involves the splitting up of the railway into territorial areas and the acceptance by a single officer of complete responsibility for the operation, running, permanent-way and rolling stock in his area.

In practice, the position is rarely simple or clear cut. In the case of railways of limited size, there is little need for co-ordination below the highest level, and a departmental form of organisation is to be expected. Where the larger systems are concerned, a compromise form of organisation is frequently adopted, aimed at combining the best features of both the departmental and divisional methods.

In U.S.A. there are well over 100 class I railways and no two are likely to show precisely the same form of organisation. The typical American railway, if it were possible to envisage such a thing, would, however, have a President, assisted by a number of functional Vice-Presidents, responsible for its management to a Board of Directors.

Each Region (District) into which this typical railway was divided would be headed by a General Manager (or Vice-President) who would be responsible, through the Vice-President (Operation) to the President, for the entire day-to-day working of his region. The General Manager of the Region would have on his staff a number of departmental officers (e.g. Superintendent of Motive Power, Superintendent of Transportation, Chief Engineer) who would be responsible to him for the routine working of their respective departments.

The Regions would be sub-divided into Divisions, headed by a Divisional Superintendent responsible to the

April 1956

DEPARTMENTAL ORGANISATION IN INDIA

3

Regional (or District) General Manager. In this connection it must be borne in mind that this terminology is in contrast to the historical practice found in Great Britain, where Divisions are the largest units, and may be sub-divided into Districts.

In India the full Divisional system was in vogue in Ex. E. I. Railway and is now in vogue on the Eastern Railway.

Central Railway has started introducing the full Divisional system. They had a partial Divisional system of the Ex.-G.I.P. pattern in which the Commercial District Officer was designated as DCS and was independently in charge of the commercial working of the division not functioning under the administrative control of the D.V.S. But now the full Divisional system is being introduced, in Central

Railway. All departments of each division come under the control of the Divisional Superintendent, as in the Eastern Railway.

A policy decision has been taken to introduce Divisional system on the Southern Railway. A beginning in this direction would be made before the end of June this year.

Due to the formation of Regions on Indian Railways, it has become easier to form the Division. It would have been more difficult to switch on to Divisional system from a District system, than from a Regional system to a Divisional system. The Regional system had some drawbacks such as, increasing correspondence and duplicating work at certain levels and so on. But this prepared the way for introduction of a full Divisional system. There is a silver lining in every cloud.

Central Food Technological Research Institute, Mysore





Best value for money?
'Hercules'

say 8 out of 10 cycle dealers *

YOU can spend less, you can spend more — but there's no wiser bargain than a Hercules cycle. Eight out of ten dealers say: 'Hercules gives you best value for your money.' Follow their wise advice, and buy Hercules. They know!



Your cycle is an investment

*Established by an independent survey.

Hercules

The Best Value for your Money

Manufactured by T. I. Cycles of India Limited, Madras



NEW TRAVEL CONCESSIONS

The Railway Minister, Shri Lal Bahadur Shastri, announced in the course of his budget speech that the Railways will in future issue concession return tickets for the general public at one and a half times the single ticket fare between July 15 and September 30 each year.

The return tickets will be issued for distances over 300 miles, and with a graded period of availability varying with the distance.

The Minister, who made this announcement while presenting the Railway Budget for 1956-57, further proposed that the concession now available to students travelling in groups of four between their homes and their educational institutions, should in future be available to students even when travelling singly, on the production of the usual certificate.

Another announcement which the Minister made was that the quarterly season tickets at present available at 2½ monthly season ticket fares on certain Railways, should be extended to the Calcutta suburban areas on the Eastern and South-Eastern Railways, and also to the Northern Railway and the old O. T. section of the North-Eastern Railway, where it is not now in vogue.

The Minister said that the concession tickets issued last year during the Dassehra, Diwali and Christmas holidays had proved very popular. It had now been decided that, in future, journeys can be broken on these tickets on the outward trip.

The Minister remarked: "We should very much like to have introduced all the old travel concessions so that the public at large could be benefited, but I cannot overlook the fact that overcrowding is still substantial".

DRIVE TO CARRY MORE TRAFFIC

The Railway Board has laid down new targets according to which the Indian Railways will carry 10 to 20 per cent more goods traffic during the next busy season than they expect to carry during the current season.

A large number of works have been sanctioned to expand sectional and transshipment capacity in different parts of the country where transport bottlenecks have during recent years hindered the free flow of traffic.

BOTTLENECKS EASE

The position at some of the worst bottlenecks has eased considerably as a result of a drive launched sometime ago.

For instance, the capacity for movement over the Madras-Bezawada section has increased from 350 to 450 wagons a day and the daily movements over the Rātlam-Godhra section have improved from 490 to 630 wagons a day. The daily transshipment position during the last three months at Viramgam has improved by 90 per cent, and at Sabarmati by 22 per cent, as compared to the corresponding period of last winter. Movements via Ghorpuri to South India are now free.

Movement across the Ganga has been stepped up notwithstanding difficult river conditions resulting in frequent disorganisation of ferry crossings. The

transshipment via Manduadih, particularly, has been stepped up by about 45 per cent over last year. As a further relief for movements of traffic to North Bengal and Assam, an agreement was negotiated with the Pakistan Railways for through booking via their eastern route, and on an average about 50 wagons daily have been moving that way.

The daily average number of wagons passing through Moghalsarai has stood during the last three months at 1,778 as compared to 1,602 last year, and the allotment of coal above Moghalsarai has been 1,320 wagons per day during that period, which is an improvement of 15 per cent over the corresponding period of the last year.

RESULTS ACHIEVED

The cumulative result of all these improvements may be gauged from the tonnage lifted in the first nine months of the current year, which was 8½ per cent higher on the broad gauge and 18 per cent higher on the metre gauge than during the corresponding period for last year.

Since wagons are short of requirements, steps have been taken to improve their availability for traffic by a reduction in the number of wagons under repair, and by intensive utilisation. The percentage of sick wagons in November and December 1955, consequently, came down to 4 per cent on the Broad Gauge and 5.8 per cent on the Metre Gauge, from 7 per cent and 7.2 per cent in the previous year.

During 1954-55, the net ton miles per wagon day over the Broad Gauge reached the record figure of 483 which constitutes an improvement of 8 per cent over the war-time peak figure of 451, the highest ever reached before.

Net ton miles per day per engine in use on the Broad Gauge rose to 29,345—an improvement of nearly 9 per cent over the best previous performance, in 1941-42. The corresponding figure over the Metre Gauge was 12,851, which is nearly 4 per cent over the best previous performance.

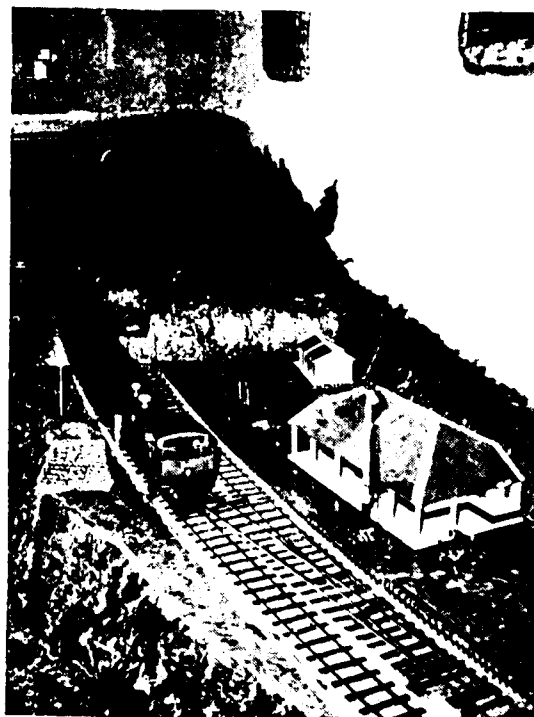
ECAFE RAILWAY SUB-COMMITTEE'S 10-DAY TOUR

Prior to the fourth session of the Railway Sub-Committee of the ECAFE Inland Transport Committee, which opened in New Delhi on March 25, railway experts from several ECAFE region countries who constitute the ECAFE Sub-Committee made a 10-day tour of India.

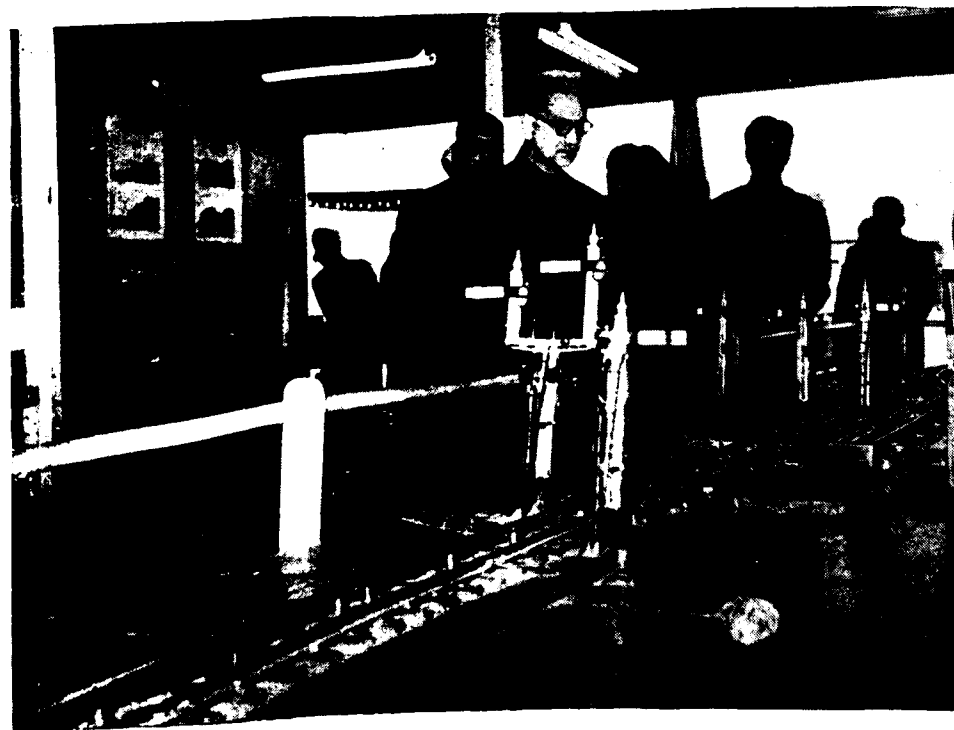
The tour, which started from Calcutta was organised by the Railway Board to enable leading railwaymen from various ECAFE region countries to see important railway and other projects in the country.

The itinerary included among other things, visits to the Chittaranjan Locomotive Works, Tata Steel Works, Vizagapatam Port, Integral Coach Factory, Perambur, Railway Research Sub-Centre at Lonavala, Railway Workshops in Bombay and the Railway Staff College, Baroda.

N.M. Ry. rack-rail model at the S.Ry. Stall in the Amritsar Exhibition held in Feb. 1956



Our stalls at the Amritsar Exhibition attracted huge crowds. Photo shows a section of the visitors keenly watching the working of the rack-rail model



Shri M. K. Kaul, G.M., Northern Railway, inspecting our stall at the Exhibition. The N.M. Railway rack-rail model was displayed at the Jammu Industries Fair recently

RAIL CONCESSIONS TO FOREIGN BUDDHIST PILGRIMS

Rail travel concessions are to be given to Buddhist pilgrims from foreign countries visiting places of pilgrimage in India in connection with the 2,500th Buddha Jayanti Celebrations.

The Railway Board has decided that return tickets to foreign Buddhist pilgrims may be issued on payment of a single fare, in first, second and third classes, for visiting the following stations serving pilgrimage centres: Sanchi, Sarnath, Gaya, Rajgir, Deoria, Basti, Gonda or Balrampur, Pakhna, Delhi and New Delhi. The Board has also decided that for those who prefer circular tour tickets, such tickets may be issued at half the total fare.

The concession tickets will be issued from May 1, to December 31, 1956, and will be available for completion of

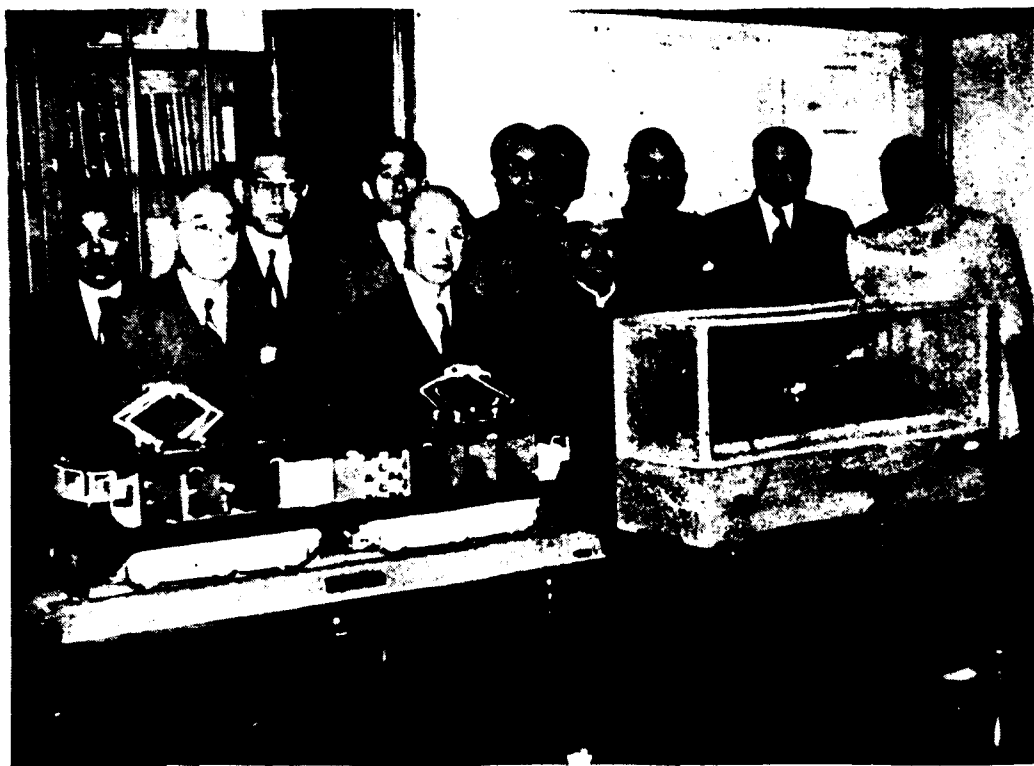
journey within three months from the date of issue. These return tickets or circular tour tickets will be issued from any station served by an airport or seaport. The itinerary need not necessarily include all the stations mentioned above, and the foreign pilgrims may, if they so choose, visit only some of these centres and other nearby places of interest.

These tickets will be issued only on production of a certificate from an Indian embassy abroad or from the Ministry of Education, Government of India, New Delhi, to the effect that the person seeking the concession is a foreign visitor coming to India in connection with the 2,500th Buddha Jayanti Celebrations.

'CHAIR CAR' INTRODUCED

The Northern Railway has introduced a new 'chair car' for first class

Photo shows the model of a Locomotive and an Electric Coach presented to the Union Railway Minister, Shri Lal Bahadur Shastri, by the representatives of a well-known Japanese Firm which is handling large orders for the Indian Railways



Interior view of the new 'Chair Car'.

passengers, in which only sitting accommodation is provided.

This is at present operating on the Flying Mail, between Delhi and Amritsar.

The 'chair car' which was furnished at the Central Railway's Carriage and Wagon Workshops in Bombay, is the first of its kind to be put into use on the Indian Railways.

Using the new all-steel integral construction light weight coach, one half has been fitted out to seat 16 short distance first class passengers in tubular steel upholstered arm-chairs, while the other half of the coach has the conventional pattern of berths to cater for long distance traffic.

An attractive interior decor with soft grey and green mottled panelling has been used for the conventional half provided with berths. The other half, with its individual arm-chair seats, has polished decorative teak faced panelling with anodised aluminium fittings. Heightening the aesthetic appeal is a large painting after a famous fresco from Ajanta which has been reproduced by the Central Railway's artist on the end panel of the 'chair car'.

The seating arrangements have been so conceived that while greater comfort has been provided for short distance passengers, they occupy less room than the conventional long distance coach with berth arrangements. Another advantage to the long distance passengers is the elimination of inconvenience by short distance passengers disturbing them at nights as the latter will be accommodated in the 'chair car'.

GUARANTEED FAST MOVEMENT OF GOODS

The Railways propose to introduce shortly, as an experimental measure, a special scheme for guaranteed quick transit of goods in wagon-loads and in smalls on important trunk routes.

The basic features of the scheme are that goods would be carried by express goods trains within a guaranteed period, and their movements would be specially watched.

A small percentage of the normal freight would be levied extra for this service, and if the guarantee was not fulfilled, the extra charge would be refunded.

CALCUTTA RAILWAYS SOLVE A 'WEIGHTY' PROBLEM

One of the 'weightiest' of problems which have ever faced the Railways in India has just been satisfactorily solved by the Eastern and South-Eastern Railways.

A steel 'monster' recently arrived at the Calcutta docks, demanding rail transport. This was a Schloemann press, the first of its kind to come to India, which the steel works at Jamshedpur had imported from Germany for the manufacture of automobiles.

Perhaps the bulkiest ever entrusted to the Indian Railways, the consignment was outsized, about 33 feet long, 10 feet high and 8 feet wide. It weighed 93.95 tons.

Engineers and transportation experts conferred. Ultimately, the 'monster' was loaded on a 90-ton wagon, allowing for overloading to the extent of five tons. It was despatched by a special train and transported safely under special precautions and under the supervision of a party of Railway engineers and transportation men.

WAGON ERECTION PLANT AT VISAKHAPATNAM

The construction of a wagon erection plant designed to assemble 750 broad gauge goods wagons every month is now nearing completion at Visakhapatnam. Located inside the Visakhapatnam port area, about one and a half miles from the main docks, the plant will go into production shortly.

The South Eastern Railway, which is setting up the plant, has provided the requisite yard and the permanent structures like gantries. The contractors, who have been given the work of assembling the wagons, are supplying compressors, mobile cranes and other machinery.

A Calcutta firm has been given the contract for assembling at this plant 8,800 wagons, both covered and open

types, which are being imported in a semi-knocked down condition from Japan, U.S.A., U.K., Australia and Poland against the Railways' own procurement programme as well as under international and technical co-operation schemes.

TICKETLESS TRAVEL

Railway magistrates may in future travel incognito in trains as part of the drive to check ticketless travel on the railways.

The Railway Board has suggested this and other measures to the Railways in order to increase the effectiveness of the machinery for fighting the evil of ticketless travel.

The Railways have been asked to organise surprise 'raids' on trains by stopping them in the middle of their journeys at unscheduled points known only to the raiding officers.

The raiding parties would travel by road, car or bus on sections notorious for ticketless travel and 'waylay' the trains which are proposed to be raided.

'CINEMA ON WHEELS'

For the first time in India, a train left Howrah station in 14-3-56 with a specially-built cinema coach attached to it.

The "Cinema on wheels" screened documentary films on India's Five-Year Plan, cultural subjects and on various railway projects.

The cinema coach was attached to a special train carrying railway experts from several ECAFE region countries who were on a ten-day tour of India, prior to the fourth session of the ECAFE Railway Sub-Committee.

The cinema coach has been built for the regular exhibition of films to third class passengers on a selected train on various aspects of the Five-Year Plan and on other subjects of educative nature.



NEW RAILWAY BOARD SECRETARY

D. C. BAIJAL

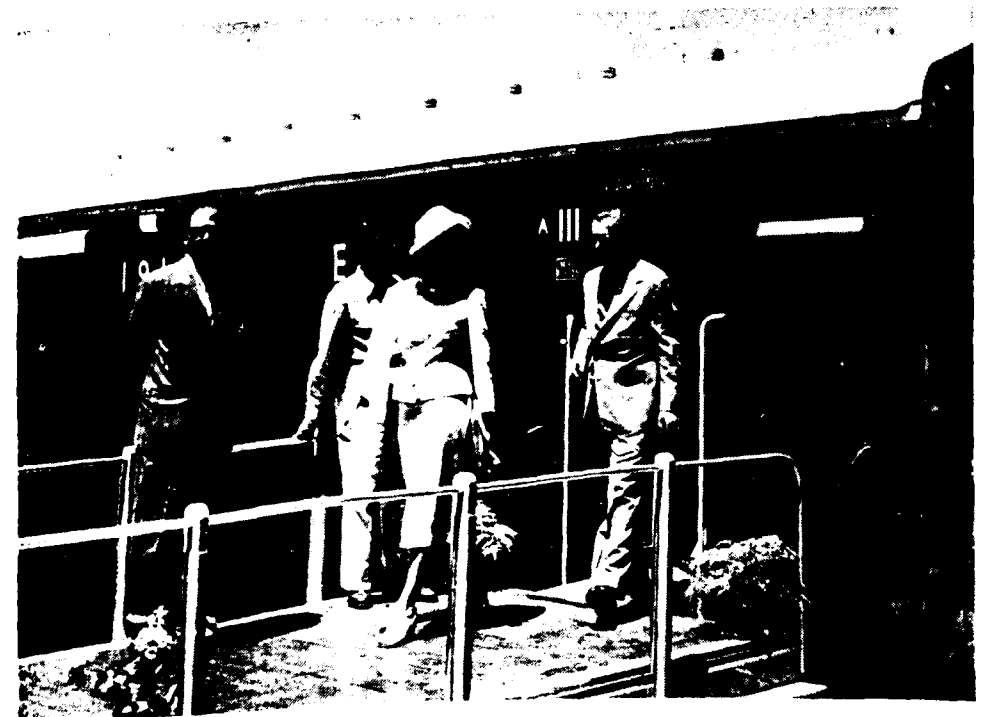
Shri D. C. Baijal, who has been appointed Secretary of the Ministry of

Railways (Railway Board) with effect from January 16, 1956, was born on August 8, 1906.

After a brilliant academic career during which he obtained a First Class in B.Sc. at the Allahabad University, he joined the Thomson College of Civil Engineering, Roorkee, in 1926. He passed out from there in 1929 and was awarded the Council of India Prize for being the most distinguished student of the year, and won several other prizes.

He joined the Indian Railway Service of Engineers in 1930 and was posted as Assistant Executive Engineer on the Eastern Bengal Railway. After working as Sub-Divisional Officer in Assam, North Bengal and East Bihar, he was appointed Executive Engineer-in-charge of the Calcutta District in 1941. In this capacity he carried out several important

Their Imperial Majesties the Shahanshah and Empress of Iran visited the Hindustan Aircraft Factory at Bangalore on February 29. Photo shows their Imperial Majesties coming out after inspecting a Railway Coach built at the Coach Branch of the Factory



remodelling schemes to meet the demands of military traffic.

Shri Baijal joined the Defence of India Corps (Railways) as a Commissioned Officer in 1942, and on resigning from it in 1946 was awarded the honorary rank of Major and also the Burma Star, 1939-45 Star and the War Medal.

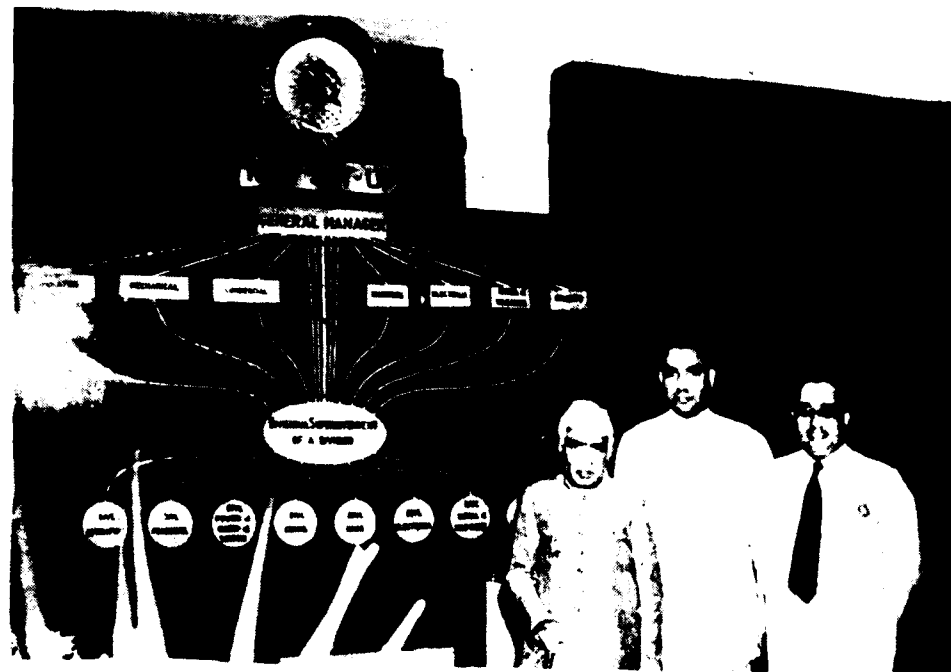
In December 1946 he was transferred to the Railway Board as Deputy Director (Projects) and in November, 1947 was promoted to the post of Joint Director, Civil Engineering.

In March 1952, he was appointed as Secretary of the Ganga Bridge Enquiry Committee, appointed by the

Government to recommend the most suitable location for a new combined rail-road bridge across the River Ganga. On completion of this work, he resumed duty as Joint Director, Civil Engineering. After holding this post for nearly five years, he was appointed in October 1952 as Divisional Superintendent of Jodhpur Division of the Northern Railway, in charge of what was previously the Jodhpur Railway.

He was posted as Divisional Superintendent of Ferozepore Division of the Northern Railway from August 11, 1953, and promoted as Director of the Efficiency Bureau in the Ministry of Railways (Railway Board) from April 14, 1955.

The Chief Minister of Hyderabad, Shri B. Ramakrishna Rao, inaugurated the introduction of the Full Divisional System on the Central Railway at Secunderabad on Tuesday, 21st February 1956. The photo shows Shri B. Ramakrishna Rao, the Chief Minister of Hyderabad (left), Shri M. N. Chakravarti, General Manager, Central Railway (centre) and Shri R. Hydari (right), Divisional Superintendent, Central Railway, Secunderabad, standing in front of the illuminated schematic organisational chart which was switched on to symbolise the introduction of the Full Divisional System on the Central Railway.



DOUBLING OF GOMHARRIA-SINI SECTION

The Gomharria-Sini Double Line, work on which started in September 1953 and was completed recently, was opened ceremonially on February 23, 1956, by Shri S. M. Dhar, Agent, Tata Iron and Steel Company, Limited, before a large gathering of railway and Tata officials, railway workers, local villagers and a number of press representatives. Shri N. C. Kapoor, General Manager, South Eastern Railway who was to perform the opening ceremony could not attend due to indisposition. This doubling marks an important phase in the South Eastern Railway's plan of assisting the country's growing steel industry.

Essentially designed to serve the Steel Works at Jamshedpur the newly-constructed double line on this 10-mile long section will carry a bigger volume

of raw materials from Birmitrapur and Noamundi which the Steel Works will need to fulfil their programme for increased production in the first Five-Year Plan period.

The Government of India sanctioned the doubling of the Gomharria-Sini Section in September 1953, at an estimated cost of about Rs. 48 lakhs and the work of construction started in the same month. The new track is laid with 90 lbs. Revised British Section rails. A portion of these rails was manufactured at Jamshedpur, the rest being imported from Japan.

Remodelling of yards

The doubling of the section necessitated major remodelling of the stations at Gomharria and Sini. Another additional work carried out was the shifting, towards the west, of the block hut station and the yard at

Shri S. M. Dhar, Agent, Tata Iron and Steel Co., Ltd., cutting the tape, declaring the Gomharria-Sini double line open





Gomharria station: A portion of the new line for the doubling can be seen on the left foreground

Birabans where formerly the adverse gradient acted as a deterrent to the speed of the trains. The remodelling of both Sini and Gomharria involved regrading, which work had to be carried out under traffic. For this work 3 miles of track and 33 sets of points and crossings have been laid.

HEATLY & GRESHAM LIMITED

INCORPORATED IN ENGLAND

CALCUTTA - BOMBAY - MADRAS - NEW DELHI

SOLE AGENTS IN INDIA FOR

GRESHAM & CRAVEN LTD., MANCHESTER } S.J. Loco Vacuum Ejectors & Automatic Steam
GRESHAM & CRAVEN OF INDIA LTD. } Brake Valves, R. C. W. & Simplex Injectors,
Ross Type Safety Valves, Vacuum Brake Equipment & Components, Vacuum Exhauster Sets, etc.

HASLER TELEGRAPH WORKS LTD., Locomotive & Carriage Speed Indicators & Recorders
Revolution Counters.

JOHN LEVICK LTD., Rolling Stock Internal Fittings, Commodes & Flush Tanks, Wash Basins
& Bathroom Fittings.

OXYCHLORIDE FLOORING PRODUCTS LTD., Elephant Brand Composition Flooring.

BECKETT LAYCOCK & WATKINSON LTD., Railway Rolling Stock, Road & Marine Windows.

CLYDE BLOWERS LTD., Clyde Patent Scot Blowers for all type of Locomotive Boilers.

THE EVERLASTING VALVE CO. (G.B.) LTD., Blow off Cocks & Valves for Locomotives
& Industrial purposes.

AND OTHER MANUFACTURERS OF RAILWAY MATERIAL AND EQUIPMENT

Also for **MACHINE TOOLS & GENERAL ENGINEERING EQUIPMENT**



WORLD OF RAILWAYS

ARTHUR L. STEAD

Our London Correspondent

ALL over the globe, railway motive power now is in the melting-pot. For more than a century, the steam locomotive reigned supreme as the prime hauler of passengers and goods, following its introduction on the pioneer railways of Britain. Now, more efficient and economical means of traction are available in the electric and diesel locomotive, and while the trusty 'Iron Horse' will linger on for a while, it is obvious that we are now approaching the end of the 'Steam Age' and entering a new era of electric and diesel traction.

British Railways, as 'Southrailnews' readers will be aware, are at present in the early stages of a vast modernisation plan launched at the end of 1954. This plan aims at exploiting the great natural advantages of railways as bulk carriers of passengers and goods, and revolutionising the character of the services provided for both—not only by the full utilisation of modern equipment of all kinds, but also by a purposeful concentration on those functions which the railways can be made to perform more efficiently than other forms of transport, whether by road, air or water.

Track and signalling over the 19,000 route-miles (51,000 track-miles) of British Railways are being improved on a major scale; passenger coaches are being modernised; goods train services are being drastically remodelled; and

steam is being replaced as a form of motive power by electric and diesel traction.

Actually, it is this changeover from steam to electric and diesel traction that forms the principal plank of the British rail rehabilitation scheme. In the main, the future set-up of British Railways is visualised as a system comprising a network of trunk routes operated electrically, with secondary or "feeder" routes employing diesel traction. Large numbers of relatively little used branch lines are being boldly discarded, it being realised that, in a small country like Britain, road transport can serve rural areas much better than rail.

Electrification is really the big hope of British Railways for the future, just as is the case in many other lands. Lacking natural oil resources, the diesel engine does not appeal to Britain for main-line operation, although light diesel railcars can serve a useful purpose on less important routes. The immense possibilities of electrification have always been realised, and now a fresh impetus to the development of electric traction has been given by the recent striking progress in the use of 50-cycle alternating current.

As a matter of history, it may be noted that for more than half a century Londoners have enjoyed electric underground travel, and on the trunk

April 1956

railway systems electric suburban operation dates back to pre-World War I days, while main-line electric services proper were pioneered by the Southern Railway Company between London and Brighton (50½ miles) in 1933. Today, there are important electrifications between Manchester and Sheffield, in the Newcastle-on-Tyne area; and between London and the south coast, where there is operated on the 660 volts direct current third-rail system the largest suburban electrification in the world.

Out of the total route mileage of British Railways of 19,000, some 863 route-miles are at present electrified on the 600 to 700 volt direct current systems with conductor rails, and 103 route-miles with 1,500 volt overhead direct current equipment (similar to that generally employed in India). By comparison, there are in the whole world some 22,300 route and 39,000 track-miles of electrified line, of which 10,800 route and 20,400 track-miles are alternating current and 11,500 route

and 18,000 track-miles are direct current. Of these last figures, approximately half is on the 3,000 volt system.

Britain's adherence to the direct current system of electrification through the years, in contrast to what occurred in other lands where alternating current was favoured, at first sight appears a trifle odd. However, the explanation is simple.

In Britain, early electrifications came about as an answer to the competition of electric tramways which threatened suburban business, and the railways simply followed the example of the tramways in adopting the 600 volt direct current system, the direct current motor having the ideal characteristics for traction, namely, variable speed and torque.

As was pointed out by Mr. S. B. Warder, Chief Electrical Engineer, British Transport Commission, in a paper read recently before the Railway Students' Association in London, the direct current motor was simple to

Paris-Lyons express on the electrified main-line of the former Paris, Lyons and Mediterranean Railway, now part of the French national network



April 1956



Eight-Coach suburban train on the London electrified routes of the Southern Region of British Railways

construct and had the advantage of developing a high starting torque without overheating. The direct current itself had to be made available to the trains, and up to 1930 it was only possible to obtain the energy from special low-frequency generating stations. A further limitation of the direct current system was that the low voltage restricted its use to relatively small areas because of the large conductors necessary and the many substations required to keep voltage drop within tolerable limits.

This was to a certain extent overcome by increasing the voltage firstly to 1,500 and finally up to 3,000, but the development of the mercury arc rectifier played a considerable part in making possible the projection of the direct current system beyond the suburban area by making feasible the use of national standard frequency (50 cycles) for its source of energy.

In most other European countries, the suburban problems were different and developments took other forms. Both Britain and the lands on the European mainland had to start with a low-frequency source, but to overcome the voltage drop problem most conti-

ental countries conveyed the low-frequency alternating current to the trains at high voltage (11,000 to 16,000), where it was transformed to about 300 volts to drive alternating current commutator motors with somewhat similar characteristics to those of direct current motors.

Through the years, both the British and continental plans proved good systems, but the increasing cost of labour and materials has, in recent times resulted in the 1,500 volt direct current system losing some of its economic advantages as compared with its higher voltage competitors.

Up to two years ago, the balance was swinging towards the 3,000 volts direct current system, for the lower cost of the fixed equipment was sufficient to offset the complication of two 1,500 volt motors permanently connected in series for use on the higher voltage. In 1951, the British Transport Commission decided that the standard system in this country should be the 1,500 volts direct current, but not to the exclusion of the 750 volt direct current third rail, or 3,000 volt direct current or the 50-cycle single-phase alternating current systems in suitable circumstances.

The 3,000 volt system proved to be the cheapest in the comparative estimate, but was thought to afford more complication for inter-running with the 750 volt third-rail system. It was, however, primarily because it was considered that only heavily loaded lines were likely to be electrified for many years ahead that it was decided on the 1,500 volt direct current as standard.

Today, railways everywhere are realising the advantages to be secured through a combination of the best features of the alternating and direct current systems of electrification, and in Britain a tremendous impression has been made by the pioneer work of the French Railways in the employment of 50 cycle current instead of the established low-frequency current arrangement.

The French experiments quickly established that very cheap fixed installations could be provided at 20,000 volts, and that therefore it was ideal where traffic was **light and infrequent**. In Britain, these facts were confirmed in experiments conducted between Lancaster, Morecambe and Heysham, on the London Midland Region system, in 1953.

Now, experience on the Valenciennes-Thionville route of the French Railways has shown that the new system is still preferable where traffic is **heavy** and where the cost of obtaining the additional electrical clearance is high. It is significant that, although the French Railways have already 2,130 route-miles electrified on the 1,500 volt direct current system (including the Paris-Lyons main-line electrified comparatively recently) it has been decided to adopt the 25,000 volt single-phase arrangement for the important new electrifications being undertaken in the busy Northern and Eastern Regions.

Apart from the savings in fixed equipment, the alternating current locomotive, particularly the type which

Castrolite

a 'balanced' oil for modern cars



Most motorists rely on Castrol XL, the undisputed Masterpiece in Oils. However some car owners prefer to use a thinner oil if their car engine is in good condition and oil consumption presents no problem. Their taste both in summer and winter is met by Castrolite.

Castrolite which is a "balanced" multi-grade oil (20W-20-30) is thin when cold giving immediate oil circulation, yet when hot it retains full body, providing the engine with "Castrol XL" protection. These characteristics give quick starting and save petrol, especially on short runs. In common with all other Castrol grades, Castrolite is fortified by exclusive patented additives.

CASTROLITE

- 1 is a multi-grade oil
- 2 contains patent additives
- 3 sells in the Castrol price range
- 4 is approved by British car makers



THE MASTERPIECE IN OILS

C. C. WAKEFIELD & CO., LTD.

N-21(15)



Park Royal—a typical suburban station on the outer electrified routes of the London Transport Board's Railways

uses rectifier-fed direct current motors can be more lightly and cheaply built than its 1,500 volt direct counterpart. British experts confirm the view of French operating officers that, while the best 80-ton direct current locomotive is capable of hauling a 1,000 ton train on a grade of 1 in 100, an alternating current locomotive of equal weight can haul 1,600 tons on the same grade. The reason for this is that the method of control and the manner in which the motors are connected in the

alternating current locomotive enables it to make much better use of the available adhesion than the direct current locomotive.

It now appears as if, in its nationwide electrification project, the British Railways undertaking will probably adopt as standard the new system. This will be a landmark in railway history, and the development is one of major interest to the Indian Railways now themselves engaged on ambitious electrification projects.

Telephone : 55876

Telegram : "DHAMICHAIN"

Engineers, Contractors and Body Builders

PLEASE CONTACT

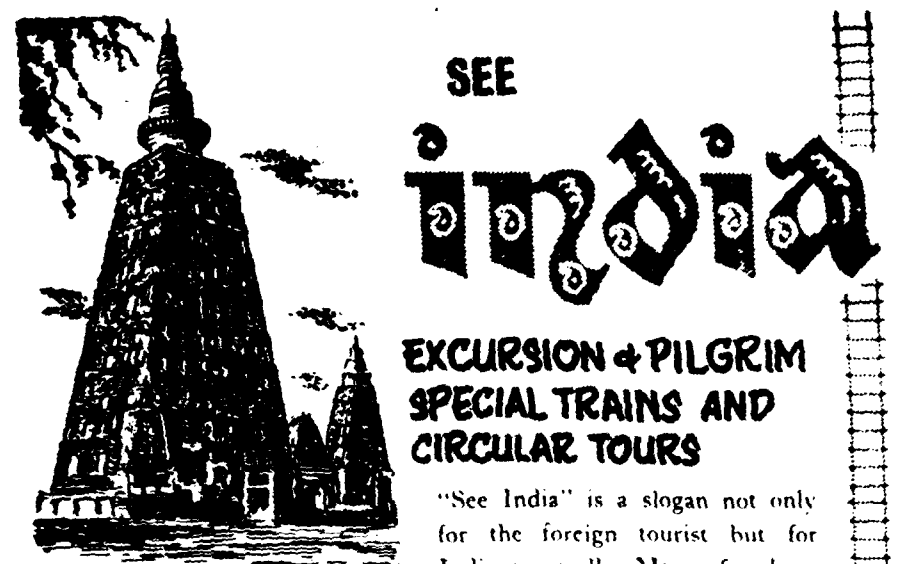
GOBINDRAM MURLIDHAR & CO.

Brass Founders, Contractors and Suppliers

37, VENKATACHALA MUDALI STREET, MADRAS-3.

FOR

All your requirements of Bolts and Nuts all types, Building Hardware Hand and Workshop Tools, G. I. Pipes and Pipe Fittings, Machinery all sorts, Paints, Varnish, Turpentine and Glue, etc.



SEE

india

EXCURSION & PILGRIM SPECIAL TRAINS AND CIRCULAR TOURS

"See India" is a slogan not only for the foreign tourist but for Indians as well. Many of us have yet to make a discovery of our home land, to know its great mountains, its beautiful valleys, ancient monuments, historic temples and new townships.

Standard Circular Tours

The Northern Railway is issuing at a concessional fare of 3/4ths of the tariff fare, second, inter and third class tickets for a number of standard tours. These tours cover a number of specific itineraries, details of which are available from station masters on this Railway. In addition, if any itineraries are proposed by the public to the Chief Commercial Superintendent (Rates) of this Railway, they will be examined and concessional fares granted provided certain conditions are fulfilled.

Special Trains

Requests for special pilgrim or excursion trains on the broad gauge will be considered and the following concessions will be permissible :-

- (i) Kitchen arrangement— One bogie vehicle will be attached free with each train.
- (ii) One conductor and four cooks servants will be allowed to be carried free.
- (iii) For tours exceeding 1,500 miles and over, a concessional fare equivalent to 3/4th of tariff fare will be permissible under certain conditions.

For detailed information, please apply to the
Chief Commercial Superintendent (Rates),
Northern Railway, Kashmiri Gate, Delhi.

THE PUBLIC RELATIONS OFFICER, NORTHERN RAILWAY



AHOBILAM IN ANDHRA THE ABODE OF NINE NARASIMHAS

T. N. SRINIVASAN



A view of the temple at lower Ahobilam, showing the fine carvings of the Ranga Mandapam

AHOBILAM, now almost a deserted village in the Kurnool district of the Andhra State, is one of the most important Vaishnavite places of pilgrimage in South India. This place is situated amidst the continuous range of hills that form the puranic Sri Parvata range of mountains, at whose eastern extremity is situated the famous Tiruvengadam peak—the Tirumalai hills, while the western end forms the sacred Saivite spot—Srisailem, and the middle portion is reputed to be the holy Ahobilam Kshetram. It is one of the one hundred and eight Tirupathis or sacred places which have been benedicted by the Vaishnavite Azhwars. Saint Tirumangai-mannan had glorified this place with ten fine hymns in his Peria-Thirumozhi, wherein he called this place by the name Singavezhkundram and rightly pointed out that though this place was not easily accessible, the pilgrim who managed to go there and offer worship to the great Singapiran, would be enthralled by

the natural beauty and calmness of the spot, which would bestow on him both mental solace and physical comfort.

Even today, this place still retains its pristine glory and grandeur. The nearest railway station is Nandyal on the Guntakal-Bezwada branch line, from where Ahobilam is about thirty miles away. The pilgrim has to go by bus to a small taluk town by name Arlagadda, from where he has to take country-carts to reach this sacred place and pass through virginal forests and lofty hills. Having once reached Ahobilam, the pilgrim finds real happiness, for he is in a place where the hand of modernism has not so far extended to spoil the natural charm of this sacred spot.

This place is also known as Navanarasimha Kshetram, as it is here that there are shrines dedicated to the nine aspects of Sri Narasimha Avatar, each form having special significance in the cult of Narasimha which finds prominence in the

Narasimhapoorvathapani Upanishad of the Atharva Veda. Though temples dedicated to one or other of these nine forms exist in various places in our country, it is only at Ahobilam we have all these nine forms installed at spots within a short radius. This sacred place was said to have been visited by Sri Rama during his wanderings in this part of the country in search of Sita, for five miles away in the interior, there is a tank by the name *Ramathirtham*. At the foot of the hills stands the dilapidated place known as *chinna* or lower Ahobilam. From the appearance of the ruined mandapams and deserted streets, even at first sight the traveller can easily visualise that this place must have been very prosperous at one time throbbing with life and wealth. The great Vijayanagar rulers built the several temples here in the same style, as they glorified their capital Vijayanagar, but the Muslim rulers of the Golkonda dynasty raided this place and destroyed the entire town by setting it on fire. They mutilated the charming images here and devastated the whole place.

As soon as the devout pilgrim enters the village, he passes along a broad street with several stone-mandapams on either side which leads him to the temple of Sri Prahlada Varadan, the most important shrine in lower Ahobilam. Before him stands the monolithic Pillar of Victory, forty feet in height, erected by the Rangarajulu rulers, to commemorate their victory over the Muslim invaders, whom they overthrew here in a battle.

The temple of Sri Prahlada Varadan is fairly big, having a fine gopuram at the entrance, with three prakarams round the main shrine. In the first prakaram is a fine tank and a small shrine dedicated to Sri Ramanuja. Recently this tank called *Azhwar Koneru* which was in a very bad state, was rebuilt due to the efforts of the Jeer of the Ahobila Mutt, to whom this temple belongs, so that the pilgrims that come here can have good drinking

water. Passing through the second enclosure, the visitor reaches the inner prakaram. In the centre of this square stand the two shrines of the main deity Sri Lakshmi-Narasimha and his consort. In front of these shrines is the Ranga Mandapam, built by the Vijayanagar rulers in their characteristic ornate style of architecture, wherein the delicate designs are very minutely and exquisitely worked out, in the same way as we see in the famous Kalyana-mandapams at Kancheepuram, Vellore, Tiruvannamalai and other places. Though the iconoclastic ravages of the Muslim invaders had ruined many a charming piece of art that this mandapam once boasted of, the few remaining images bear silent testimony to the splendour of the plastic art of the Vijayanagar artisans, which Fergusson and other eminent art-connoisseurs extol much.

The deity of this shrine is the milder aspect of Narasimha—Sri Lakshmi-Narasimha form—when he blessed his devotee Prahlada after destroying his father Hiranyakasipu. The utsava image is a charming image with his two consorts, Sridevi and Bhodevi. It is to this deity that the annual Brahmotsavam is celebrated on a grand scale in the months of April-May, when a large concourse of pilgrims visit this place.

About a mile and a half south of this shrine is the Sannidhi of *Chatravata Narasimhan*. Here the image of Sri Narasimha is installed under a pipal tree, surrounded by an impregnable growth of thorny bushes. Further away at a distance of about half a mile is the sacred spot, wherein is installed the image of *Yogananda-Narasimhaswamy*, who is represented as a seated image in yogic aspect, with the legs crossed and the front two hands resting on the knees. This last mentioned deity is installed almost on the outskirts of Lower Ahobilam.

Leaving Lower of Chinna Ahobilam, the pilgrim walks nearly six miles along a rugged hilly tract, where only a bridal path is provided, crossing on his way



A fine sculptural piece of "Ugra Narasimha"

small rivulets that rush down at terrific speed, with gigantic trees all around, to reach what is known as the Upper or *Pedda Ahobilam*. No doubt the task of walking these six forlorn miles is strenuous but the benefit of this difficult task is more than compensated by the grand panoramas that reveal themselves before the pilgrim, giving him an insight into the marvels of nature's creations and how our ancestors had made use of the same to infuse faith in that Supreme Being.

On his way, he worships the *Karanja Narasimhan*, who is installed in a small forsaken garden. Reaching Upper Ahobilam after an arduous journey, the pilgrim will be transported with joy to see the virginal beauty of the spot, which abounds in several fine waterfalls that cascade down the thickly vegetated hills. This place is about 2,800 feet above mean sea level and here are two hills—the *Garudadri* and the *Vedadri*, from whose valley comes

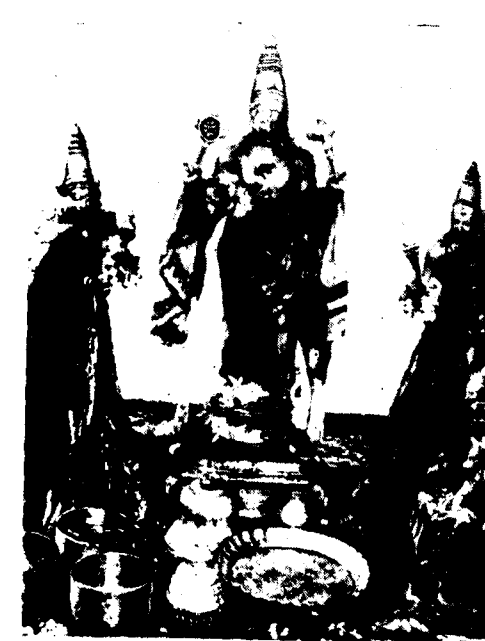
out the puranic river *Pavanasini*, which ripples down in a series of gentle cascades of milk-white streams. A bath in this sacred river is said to absolve one of all sins, as its very name signifies.

The first place to arrest the attention of the pilgrim is the temple of *Sri Ugra Narasimha*, built in the traditional Dravidian style of architecture, but in a very bad state of preservation for the entire structure is covered over by an outgrowth of forest-vegetation. The *garba-graham* of the deity is scooped out of the rock that abuts on the side of the temple and houses the ferocious form of Narasimha in the aspect of tearing the demon. Some are of the opinion that it was here exactly that the Vibhava aspect of the Lord took shape and here it was that Hiranyakasipu was actually slain.

On the eastern side of the Ugra Narasimha temple, there is a gateway with a dilapidated gopuram. Beyond this is all forest and passing a distance of about three furlongs with difficulty,

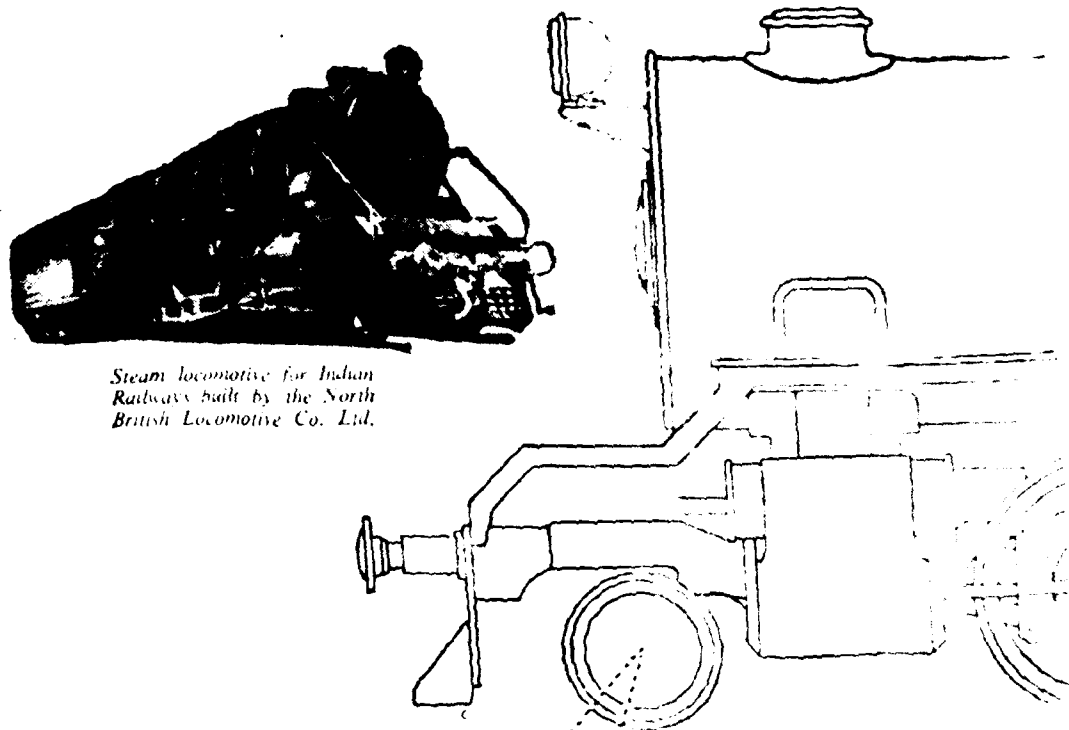
(Continued on page 31)

The Utsava image of "Sri Prahlada Varada"



1 000 000 SKF AXLEBOXES

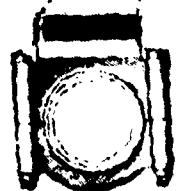
With **SKF** axleboxes nothing is left to chance—and it is not by chance that **SKF** is the first to have supplied 1,000,000 roller bearing axleboxes to the railways of the world. Designers and railway engineers have long known that there is always an **SKF** axlebox that is exactly right for their particular requirement. Standard axleboxes, special axleboxes, single and double bearing axleboxes for mounting inside or outside the wheels—all are included in **SKF**'s first million. All these types—and more special types too if the need arises—will make their contribution towards **SKF**'s second million.



Steam locomotive for Indian Railways built by the North British Locomotive Co. Ltd.

SKF MEANS THE RIGHT BEARING IN THE RIGHT PLACE

**THE SKF
BALL BEARING
CO., LTD.**



BOMBAY, P. O. BOX 71.
CALCUTTA, P. O. BOX 588.
MADRAS, P. O. BOX 66.

HOW THE RAILWAYS ARE STRIVING TO IMPROVE THE QUALITY OF THEIR SERVICE



Radio Broadcast talk given by Sri S. K. Mukerji, C.C.S., S. Ry., between 9-30 and 9-45 p.m. on 10-4-56. from AIR. Madras

AS one who has to remain in close touch with the users of the Railway system, I often come across people whose minds are set on the assumption that the Railways, called upon to bear such an enormous pressure on their transport capacity during the implementation of the Second Five-Year Plan, will find it impossible to maintain and much less to improve the standard of their service and that—as had happened during the Second World War and immediately thereafter—**quality** of service may have to be sacrificed for **the quantity** to be rendered. In this thought process one factor is perhaps overlooked—that the problem of handling heavy traffic in peace time is not the same as during a war emergency, when under the stress of military movements, all other traffic has to assume a secondary importance; when augmentation of the railways' resources is almost impossible and even

the normal channels of replacements and renewals are not open to them. As against this, we are now in an era of planned economic development and one essential requisite for such development is the existence of a sound and efficient railway system in the country. It is, therefore, necessary at the outset to underline the fact that concurrently with their plans and programmes for movement of heavy additional traffic, the railways are systematically progressing certain measures to improve the quality of service which they are expected to offer. In the course of this talk, I shall dwell on some of the steps which the railways have taken or are intending to take to achieve this end.

Before proceeding any further, let me explain briefly as to what is meant by "quality of service" in relation to railway transport. Whether it is a passenger who has to make occasional railway

journeys or a businessman who is interested in the transport of his goods, the test for the quality of transport service, is its quickness, safety and comfort. Within the limits of their resources, the railways are now systematically tackling this question in its different aspects, realising all the time that there is no room for complacency in such a matter.

Taking the question of quickness of service, it has to be observed that acceleration of passenger services, especially of long distance Mail and Express trains is rendered possible, as old and light tracks are relayed to permit running of modern and faster types of engines, as bottle-necks are eased by doubling of congested sections and as Signalling methods are improved. Noticeable improvement has already been effected in the overall running time of certain important Mail and Express trains, as in the case of the Grand Trunk Express between Madras and Delhi and more improvements are likely to follow.

Quickness of Goods service is being attempted not only by a determined effort to move as much traffic as possible by block specials, but also by the progressive introduction of local and through Express Goods trains running on fixed schedules. These trains, shunting at only a few selected points **en route**, provide a significantly quick service between important centres.

From the 1st April this year, the railways have introduced a special scheme for quick transit of goods on certain specified routes and between pairs of selected points. The idea underlying this scheme is to make consignments available for delivery at destinations within a target time, on collection of a small extra fee. If the transit time exceeds the target, the extra fee levied is refunded. For the present, the service has been introduced on the main trunk routes between Delhi and Calcutta, Delhi and Bombay, Delhi and Madras, Bombay and

Calcutta, Calcutta and Madras and Bombay and Madras including a few selected intermediate stations on each route.

A special machinery has been set up to watch the transit of consignments booked under this scheme, so as to ensure their availability for delivery at destinations within the prescribed time. It is expected that delay to consignments in transit, both in wagon loads and smalls, will be considerably minimised with the progressive implementation of this scheme.

Each Railway has now developed some sort of an organisation for closely watching the transit time of goods and parcels between important pairs of points. Targets have been fixed for the transit time in each case and frequent test checks are made to find out whether these targets are exceeded. Delays in transit are localised and remedial measures are taken as necessary. The position in regard to transit time of parcels is still susceptible of considerable improvement. These delays are mostly due to limited capacity for clearance of parcels on normal passenger trains, shortage of suitable vans for loading of parcels and lack of adequate facilities at junction stations or break-of-gauge transshipment points for handling the parcel traffic, which in recent years has increased enormously. By running daily or periodical Parcel Expresses, where feasible, by rationalisation of loading arrangements of parcel vans and by the provision of extra sidings and platforms for handling parcels traffic, the railways are seeking to eliminate these delays.

We shall now come to the safety aspect of railway service, by which I mean not only the safety of passengers, but also safe delivery of goods and parcels. Following the recommendations of the Railway Accidents Enquiry Committee of 1954, and the Reviewing Committee appointed thereafter, several steps have been initiated on the Railways towards minimising accidents

arising out of the failure of mechanical equipment or of the human element. As it is, in 1954-55, the total number of accidents on open line of Indian Railways recorded a decrease of 7 per cent though the increase in the total train miles was at the same time of the order of 3 per cent.

Safe delivery of consignments entrusted to the care of the railways is a problem that bristles with difficulties and not only the Indian Railways, but also the railways in other parts of the world have had to face, during the post-war years, a vast increase in their claims bills. On all the Indian Railways, over 2 lacs of claims were settled in 1954-55 as against 34,000 approximately in 1938-39. An amount of over Rs. 288 lacs was paid as compensation as compared to about Rs. 4 lacs in the pre-war year. This aggravation of the position is due to a combination of causes, viz., shortage of essential commodities and their high prices leading to a large number of thefts and pilferages; dilution of staff resulting from heavy recruitment of raw hands to cope with the increased traffic with consequential increase in misdespatches, exchanges and wrong deliveries; over-aged wagons with body holes having to be pressed into service due to shortage of rolling stock, resulting in consignments getting more easily damaged by wet and also terminal delays resulting from heavy increase in the volume of traffic. It is realised that on the side of the railways, the cause of heavy claims lies in badly carried out operations, namely, checking, handling, loading, shunting, supervision, etc. On the side of the trade, negligence and also reluctance to adopt better packing or loading methods are contributory causes.

On each railway, a Claims Prevention organisation has now been set up. The function of this organisation is to localise the bad spots for claim, the commodities mostly susceptible to claim and the causes responsible therefor. The Claims Prevention

Officers and Inspectors make specific checks periodically of rivetting and sealing of wagons, packing and labelling, handling of consignments in their transit and these checks are of immense value in determining the course of preventive action. A system of locking wagons with Ellis Patent Lock has been introduced at all important stations where valuable consignments are booked. These E. P. Locks provide a special measure of safety, as they cannot be opened without the use of the special implement known as E. P. Key. Actual experience has shown that practically no thefts are reported in wagons moving with E. P. Locks. There is at present, some difficulty in getting more E. P. Locks, but as and when the position improves, this system of locking will be extended to other stations.

Lastly, I shall refer to the question of comfort in rail travel or what is known as the provision of Passenger Amenities. The term 'Passenger Amenities' includes all the facilities provided by the Railways from the time passengers enter a railway station till the time they leave their destination stations on completion of their journeys. These comprise provision of model carriages, fans and fittings, improvement of train lighting, mitigation of overcrowding to the maximum extent possible with the existing resources in carriages and engines, opening of new stations and halts, provision of waiting rooms and halls, opening of new Booking Offices and Out-agencies, raising and covering of platforms, catering and drinking water arrangements, more improved sanitation of the station premises and passenger carriages and sleeping accommodation for third class passengers.

Provision of amenities towards making rail travel more comfortable continues to receive close and constant attention of the railway administrations and works undertaken with this object are particularly watched and

progressed with care, and adequate financial provision for these is made each year. During the First Five-Year Plan, a sum of Rs. 3 crores for all the Indian Railways was set apart for Passenger Amenities works, including the required fittings on passenger coaches. During the Second Five-Year Plan, which has just commenced, an allotment of 3 crores for each Railway has been made.

The Railways are making constant endeavour to mitigate overcrowding to the maximum extent possible within their existing resources by introducing additional trains including Janata Expresses and extending the existing trains for a longer run. 136 additional trains were thus introduced on the Indian Railways during 1954-55 and the runs of 117 trains were extended.

For the first time in the history of the Indian Railways, sleeping accommodation for third class passengers is now provided as an experimental measure on a limited number of trains

on levy of a surcharge of Rs. 3 per night. A Special Travelling Ticket Examiner is provided on each sleeper coach to ensure that at night only such passengers as have paid this surcharge occupy this coach.

Concrete steps are being taken by the railways towards supply of cheap and wholesome food to passengers during their journey by the progressive introduction of Departmental catering even on the railways on which it did not exist before, so as to set the standard for other licensees on the railway. The menu and prices of Indian style meals served from the Refreshment Rooms have been standardised and the use of Restaurants and Dining cars has been thrown open to third class passengers during meal hours.

Thus are the Railways endeavouring to do their best in giving a better and better service while planning to provide for more and more to meet the country's growing requirements.



SPHERICAL ROLLER BEARINGS IN RAILWAY AXLEBOXES

Railway axlebox bearings have always been of vital importance to the reliability of railway vehicles and have for long been a factor having a considerable influence on the running economy of railways. Ever since railways first came into being, constant efforts have been made to improve the design of the bearings—not only to make them more reliable and economical, but also to make possible larger payloads, higher train speeds and to reduce starting resistance.

It is now generally recognised that rolling bearings offer the solution to the railway bearing problem, particularly for the heavy, high-speed and intensive railway traffic conditions which prevail today. The success of rolling bearings has been achieved by the joint efforts of the rolling bearing industry and the railways over a long period of years.

Special interest is centred on this matter at the present time because SKF has just announced the supply of the millionth SKF axlebox. For many years a pioneer and leader in the field of railway bearings the SKF organisation is believed to be the first Company to have reached this total. The vast majority of the million axleboxes so far supplied have been equipped with double row spherical roller bearings, a type which was specially designed and introduced to solve railway bearing problems.

A study of the development and of the part played by this type of bearing may therefore be of historical and current interest.

As far back as 1911 axleboxes incorporating self-aligning ball bearings, were fitted experimentally by SKF to a number of heavy passenger coaches on the Swedish State Railways, and shortly afterwards a number of steam locomotives were similarly equipped. For reasons which are obvious in the light of later experience, the restricted space available for the

axleboxes did not permit the fitting of ball bearings with sufficient carrying capacity. Better results were achieved, however, with 6-wheel ore trucks on the North Swedish ore railways, to which a large number of ball bearing equipped axleboxes were fitted from 1915 onwards. Extensive examinations were made, however, of the train resistance compared with plain bearings equipped trains, which proved that the saving in power and the permissible increase in train lengths would offset the additional cost of the bearings. The reduction in the starting resistance was found to be very considerable, particularly in very cold weather. At this stage, however, one of the major advantages of rolling bearing axleboxes—increased reliability and reduced maintenance costs—did not immediately become apparent. That was to follow later with the large scale use of roller bearings in railway vehicles.

The ball bearing installations mentioned above were very largely of an experimental nature, but meanwhile SKF seriously took up the question of railway vehicle working conditions and the problems encountered with the design of bearing schemes, with the object of producing a suitable type of bearing for railway service. It was quickly realized that the problem could only be solved by using roller bearings of very high carrying capacity, and efforts were centred on designing a self-contained, non-adjustable unit capable of carrying thrust loads in both directions.

In 1919-1920 the first SKF double row spherical roller bearing was put to its first practical tests on the Swedish State Railways. This marked an important turning point in the development of railway bearings because for the first time a roller bearing became available which had been designed specifically for railway service.

In 1921 an installation of considerable significance was carried out on the Pennsylvania Railroad, when 48 axleboxes of a special type were fitted. These axleboxes remained in service until 1946, when the coaches were scrapped. The design of this axlebox is of special interest because it was the first time that a single, completely self-aligning bearing had been used successfully in a railway axlebox. It was also the first time that axlebox bearings had been mounted on withdrawal sleeves—a feature which ensured a tight fit between the bearing inner ring and the axle journal, even though the journal might be machined to a relatively coarse tolerance. Dismounting of the bearing for inspection of the journal was also greatly facilitated.

Nowadays, the use of modern workshop equipment ensures accurate machining of axle journals to close tolerances. This has led to a saving in cost and space, because it enables the bearing to be mounted direct on the axle journal.

On four-wheel wagons, which are the most common type of goods vehicle in Europe, two bearings are used per axlebox, as shown in Fig. 2. This bearing scheme has become the most widely used for many different types of rail-

way vehicle—both for rolling stock and locomotives—even though the self-aligning properties of the spherical roller bearing are not completely utilized.

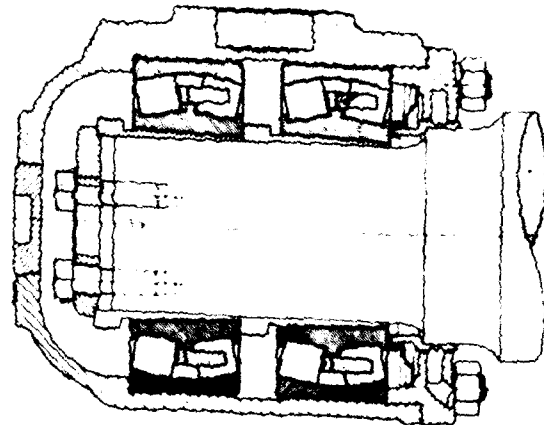


FIG. 2

In many cases, however, the unique self-aligning properties of spherical roller bearings have given considerable freedom to the vehicle designer in drawing up bogie, rolling stock and locomotive designs. A single bearing axlebox with one spherical roller bearing (Fig. 3) is virtually essential in diamond-type bogies. In other cases the self-aligning properties of the axlebox have led to simplicity of design, flexibility and other advantages. An

FIG. 3

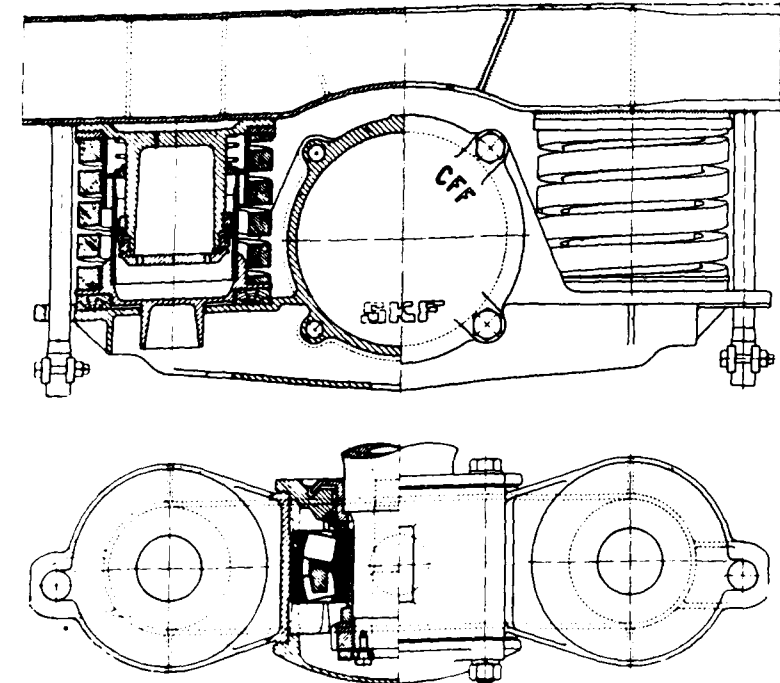
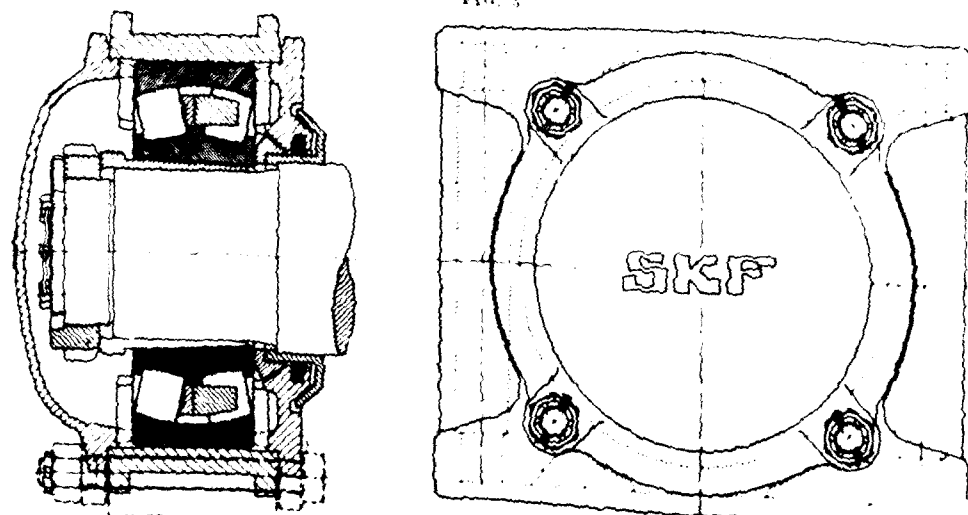


FIG. 4

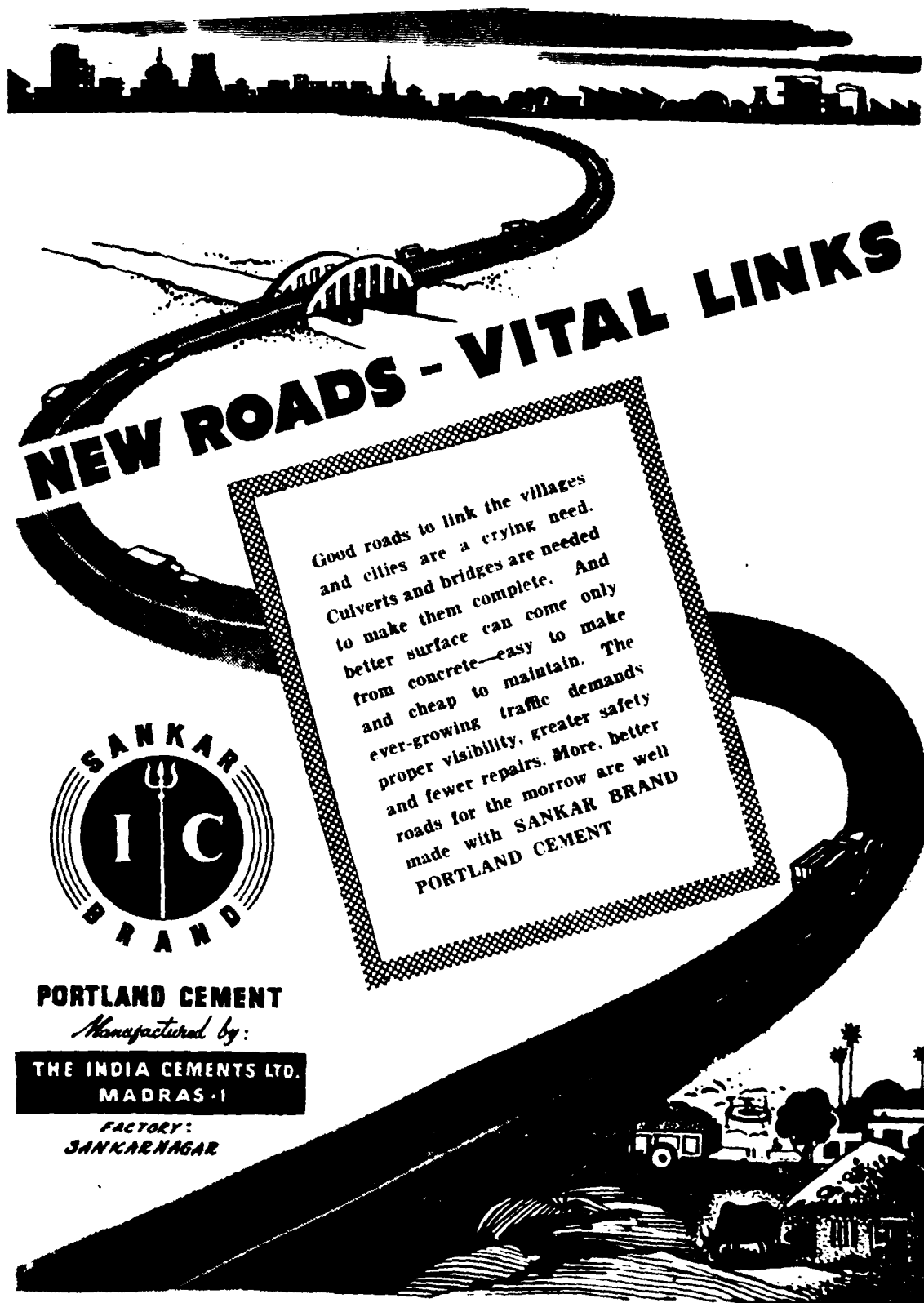
outstanding example is the Swiss bogie bearing scheme shown in Fig. 4, which has become world famous because of its excellent riding qualities. Single bearing axleboxes also offer advantages on locomotives because their narrow width allows them to be fitted inside the wheels on driving and coupled axles. A single bearing design often offers the most efficient and economical solution for axleboxes which are bottom-loaded either by underslung carrying springs or equalizing beams.

Over the years the demands made on the performance of roller bearing axleboxes have become more and more severe. Axleloads, train speeds and annual mileages have increased, and at the same time the tendency in modern bogie and vehicle design has been to restrict still further the available space for the roller bearings. This has confronted roller bearing manufacturers with the problem of developing bearings with even greater carrying capacity in relation to their size. SKF successfully solved this problem by a radical redesign of the spherical roller bearing to give no less than a 40 per cent

increase in its carrying capacity. This development marked a major advance, in the field of railway bearings and made possible the successful application of axleboxes with smaller external dimensions than hitherto for given loads.

An axlebox for American goods wagon bogies is undergoing extensive tests in the U.S.A. Free axial oscillation of the axle in relation to the bogie frame, made possible by the self-aligning feature of the bearing, makes this axlebox particularly suitable for high train speeds. Moreover, this bearing scheme is probably the most economical ever produced for goods wagons.

The development during recent decades has also resulted in the manufacture of satisfactory axleboxes fitted with cylindrical or taper roller bearings of suitable design, each possessing characteristic features. Spherical roller bearings, however, occupy a central position in modern railway bearing engineering as general purpose bearings. The millionth SKF axlebox was fitted with spherical roller bearings.



PORTLAND CEMENT
Manufactured by:
THE INDIA CEMENTS LTD.
MADRAS-1
FACTORY:
SANKARNAGAR

GANDHI MANDAP AT RAJBHAVAN GUINDY

G. S. RAJU

There was something in Gandhiji which appealed to the mass of the Indian people. His simple life, his vegetarian diet, goat's milk, his day of silence every week, his habit of squatting on the floor instead of sitting on a chair, his loin cloth, in fact everything connected with him, had marked him out as one of the eccentric Mahatma's of old and had brought him nearer to his people. Wherever he went even the poorest of the people felt that he was a product of the Indian Soil—bone of his bone, flesh of his flesh. When Gandhiji spoke he did so in a language that they comprehend, not in the language of Herbert Spencer and Edmund Burke. as for instance. Sir Surendranath Banerjee would have done, but in that of the Bhagavat Gita and the Ramayana. When he talked to them

about Swarajya he did not dilate on the virtues of provincial autonomy or federation, he reminded them of the glories of Ram Rajya the (Kingdom of the Rama of old) and they understood. And when he talked of conquering through love and ahimsa (non-violence) they were reminded of Buddha and Mahavira and they accepted him. Thus he showed the way and performed the unheard of miracle in the history of the world, in getting Independence without shedding a drop of blood. This is a permanent reminder to us.

To perpetuate the memory of Gandhiji, the father of the nation, and to follow his teachings of mutual love and devotion to God, a form of memorial was found necessary. As statues did not bear the true resemblance of Gandhiji, it was decided to

Front view of the Mandap





Another view of the Mandap

build a mandap common to all which could be utilised for conducting bhajan and the singing of devotional songs which were very dear to Gandhiji. The mandap which has been put up at a cost of 4 lakhs of rupees mostly contributed by wage earning employees including Southern Railway's on a ten acre land graciously presented

by our Governor Shri Sri Prakasa in Raj Bhavan, Guindy. It has been built on the pattern of South Indian temples with figures and inscriptions from different religions including those from Gita, Tirukkural, the Quoran, the Bible, and Gandhiji's own teachings.

The best way of paying tribute to Gandhiji is to follow his teachings.

Helping in an important job...

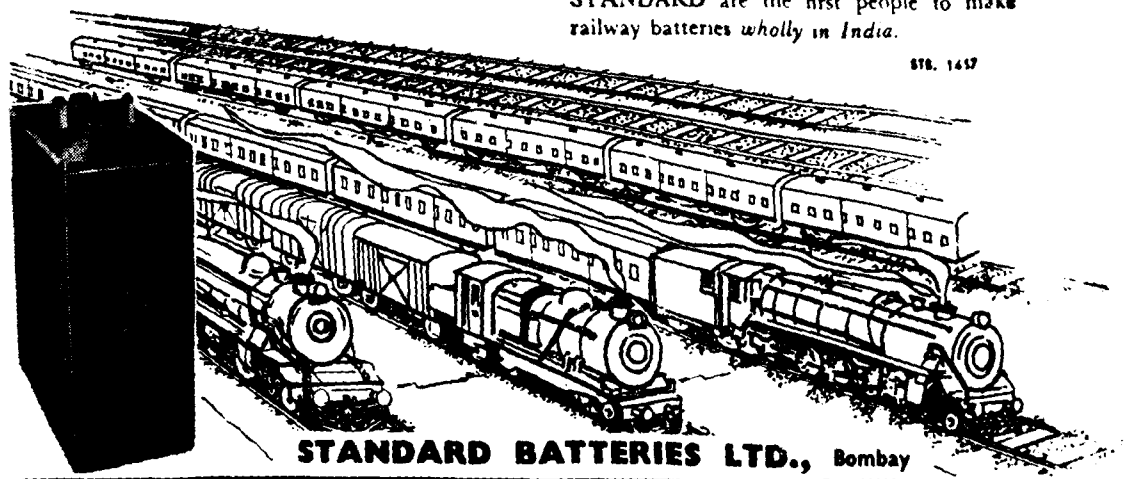
Standard
TRAIN-LIGHTING BATTERIES

EVERY DAY, Indian Railways carry well over 3 million passengers. Keeping these passengers comfortable every day, 24 hours a day, is one of the Railways' many tasks.

STANDARD batteries play a great part here. Hour after hour, day after day, they work the fans, lights and air conditioners on trains.

STANDARD are the first people to make railway batteries wholly in India.

578, 1457



STANDARD BATTERIES LTD., Bombay

April 1956

AHOBILAM IN ANDHRA

31

AHOBILAM IN ANDHRA

(Continued from page 23)

we reach the shrine where another aspect of Narasimha known as *Kroda-Narasimha* is installed. Here vegetation has grown so much that it is impossible to discern the deity clearly. Further away at a distance of two miles from this spot in the midst of virginal forest is the solitary shrine of 'Sri Malola Narasimha', in a cave scooped out of the mountain. Here the deity is in a very mild form as *Lakshmi-Narasimha* having his consort seated on his left thigh himself being in a seated pose. The utsava image of this deity—which is also in the form of Lakshmi Narasimha was brought away by the first Jeer of the Ahobila Mutt. Sri Adiwan Sadagopa Yatindra Mahadesikan for worship in his mutt, which image is still with the head of this mutt. Near this deity is a huge slab of stone which is called *Prahlada-bandha*, and it is believed that Sri Narasimha, after vanquishing his enemy became calm when Sri Lakshmi joined him. In that mild aspect, he asked his devotee Prahlada to sit on this slab and taught him the mysticism of the Divine name himself.

From this place at a distance of about three miles, still higher up, situated on the flank of a steep hill, is the abode of *Sri Jwala Narasimha*. The place is almost unapproachable and as there is no bridal path even to this place, the pilgrim has to engage the services of the local hill-men who are known as

'Chenchus', to carve out a way to this shrine and to accompany him, as the place is infested with wild animals and poisonous reptiles. It is said that in a small cave here, there is a rough carving of the *Ugra-Narasimha* image and beyond that the place looks as though it is set on fire. Near to this spot is a small monolithic pillar carved out of a projection in the rock, called *Ugrasthambam*. It is believed that Vishnu came out of this pillar as the ferocious lion man and then rushed to attack his enemy.

Five miles south of upper Ahobilam, situated on another hill is the shrine of *Sri Pavana Narasimha*, to which very few only had gone and worshipped.

Though Ahobilam is such a sacred place, the visitors to this holy spot are only few, because of its secluded location. Of course in recent years, the authorities of the Ahobila Mutt and the pious adherents of that institution had spent quite a lot of money in improving the place and providing the primary needs of the pilgrims, who are anxious to go there for worship. In spite of all these shortcomings, it is worth a visit especially during the summer months when the visitor is well paid for all his troubles as the place is far off from the turmoils of the busy world, communing as it were, with the magnificent creations of Dame Nature, who herself reveals the Creator's charming creations.

SANITARY ENGINEERS & CONTRACTORS

ENQUIRE

JOSHI & COMPANY

24 THAMBU CHETTY STREET

Post Box No. 1355

MADRAS-1

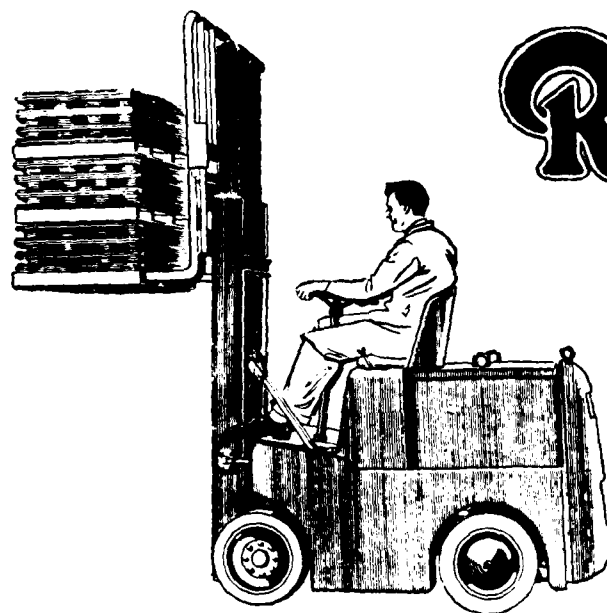
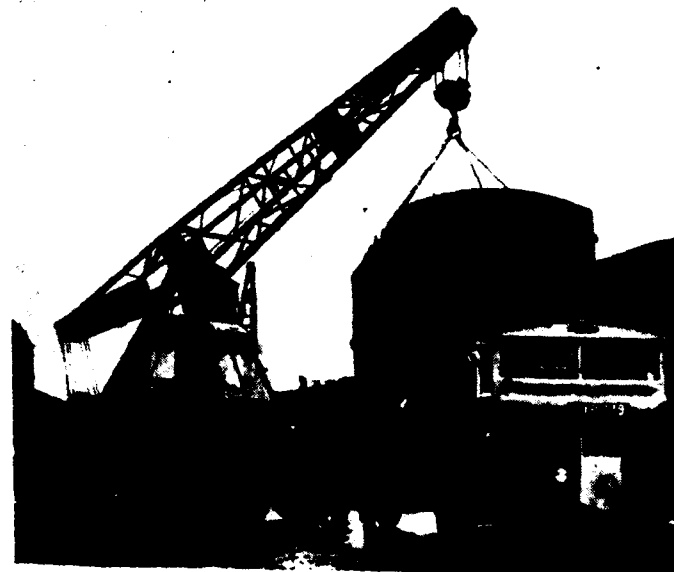
Phone: 2509

Grams: 'JOSHICO'

RAPIER

CRANES
&
EXCAVATORS
FOR ALL WORK

Guaranteed for
**THREE
YEARS**



Ransomes

**BATTERY ELECTRIC
FORKLIFT TRUCKS**

LOW RUNNING COST
LOW MAINTENANCE
LONG LIFE
NO FUMES
EFFICIENT
SILENT
CLEAN

AGENTS FOR SOUTH INDIA:

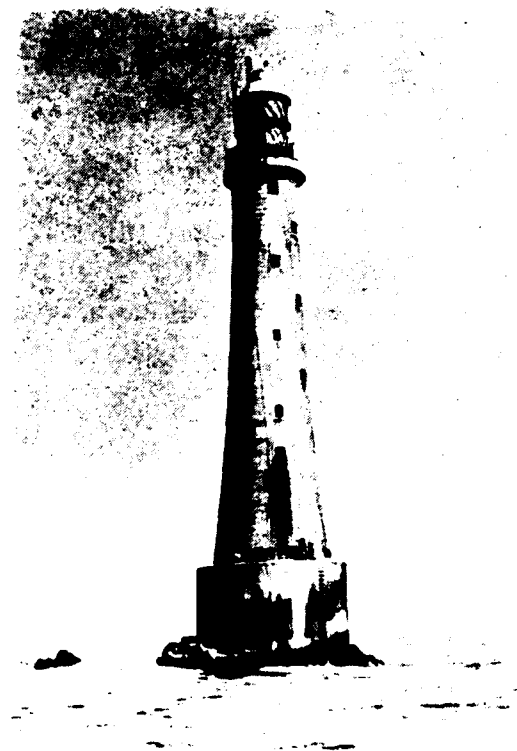
GORDON, WOODROFFE & CO. (Madras) LTD.
POST BOX No. 42 **MADRAS-1**

Phone: 2978

Grams: WOODROFFE

SIGNALS OF THE SEA

PAUL LEWIS



Bishops Rock Lighthouse, Scilly Isles

LIGHTHOUSES are the signals of the sea. Without their aid there would be nothing to guide the mariners through dangerous and difficult waters or keep them off a rocky shore.

The world's first lighthouse of any fame was at Pharos and was accredited to King Ptolemy of Egypt. The actual builder was Sostrates who was anxious that future generations should accord him the honour of having built it. He carved his own name in the stone and covering it with cement he engraved the King's name over it. In a few years the cement wore off, as it was intended to, to reveal Sostrates' name, carved deeply in the stone. Pharos lighthouse was very high, about four hundred feet, and a wood fire at the top was kept burning continually. In later years the Romans built many

lighthouses on the shores of Britain and the Mediterranean and they worked on the same principle.

The modern lighthouse claims the ancestry from the Tour de Cordouan at the mouth of the Gironde, which was built by the merchants of Bordeaux in A.D. 805 and maintained by a toll on every ship that entered or left the port. Like Pharos lighthouse a wood fire was kept burning continuously at the top and this method was employed in all early lighthouses. Later on coal was used but this was found to be expensive and dangerous. The Isle of May lighthouse in Scotland used four hundred tons of coal per annum. This method proved defective for in a gale the light would be brilliant on the windward side and practically invisible to leeward. This caused two ships of Britain's navy to

get wrecked near Dunbar in 1810 having mistaken a lime kiln for the actual lighthouse.

Candles were then tried as a means of illumination. In the mid eighteenth century a man named Smeaton built the third of the four lighthouses which have stood on the rocky site of Eddystone off the shores of England. He used a candelabrum with an inner and outer ring containing twenty-four candles. A clock was used which rang a gong every half hour to remind the keepers to snuff the candles. Oil burners followed but these did not give much better results. In 1870, a Frenchman named Aime Argand invented a burner consisting of a circular wick with a central draught which, when surrounded by a glass flue, gave a steady and brilliant flame. The multiple wick burner was developed from this. Auer von Welsbach invented the incandescent mantle in 1886. Originally this was used on land

with coal gas but petroleum vapourised in a suitable lamp proved equally effective. An oil burner with incandescent mantle is now in general use in lighthouses.

Electric light was first used in 1889 at the South Foreland Lighthouse, Great Britain, but it was not extensively applied in this country although it is in general use on the Continent and the United States. St. Catherine's, a lighthouse in the Isle of Wight, is the chief British example of electric lighting in the lighthouse. It has a light of three million candle power which is considered small compared with the one at Heligoland which is thirty-eight million candle power. Quite recently, one of India's lighthouses has been electrified. This was the nineteenth century kerosine-lit lighthouse in Madras situated over the High Court buildings. The candle power of this first high power electric light in India is nearly half a million and the

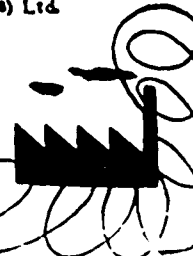
BY. 567.

THE ENDLESS THREAD

Through every spindle and every loom of the Buckingham & Carnatic Mills, there runs one thread. It is a thread which has been spun continuously through years of leadership in textiles, and which has never been broken. You cannot see this thread even with a microscope - yet of all the threads woven into Buckingham & Carnatic cloth, it is the one which people value most.

The name of this thread is *Quality*.

THE BUCKINGHAM & CARNATIC CO. LTD.
Managing Agents: Banny & Co. (Madras) Ltd.



visibility range is about 20 miles. A brand new lamp would have cost about two lakhs but this one cost less since part of the original design had been utilised. The candle power of the original lighthouse was 70,000.

Increasing light by reflectors was tried as early as 1763. Pieces of silvered glass were joined together to form a cone shaped or parabolic reflector. Later, silver metal reflectors took the place of glass, several lamps being used so that the light was shown all around, each with its own reflector. This was called the catoptric method and it soon gave way to the reflecting or dioptric method.

This was invented by a Frenchman, Augustin Fresnel, who tried to concentrate the light in a horizontal beam so that none of it would be wasted in an upwards or downwards direction. This he did by using a central bull's-eye lens surrounded by concentric rings of glass each of which projected a little beyond the previous one so that all the upwards and downwards rays of light were refracted into the horizontal beam. He further improved on this by adding reflecting prisms. To increase the intensity of the beam superimposed lenses are now used with a burner at the centre of each. To assist identification of the various lights they are shut off for varying intervals by a revolving screen or descending shutter.

Among the world's famous lighthouses are Round Island, 415,000 candle power, Eddystone, 292,000 candle power, Needles, 35,000 candle power, and

Godrevy Island, which is an unattended light, 68,000 candle power. Some lighthouses give indications other than light issuing the name and location by gramophone records and radio.

The maintenance of the lights must depend upon the human element: upon the men who spend most of their existence exiled from their homes and their fellowmen and upon whose vigilance depend the lives of thousands of seafarers. The dangers and hardships of their vocation is well illustrated by the relief of the Eddystone lighthouse in 1938. In November and December of that year a gale had lashed the coast of Cornwall for seven weeks. During this time the heavy seas never moderated. On December 5 a message was received from the Eddystone lighthouse that one of the keepers had been taken ill, and had to be brought ashore. A relief keeper arrived at Plymouth (about fourteen miles from the lighthouse) but day after day passed without the gale abating and the transfer was impossible. On December 12 the Trinity House steamer *Satellite* spent the whole day patrolling round the lighthouse. Many unsuccessful attempts were made and it was not until the eighteenth day that Jordan was got off the lighthouse in safety and then only by pouring oil on the sea around it.

The whole of the lighthouses of England are under the control of Trinity House: Commissioners of Northern Ireland control those of Scotland and the Irish lighthouses are supervised by the Dublin Ballast Board.

The Board have decided that the designation of the Anti-Corruption Officer should be changed to 'Vigilance Officer' and that the Anti-Corruption Organisation should henceforth be known as 'Vigilance Organisation'.

A "HILLMAN" ON THE PLAINS

V. S. S.

AIR-CONDITIONED by the khus-khus thatties inside his bungalow at Sterling Road, Aravamudhan was still feeling quite out of sorts on that Sunday noon. It was mid-May and a feeling of lassitude and fatigue took possession of one even as the creeping paralysis. Try as much as he could to read himself to sleep, Aravamudhan could neither read nor sleep, till out of sheer ennui he stepped into the verandah defying the heatwave.

Hardly twenty-five life was kind to him so far. Born of poor parents, by assiduity Aravamudhan had won the first rank and University medal in Physics Honours. He then joined the Guindy College, his widowed aunt coming to his succour, and secured the B.E. (Hons.) degree. And then the I.R.S.E., obtaining the top place thereby posted for training to Southern Railway. On completion of his probation the young engineer was married to Andal, the lovely daughter of Rajamanthra Praveena Sri K. Sesha Iyengar, the Chief Engineer of Mysore. Aravamudhan loved Andal as he never believed he could have loved a woman. Andal was so startlingly alive and the slim perfection of her body, the black splendour of her hair, the softness of her eyes and the glory of her general demeanour—it all intoxicated him. The six months they had lived together in that cosy bungalow of the Railway was a beautiful dream of poetry and romance. Then came the fierce summer and Andal who was born and bred in the cool atmosphere of Coorg could not stand it. Just then Padmanabhan, her brother, a D. F. O., at Ooty had sent them an invitation to spend the summer with them on the hills. Aravamudhan could not think of a holiday so soon after his confirmation and so he sent Andal to Ooty. And there he was standing on the verandah quite wretched and forlorn on that hot Sunday noon.

Three weeks past since Andal left him and save for one brief letter he

had not had any news from her. Would he get an Express delivery letter from her today, he wondered. As he was scanning towards the gate there entered an old man with a stoop supporting himself on a heavy staff who fumed his way down the drive. Unkempt and dragging his steps as near Aravamudhan as possible the old man made a low obeisance.

"I am a reader of faces, Yajamon, they call me a physiognomist, these parts. I have done it now for all the sahibs near about and I wish to do it for Yajamon."

"Dry up and hop it", said Aravamudhan in anger "and listen, I am an engineer not a traffic bloke."

"No, Yajamon, not so harsh please. Give me a chance and then judge. Yajamon's face is very interesting study indeed, the luckiest face on this side of the Vindhya."

"There, there . . . that old joke will pass muster with John and company not with Aravamudhan, I.R.S.E. Now, get going."

"Not so fast, Yajamon. I will tell you a small bit and then you will scream for more. And as I was entering the compound, my Yajamon, was engrossed bitifully pining for his lady love up on the blue hills. Dare you deny it, Yajamon?"

The small still voices would not allow Aravamudhan to deny his assertion and taking advantage of the momentary silence, the old man proceeded.

"No need to pine any longer, dear Yajamon, for your wife will join you in three days' time, driving in your own car. Rejoice!"

"Oh, stow it man!" shouted Aravamudhan in great wrath "I knew you were a bluffer. My wife will not come so soon, nor do I own a car nor does my wife know to drive a car. So get out of here before I change my mind and call in the police."

April 1956

A "HILLMAN" ON THE PLAINS

37

"Why should Yajamon lose his temper. I am not asking for a single pie now but shall begone now. But that big fold there on the forehead indicates big money in the offing. Let me see now, it is the first prize in a competition, yes, that is sure. Now good-bye and I will call in later to claim my share of the prize money."

"The old blithering idiot fancies I am a fool. I am glad he is gone." Just then the postman arrived with an Express letter. It was from the Rajamanthra Praveena and his face tell. Sri Sesha Iyengar had said that after his retirement his six-seater old 'Oldsmobile' was of no more use to him and he had exchanged it for the latest 'Hillman' paying the small difference. The car was wonderfully roadworthy and he had great pleasure in offering it to him and will he please accept this small present. He stated further that he was arranging to send the car over to Madras shortly under proper escort. Aravamudhan was delighted. It was a gentleman's agreement at the time of his marriage and he had never bargained for a car. He could now go to office in his own car and what is more he could take his Andal for a daily spin on the marina! It was great! Ay, the old man was not wrong, but then . . . The phone was ringing and he hurried inside.

It was the PA to CE speaking. Aravamudhan was ordered to proceed by that evening's GIR Special, bound to Waltair, with the GIR, GM, and the Heads of Departments. Aravamudhan left.

Next Thursday morning when he taxied home he found the portico occupied by a beautiful blue sedan. Aravamudhan dashed in and who should greet him but his dearest Andal coming out of the side drawing room laughing as merrily as ever. Quickly gaining his composure deftly. Aravamudhan queried "and when did you arrive, Andal, and pray who is the guest in your car at the portico." Andal restraining her laughter the while "Excuse please. Have your coffee

first and I will tell the story. I am the guest that arrived in your car, Appa's present for you. I came here last evening accompanied by old Basavanna, from Bangalore. It was a glorious drive. Whilst at Ooty Manni fell sick and Anna took her to Bangalore and of course I accompanied them in their Buick. It was after my arrival that Appa wrote to you and it is at my earnest importunity that he agreed to black out the news of our arrival from Ooty. I wished to give the surprise of your life by arriving in your car. I was at the wheel—Manni taught me to drive in no time. But, why are you looking so funny! Here is your Andal, permanent guest-cum-driver. Could you ask for more?"

Aravamudhan's joy knew no bounds. Even as he was sipping the coffee the words of the old man with the stoop came vividly to his mind. It was then that his wife handed him a cover and when he opened it, he found a crossed cheque for Rs. 1,000 issued by the Jupiter Straightwords Corporation, on the Central Bank of India, Madras. Andal then interposed and said that whilst at Ooty she had in an idle moment filled in a coupon under his name and address and posted it and then forgot all about it. Whilst out shopping the other evening at Bangalore she found the signboard of the Jupiter's and out of sheer curiosity stepped in. The results were announced the previous day and looking at the board imagine her surprise when she found her husband was the winner of the first prize. How she had wished then that she had sent the entry in her own name! "You would then have drawn a blank sure, dearest. It's all my luck, you forget!" asserted Aravamudhan vehemently.

As he returned home that evening whom does he find except the old man with the stoop. Quite in a happy frame of mind, he dived his hand into his pocket and tossed him a Ten Rupee note and dashed in for tea.

That evening they drove to their friends the Murthys. Srinivasa Murthy

was a Burmah-Shell Engineer and an old classmate of his both in the Presidency College and Guindy College. His amiable wife Vedavalli and Andal were inseparable right from their college. They were living at Chetput and it was a pleasant evening they spent there. As they were about to leave the place who should come in except the old bloke, and no stoop now, with a huge bouquet and after making the usual obeisance presented it to Aravamudhan and disappeared. Aravamudhan was aghast and being an I.R.S.E., quickly saw through the game. He was however not quick enough for Vedavalli who wished to know why Manickam's presence should have staggered Aravamudhan. That was the signal

for roars of laughter and banter on end.

Andal would not leave it at that but pursued the joke right up to the gate till in sheer desperation Aravamudhan ventured to suggest that Andal should join her Anna and spend the rest of the season at Ooty.

"Well, there will be no need, now, to go to the hills for with a 'Hillman' you could still get the delight of the hills even on the plains. You cannot afford to miss the drive on the second best beach in the world" rejoined Andal and broke into boisterous laughter.

Note.—The setting and the characters of this story are drawn from fancy and do not represent people or places.

DI5032

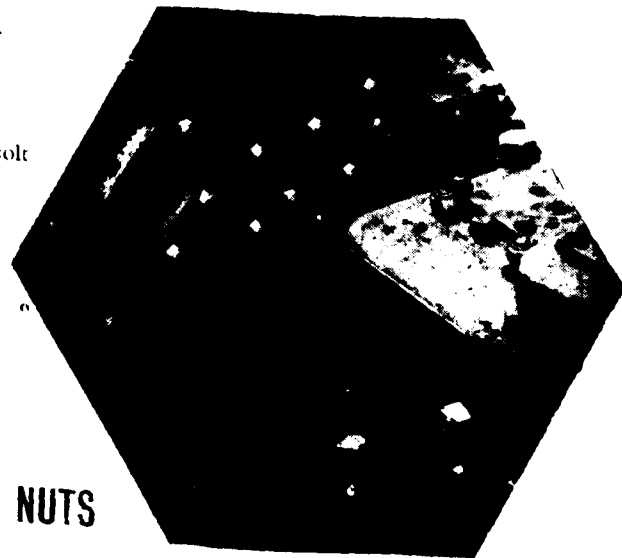
Indian Magazines

1394 5865 4x51

FILING PROOF

nothing rattles the NYLOC

No amount of vibration can slacken off the Nyloc Nut, however many times it is used. The special nylon insert moulds itself round the thread of the bolt and refuses to budge, despite oil, moisture and temperature extremes. Nyloc Self-Locking Nuts are used extensively by railway engineers on locomotives, rolling stock, bridges, permanent ways, etc., throughout the world.



SIMMONDS SELF-LOCKING NUTS

Distributed by: JESSOP & Co. Ltd., 63, Netaji Subhas Road, Calcutta 1 PARRY & Co. Ltd., Dara House, Post Box 12, Madras 1
Manufactured by: SIMMONDS AEROCESORIES LTD., TREFOREST, PONTYPRIDD, GLAMORGAN, G.T. BRITAIN. A MEMBER OF THE FIRTH CLEVELAND GROUP

"ACTION FOR ACCIDENTS"

OPRAIL

A SERIOUS rail disaster always makes headline news in the press. Below the large headlines the newspaper reader will be given more details of the accident which has perhaps taken a heavy toll in human lives. But what the average man does not know is how railway executives and staff go into action after the accident. This is how it is tackled.

The needle pointer of the electric block instrument on the desk of the A.S.M. Station Master is indicating 'train-on-line'. The A.S.M. knows that a train—it may be an express or mail—has left the preceding station moving fast towards his station. Outside in the dark night can be seen the green lights of the various signals all set for the train to run through. The hands of the station clock creep slowly from minute mark to minute mark. It is time for the fast train, but the A.S.M. hears no distant rumble of the approaching train. The minutes pass—five, ten, twenty—and outside there is merely the silence of the night. The train is overdue, and the A.S.M. knows there is something wrong.

Time passes slowly, but ominously. The lonely man on duty waiting anxiously for the roar of the train perhaps feels a fear chill pass over him. Suddenly, somebody bursts into the station office with the grim news. There has been an accident. The passenger-packed train hurtling through the night, has jumped the track, and there is the shambles of a terrible wreckage with people killed, dying and injured.

The A.S.M. pounces for his telephone, gets through to the district or divisional control office and passes on the grim news. Next, he pulls out his accident message pad, writes out the wire and taps it out over his Morse instruments to all concerned.

The scene now shifts to the Control room. The Deputy Controller on duty rings up the locomotive shed to give

the hooter alarm which is a warning for the accident relief train and staff to get ready to proceed to the site of the accident. Control then contacts the District Medical Officer, who promptly mobilises all medical staff—doctors, nurses, dressers, etc.—and equipment like stretchers, blankets, drugs, surgical instruments, dressing materials. The medical team, with the necessary equipment, will also be on that accident relief train with no time wasted.

Control will next contact by phone the divisional or district officers, and all the railway staff who will be required to go to the site of the accident for relief operations. While all this activity is in progress, messages either by telephone or wireless, if available, are being relayed to local Government and Police officials, the Ministry of Railways, the General Manager and departmental chiefs at headquarters, as also the Press. By this time one of the local Railway officers has taken over charge of all matters relating to the accident and will direct operations from the Control centre.

When the accident relief train is ready with officers, staff and the medical team, it is rushed to the site of the accident with all possible speed.

But what is happening at the site of the accident? Any railway staff working or travelling on the train, who are alive and not injured, are rendering all possible aid to the victims. The guard has protected his train in front and rear by appropriate signals. Civil officials in the vicinity, who have received news of the accident, are probably already at the site; the doctors attending to injured passengers, the police keeping a watch around the scene of the disaster to protect the belongings of passengers, railway and postal property; and also probing around for any evidence as to the cause of the accident.

When the relief train arrives, a plan of operation is devised and put into action swiftly. The first consideration

is for the injured, with the medical team rendering succour and aid to those who need it. Those who are seriously injured get prior attention, everything possible being done in the way of dressing wounds, and administering drugs or stimulants. If possible, a train from either direction may have since been brought to the scene of the accident, and seriously injured passengers requiring hospital treatment, are put on to this train, and sent to the nearest railway or civil hospital, with medical men as escorts.

Apart from the medical aid given by doctors, a detailed record must be kept of the names, addresses and nature of injuries sustained by each person. This is done usually by a Railway officer, or senior Inspector, with a Police official in attendance. It is not always easy to get this information, as some of the victims may be unconscious, but whatever means are available, must be used to establish identities. For those who have been killed, the doctors must certify that life is extinct, and aided by the police, efforts made to establish identities of those killed. Where possible too, relatives of those killed or injured, are informed as quickly as possible by wire.

While the medical staff are on their specialised task, the senior railway officer at site is busy directing all other operations, the locomotive men to ascertain extent of damage to the engine, the carriage staff to the rolling stock, and the engineering men checking on the track and permanent-way. An Officer, or Inspector, is detailed to keep a time record of everything that is being done at the site. A field telephone has also been rigged up, so that the railway official manning this can pass on information and instructions to stations, control offices, etc.

Obviously, the first consideration in a serious rail disaster is for the victims, and everything possible is done for them. But apart from this, there are other vital problems to be tackled, among which is to restore through communication as quickly as possible.

A railway accident, especially on the main running lines, causes a serious interruption to the smooth flow of traffic. If the accident has occurred on a double-line section, and obstructed only one of the two running lines, the other being clear of wreckage, the problem of getting trains moving is eased considerably. The free track is immediately used to pass trains, even though it may be at a 'dead-slow' speed of not more than five miles an hour. If this happens to be the case, orders are issued promptly from the senior railway officer on the spot to the Control Offices for regulating the movement of trains in both up and down directions.

But if the wreckage has obstructed both the tracks on a double-line stretch, or if the accident has occurred on a single-line section, other methods must be adopted promptly, so that traffic can move as soon as possible. This is usually done by diverting the trains to alternative routes, until at least one track has been cleared and any damage done repaired, so that trains can start moving again. On a single-line section, however, the obstructions caused by a big wreck, cannot even be cleared in a few hours, but action is taken immediately to get the track cleared and repaired so that traffic can move again. Until this stage is achieved, the other alternative to keep traffic moving is by transshipment. By this method, a train is worked up to within a safe distance of the wreck on either side and passengers and goods transhipped.

Now, let us see how the wreckage is cleared so that at least one track can be freed and repaired to pass trains. The huge loco after jumping the track has plunged down an embankment to come to rest on its side. Some of the passenger coaches too may have followed the loco, and others may have telescoped. Perhaps the coaches towards the rear of the train are still upright, but have straddled both tracks. In clearing-up operations those coaches that are still upright, and whose

wheels have merely jumped the track are first tackled re-railed and detached from the rest of the train. These are then drawn away to a safe distance.

With the lesser damaged part of the train cleared away, the herculean task of clearing the track of the capsized coaches are then tackled. Even with the help of a team of heavy-duty steam cranes, the task of lifting and re-railing is not always possible, as the damage to the rolling stock is severe and extensive. In such contingencies other measures are adopted. The damaged coaches are thrown clear of the track with the help of the big steam cranes, so that the permanent-way team can quickly restore the track to a condition to permit trains moving over at slow speed.

Even after a serious rail disaster, within a few days, perhaps even within forty-eight hours from the time an accident occurs, the running lines are sufficiently cleared and repaired to pass both passenger and goods trains at a restricted speed, leaving only the grim reminder of the huge and helpless loco lying on its side, and the smashed coaches, on either side of the running lines. Some may think that these damaged engines and coaches will be forgotten and left to crumble away into rusty scrap-iron. Not at all. A loco costs about a lakh of rupees, and each bogie coach nearly half-a-lakh. A railway administration cannot afford to allow so much valuable material to rot away as waste. In spite of the extensive damage, repairs are still possible, or, where this is not possible, such component parts that are still serviceable, are salvaged for use on other coaches or locomotives.

So, working day and night, the dismantling gangs strip the engine and coaches and load the salvaged parts on to wagons to be taken to the railway workshops. Eventually only the skeleton frames of loco and coaches remain. These too are lifted and swung by cranes on to long, flat bogie rail trucks and sent to the workshops. Long before these salvage operations are

undertaken, the running lines have been thoroughly repaired and normal through running of trains has been restored. Within a fortnight there is little or no trace of the awful train wreck.

One can now ask, is this all there is to a railway accident? Do the railway executives sit back and forget all about what has occurred? Far from it. There must be a cause for every accident, major or minor, and this cause must be found. During the process of clearing up at the site, railway, police and civil officers, are on the alert, and keep a detailed record of all the observable factors, that may subsequently be valuable evidence to find the cause of the accident. Then within a week or ten days after the occurrence, an enquiry is held, presided over by the Government Inspector of Railways in the case of major disasters. At this enquiry the evidence of every railwayman concerned with the accident and the operating of the train over that particular section, both before and after the accident, is recorded. Non-railwaymen, civil and police officials, passengers who happened to have been travelling on the ill-fated train, are also invited to give evidence.

After all the relevant evidence is collected and recorded, and official documents pertaining to the movement of the train or trains involved taken, the committee of enquiry must sift and ponder carefully what they have before them, and then draw up their considered conclusions, based only on the facts disclosed at the enquiry. A finding is then drafted and the complete report with supporting evidence and documents sent to the Ministry of Railways.

The findings of an enquiry into a major railway accident may often be grim for some railwaymen, as if the evidence has conclusively proved that a train wreck is due to any act of commission or omission on the part of railway staff, or failure to observe the prescribed working rules, those railwaymen found guilty may even have to face a prison sentence.

METRO-CAMMELL

rolling stock for electrified railways

INDIAN GOVERNMENT RAILWAYS
Third Class
LIGHTWEIGHT
STEEL
Motor Coach

LONDON TRANSPORT EXECUTIVE
ALUMINIUM
ALLOY
surface line coach

CENTRAL RAILWAY OF BRAZIL
Second Class
STEEL
Motor Coach

METROPOLITAN-CAMMELL CARRIAGE & WAGON CO. LTD.
Head Office: Saltley, Birmingham 8. London Office: Vickers House, Broadway, Westminster, S.W.1.
Represented in India by: VICKERS INDIA LTD., Killick Building, Home Street, Bombay 1

APPRAISING THE APPLICANT

5. THE INTERVIEW

A. V. SUBRAMANIAN

Regional Personnel Officer, Royapuram

AFTER 30 years of married life one finds he has not completely understood his wife. How can an applicant be appraised in an interview of five minutes duration" asks the critic. The reply of course is in part that an employer need not understand his employee in all the facets in which a husband needs to know his wife. But the truth is that the five-minute interview stands condemned as an anachronism; it is as much a thing of the past as the Stone Age and the Crusades.

Consider what happens in a typical interview when an executive has to "hire a hand".

On entering the room the applicant faces a peevish-looking person. He snaps questions at him, "Name? Previous experience? Certificates?"—and before he comes out of the benumbing sensation of a frontal assault he comes out of the room.

Let us not be too hard on the executive. In his defence one has to say this; he is hard-pressed for time and he does not know the nuances and subtleties of psychology. Further if the executive is the self-made type who hewed his way from the log cabin to commercial success he is apt to pride himself upon his shrewdness in the judgment of men. He does not stand in need of all this new-fangled nonsense, thank you, he can grade his candidates the moment he sees them. Also in the recruitment of unskilled labour probably there is not much point in studying the personality of every applicant. There is time enough for the boss to rate his men before they become ripe for a promotion from unskilled level to the higher skilled and supervisory strata.

But danger lurks in the belief so widely held by executives in charge of big industrial enterprises, that long-drawn-out interviews are a mere waste of time and the only purpose of an interview is to enable the boss to "have a look" at the candidate before he is employed. Even from the point of view of enlightened self interest the employer would have to study the personality of all his men with the exception perhaps of the purely seasonal extra hands. In the present day when an employee is looked upon as a workman and not a "hand"—when it is increasingly realised that even he has a head and a heart and hopes and fears and even perhaps a soul—the employer must needs have a peep into the personality of his men through the window of the interview.

If then, it is accepted that interview is an essential step in the recruitment process and it is also granted that the average executive has little time to spare for it, it is clear that the interview to be of use should be short and swift but every minute of it should be carefully planned for in advance and properly utilised. It is really an expert's job, that of the interviewer. It takes an expert to analyse the requirements of a job, to discover those requirements in the applicant interviewed, to look for those aspects of personality which the interview reveals and this is important—to eschew hasty conclusions based upon certain peculiarities of behaviour of the candidate.

The analysis of the requirements of a job has in the present day become so very technical that not every psychologist could attempt to do it with any degree of success. Specialists who have devoted their life time to

this question are available in the West and their advice is usually taken. A specialist analyses the requirements of a job after study and observation and prepares a chart known as the Job Profile. The interviewer has now merely to study the qualities of the candidates offering and rank them in accordance with their degree of approximation to the Job Profile; the closer he is to the Job Profile the better fitted he is for the job. During the interview itself, the interviewer does not merely find out how nearly the candidates approximate to the Job Profile, but attempts to give some information to them regarding the job, its surroundings and atmosphere. The reason is easy: just as the employer has the right to reject my candidature I have the right to refuse his offer.

But one is apt to place too much reliance on interviews in the modern day. An interview is very useful especially when combined with other methods of appraising the applicant. But one chief factor making for unreliability in interviews is that the candidate is not at his best during an interview. Interviews induce nervousness in candidates and it is generally noticed that they have a tendency to talk in jerks and in catch-words and phrases during an interview. The interviewer is tempted to make deductions from physiognomy and the personal appearance of the candidate but it has now been proved that the so called sciences of physiognomy and craniology—the processes of making deductions of character and attitudes from facial features and bumps in the cranium—have now been dismissed as shibboleths by modern sciences. Further, the personal predilections of the interviewer are brought to play in the assessment; this is an important factor which makes conclusions reached during interviews unreliable; an interview is in the main a subjective appraisal and lacks complete objectivity. If an interviewer, however, observes certain precautions many of these defects can be eradicated. As

DOES ADVERTISING REALLY REDUCE THE PRICE?

In the case of mass production, producing the merchandise, wrapping it in quantities so large, the production costs are cut. In order to produce in large quantities, the manufacturer should sell in large quantities and that is where advertising plays its important part. Through the means of advertisement, the manufacturer can tell many more people about his product than if he employed thousands of salesmen to call at every house. When more people know about the product, more of them purchase it and this means a lower price because of large-scale production, and cost of each item comes down. Advertising helps both the public and the manufacturer and because 'Southrailnews' accepts only Advertisers of repute, you can place reliance on what you say in its advertisement pages.

the candidates are only youngmen of less than 25 (the age limit for entry into Railway service is 18 to 30), the interviewer should look for promise rather than achievement. A growing absorbant mind is to be preferred to one that is complacent. Eager inquisitive natures though lacking balance to some extent are to be accepted in preference to prim and balanced ones as the latter will be likely to remain smug and self-satisfied right through life.

The interviewer should also realize that habits are not general but specific. For instance, the candidate who dresses neatly need not work neatly. His neatness should not be assumed to be a general habit but may well be confined to the sartorial field. To get over the nervousness of candidates the interviewer must be a man of outgoing personality—an extrovert—who has charm and pleasantness of manners through which he is able to put the candidate at ease. The point is to get the candidate to talk freely; this is the essence of the interview. Disapproval of the candidate's attitudes should not be expressed, as nothing tends to throw his whole personality into confusion than such a thing. The right thing for the interviewer is to put questions on the hobbies of the

candidates, his interests and special aptitudes. Shy and sensitive men have been found to thaw out into articulation when the conversation veers round to the question of their hobbies.

In Railway service the general intelligence of candidates is tested by means of a written examination which is followed by an interview. As the types of jobs offered in the Railways require widely different temperaments, it would be a good idea if the interviews are utilized to find out into which job each candidate can be fitted. The candidate who shows clearly sedentary interests can probably be recruited for the post of an Office Clerk while the out-door type whose predilections can be elicited during the interview can probably go as a Commercial Clerk or as a Ticket Collector. The interview in such cases comes to serve a twofold purpose—it is an integral part of the appraisal machinery to test the suitability of the candidate for any employment in the Railways and then as a next step, it serves as a machinery for effecting job placement. Such an interview would necessarily take a little more time but the harvest will be well worth the trouble.

DALMIA
INSULATORS
AND
ACID JARS

with high-class finish for
Excellent Performance.

DALMIA CEMENT
(BHARAT) LIMITED
DALMIAPURAM (TIRUCHIRAPALLI)

Price 1956

ON COURTESY

*Excerpts from lectures delivered at the Central Training School
to Staff of the Traffic and Commercial Department.*

V. RAMASUBBAN

HUMAN relationship, in all its aspects has a great part to play in the successful progress of a Public Utility Concern. The relationship between the Employee and the User has to be extremely cordial, and this, to a very large extent depends on the code of conduct the former follows—the moral principles by which he is guided, the mode of living he adopts and the loyalty and the devotion to duty he evinces.

We in the Railway sell Transport. We sell it at Stations, Booking Offices, Goods-sheds and on Trains. The Station Masters, the Booking Clerks, the Goods Clerks, the Train Examiners, the Electricians, etc., are all either Branch Managers or Salesmen. Our salesmanship should be as effective as that of the ideal shop-keeper if we as a concern are to progress.

Transport is the largest industry in the world today and of that industry, the Railways form by far the largest part. The dependence of modern civilisation upon transportation for continued progress and improvement becomes more evident each year. No nation can reach an advanced stage of development without adequate facilities for moving commodities and people. For some of us who have been working in the Railway for a number of years it seems necessary to remember constantly that the Railway is similar to a large chain store where we produce the maximum Transport and sell it to our customers, the Public—no matter to what department we belong. The new entrant to the Railway service has probably no prejudices and is not trammelled by departmental interests, and is able to think clearly in the light of

common purpose and direct his energies to that end.

To be very good Salesmen, we have to possess the requirements of courtesy, service and smartness. Courtesy is something more than mere politeness. It keeps the wheels of human relationship moving smoothly for ever. Very few of us are born rude. It is the breeding that counts in moulding our behaviour with others and courtesy and good behaviour have their origin in our infancy when we had our first impact on the outside world.

The seven commandments of Courteous behaviour may be summed up as below :—

- (1) Wear a smile.
- (2) Go out of your way to help a customer.
- (3) Do not point to his error.
- (4) Make liberal use of polite expressions.
- (5) Take genuine interest in redressing the complaints of passengers and others.
- (6) Be firm, but not rude, with offenders.
- (7) Be particularly considerate to passengers travelling Third Class.

Our General Rules enjoin that "the conduct of the Railway servant shall be prompt, civil and obliging, and that every Railway servant shall at all times afford every proper facility and be careful to give correct information to the public". The public are naturally inclined to a large extent, to judge the Railways by the Staff they

April 1956

ON COURTESY

47

meet. On the degree of helpfulness and courtesy they receive, will depend our reputation and our progress or the reverse in the future. If we give them cause to dislike us, they will not be likely to use the Railway for their travel, or the transport of their goods, as far as this is practicable for them. It is necessary to treat each customer as you would like to be treated, to make him welcome and attend on him if he has any difficulties. If this is not possible, take him to someone who can deal with the matter on hand. Do not enter into arguments with the passenger or a client. Even if you win the argument, you lose his goodwill and possibly his business. Respond cheerfully to enquiries and remember that although a question may seem silly to you, he may be in a strange place, and really wants to clear his difficulties. Learn the answers to the everyday enquiries you get, and find out who can answer the others. Being courteous, does not mean being servile. Attentiveness and helpfulness in difficult conditions is what is required. And then when complaints are made to you, listen attentively as if you have never heard the complaint before, allowing the complainant to say all he wants. At the end of it, express regret that he should feel he had cause for complaint and if it cannot possibly be cleared on the spot, obtain his name and address and tell him that his complaint will have attention. Apologise to him on behalf of the Administration for the trouble and inconvenience which had been caused to him, remembering that the customer is always free to show displeasure. The little words "please", "I am sorry", "I beg your pardon", mean a great deal in making good relations with our customers. Kind words, though they cost little, mean much.

An English Tram Conductor deals with thousands of passengers during his shift of eight hours and is the only

person to issue tickets and direct the passengers to their seats. But for every passenger, he has kind words to say such as "ticket please", "thank you", and "change correct, Sir", and so on. He even attempts a conversation on the weather.

Third class passengers comprise the largest cross section of the travelling public and most of them find their way from villages which are miles away from the station and have probably to undergo a tedious journey by bullock cart or by walk. To them the Railway Station is a strange place and the Railway Officials in their smart uniforms seem greatly important and awe inspiring. They have a hundred questions to ask and many difficulties to be cleared up. It is here that the value and worth of each Railway Official will be assessed. It is not merely enough to be nice and courteous to the First Class passenger and to look after him, but it is most essential that the third class passenger, especially the rural uneducated type, carries with him an everlasting impression of the service that is rendered to him and the courtesy extended to him by the Railway Staff.

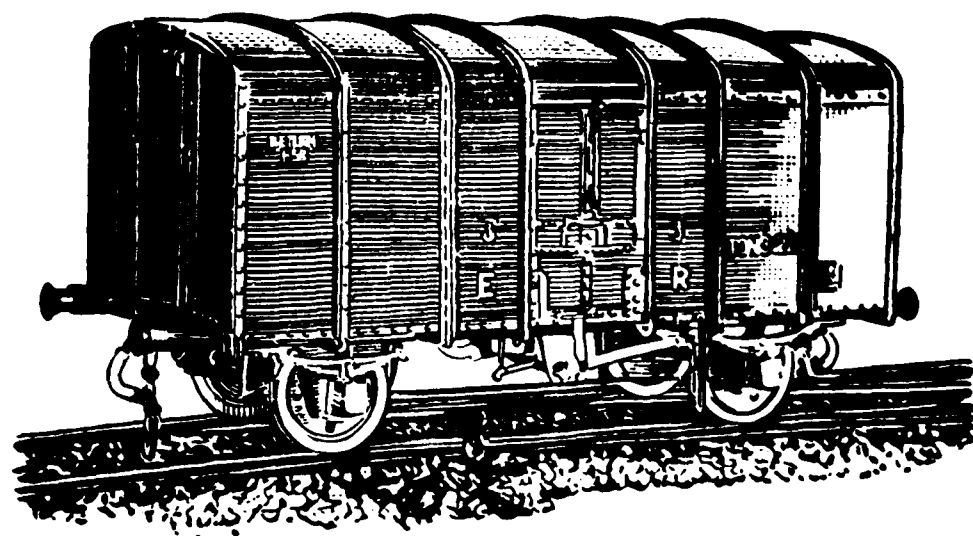
Courtesy begets courtesy. It is possible however that there are persons who had been treated badly at sometime or other by some railway servant and who carry with them a grudge against the railway in general and a grouse against all railway servants. These people are very difficult to appease. But if they are rude, irritated, impatient or unreasonable, try to see their point of view and you will find that the atmosphere is relieved of tension. Be anxious to remove all cause for ill-will and continuously practice being courteous at all times and under all conditions so that it becomes almost second nature to you to behave courteously.

(To be continued)



ISW

**FOR RAILWAY WAGONS,
SPRINGS, DROP STAMPINGS
AND FORGINGS**



SEND YOUR ENQUIRIES TO
INDIAN STANDARD WAGON CO., LTD.
HOWRAH

Works at BURNPUR

MANAGING AGENTS

MARTIN BURN LIMITED

12 MISSION ROW, CALCUTTA 1

Branches: Bombay New Delhi Kanpur

AXLE COUNTING EQUIPMENT FOR RAILWAY SIGNALLING

O. S. MURTHY

I INTERVIEWED the Signal Engineer of the Swiss Federal Railways and explained the problem we are facing in India, with regard to the shortage of wooden sleepers in relation to the track circuiting on suburban railways' electrification. I enquired whether the axle counting device used in the Swiss Federal Railways for signalling purposes has been satisfactory and whether they are considering the extension of its use more generally.

I was given to understand that the Swiss Federal Railways have two types of axle counting installations :

- (1) The 'Integra' type put in the market by Messrs. Integra, Wallisellen-Zurich.
- (2) The 'Hasler' type of track magnet manufactured by Messrs. Hasler of Bern.

The 'Integra' installation was under trial for a number of years and has now been in service for the last five years in St. Gotthardt. There are a few other installations also of the 'Integra' type on the line.

The 'Hasler' type was under trial for three years and is now in use in Bern-yard. Both the types have been used for reducing the length of the block section.

The principle of the axle counting in both the types is the same, i.e., the Magnetic field between an installed magnet and the rail is cut by the wheel of the rolling stock and induces current which works electrical relays. The further counting and operation of the colour light signals is similar to a telephone installation. Two such magnets are used in each block section and the section is blocked as soon as the first magnet starts the counting in the relays. The section

is clear when an equal number of axles pass the second magnet.

In both the types of installations there have not been any special maintenance problems, but only normal maintenance that is necessary for other electrical installations block signals.

The 'Integra' type does not work when the axle speed is below 3 km/h but the 'Hasler' type will count at all speeds up to 50 mph. In this latter case a strong field is induced by the magnet and it is only the variation of the flux that operates the counting device. Swiss Federal Railways have a scheme for the installation of remote control crossing station in the Simplon tunnel on the 'Hasler' system.

I inspected the 'Hasler' installation installed in Bern-yard for experimental purposes. The counter has been linked with ordinary track circuiting to verify its accuracy. I also visited an automatic block section installed between stations, i.e. between Palezieux and Puidoux near Lausanne. The number of impulses are counted, added and then subtracted on standard telephone relays. I enquired whether in tropical countries and in dusty situations these relays could be relied upon. I was informed by Messrs. Hasler that they can seal the units for dusty and tropical use as they have done in the case of automatic telephones manufactured by them for the army use. As regards the use of push trolleys on sections when axle counting device is introduced, I was informed that it is possible to set the relays so that two axles could be left out; but this is not desirable as the axle counting would in that case not detect the parting of a vehicle. It would therefore be desirable to design our push trolleys so as not to affect the installation.

It was the opinion of the Signal Engineer of the Swiss Federal Railways that the axle counting is satisfactory and could be used for suburban traffic. It is the intention of the Swiss Federal Railways to use it for suburban traffic in Zurich in the near future. Messrs. Hasler have received enquiries from Chile, Portugal and also from India.

The use of axle counting on other European railways is also receiving attention because more and more concrete sleepers are being laid in the tracks. A commission of European Railway Signal Engineers is now studying the problem and has visited St. Gotthardt recently to inspect the 'Integra' type of installation there.

I also interviewed the Director of the Integra Ltd, Zurich, regarding their equipment. I understand from him that his system needs a speed of about 0.6 m.p.h. to start functioning

and in his opinion this speed will be reached very soon under condition of suburban traction. He also mentioned that in other types the number of contacts are large and the maintenance would increase. I understand from him that Messrs. Siemens in Germany have also produced an axle counting device. Even with an axle counting device, track circuiting in station yards would be inevitable. He mentioned that the GIP bought one installation from them some years ago, but this was not introduced. The Ex.-G.I.P. put in wooden dummy blocks before the magnets were installed and some part of the rolling stock damaged these wooden blocks. It would not be possible for Messrs. Integra to bring down the level of the top of the magnet.

The Engineers of these two firms mentioned above would be only too glad to furnish any further information required on their installations.



KEEPING THE HOUSE TIDY

RAMA SRINIVASAN

WE both heard the cycle bell and sprinted to the front door. But I beat him to it by a few seconds, as he had been in the bathroom washing his face when the eagerly awaited bell rang. I grabbed the latest issue of Saturday Evening Post from the book-stall boy's hand, grinned triumphantly at my husband as I returned to the drawing room, and settled down comfortably on a sofa with the magazine, prepared to spend the evening thus. He gloweringly lowered himself on to another sofa.

There was silence in the room for a while, broken only by the rustling of the pages of the magazine, as I turned them over.

"It is an absolute disgrace," he shouted so suddenly that the magazine slid from my hands, as I shot up from the sofa, thoroughly alarmed.

"What is?" I enquired anxiously, stooping to pick up the magazine.

"The way you keep your house," he said sharply.

"O-o-oh! Is that all," I uttered with a sense of relief, and subsided back on the sofa, reverting to the magazine.

"Look what a beautiful house Mrs. Karunakaran keeps, everything so polished and shining. No dust on the furniture, no grease stains on sofa upholstery, fresh flowers in the flower vases, clean table-cloths on the tables, the floor, the furniture, the bric-a-brac all looking their best. It is a pleasure to look round her rooms." He grew quite eloquent and dramatic, and I was pricked by now.

"Ha!" I exclaimed. "Just like a page from a magazine, isn't it? But if I had half a dozen servants to order about, our house will be like that too."

"Not you," he scoffed. "Good housekeeping needs a knack. Here

you are, not able to manage two lazy louts. If you had half a dozen, they would probably be managing you."

"All right. Now tell me what is so disgraceful about the way I keep my house? I am sure it is no more untidy than Ramachandran's where you like to go so often."

"It is no consolation to compare our house with one even more untidy," he retorted. "Now look at this—Huh!" he said, with a grimace, as he ran his fingers over the side table. "Dust. And just look under your sofa." He gave a disgusted shudder. "One would think this room has not been swept for days. And those curtains!" he snorted. "Well, it is you who use them as towels," I quickly broke in. "That is because you don't provide a towel near the wash-basin," he replied unperturbed.

I threw down the magazine in sheer exasperation.

"Why don't you say the way we keep our house is disgraceful. It is as much your house as mine."

"Keeping the house is your job," he declared. "I am the breadwinner."

Then with a swift dive he pounced on the magazine, and curled up triumphantly in the sofa, with a complacent smirk on his face. It was then that I realised what he had been trying to do all the while. Cheated off the magazine, I could not help brooding over our passage-at-words.

The Karunakarans had been visiting us the previous day. To set the conversation going, I had eulogised to Mrs. Karunakaran about how beautiful her house was and how I could never manage to keep my house really tidy.

"It is a bit difficult with a baby in the house, I suppose," Mrs. Karunakaran had replied graciously. "I remember when my son . . ."

I stole a surreptitious look round the drawing room. The mantel piece ornaments consisted of a torch light, a bunch of keys, an odd ash-tray, a desk calendar, all placed by my husband, and a wedding photo of ours and a toy of baby's placed by me to relieve the drab surroundings. On the window sill the flowers in the vase were half withered. I had meant to change them that morning but had been too busy in the kitchen, and attending to baby. On the centre table were a couple of letters a few days old, and a cinema notice. On a corner table were heaped a pile of books and crowning them all were a few stray hair pins and a shoe-horn. For which of these was poor baby responsible?

I surveyed the room again. The things were just as they had been when the Karunakarans called the previous evening. With a fury born of a sense of guilt, I renewed the battle.

"Mrs. Karunakaran's children are grown up, and they don't litter the house with odd things. I have a small baby who has yet to learn to be tidy, and there is a big baby in the house who will never learn to be tidy."

It brought him up nicely. "Are you referring to me by any chance?" he enquired angrily.

"How clever of you to guess," I sneered.

"Look here!" he shouted. "Am I responsible for those hair-pins there or for those . . ." He looked around the room and added, ". . . for those old newspapers? You read them after I do."

"May I remind you that you asked me not to put them away yesterday because you wanted to read the budget news," I cried. "And I disown that shoe-horn there and those letters addressed to you." I got up and went to the bedroom door. "I am also not responsible for that pair of trousers flung over the chair, or for those paper cuttings all over the floor, or for that

ink stain on my dressing-table cloth. And look at this," I exclaimed, stooping to pick up a drawing pin. "Have you forgotten we have a baby in the house?" "I was a habitually tidy man," he said in a superior manner. "It is only after marriage that your pernicious influence converted me into a sloppy slacker. Even now if I try even a wee bit, I will be a much more tidy person than you can ever hope to be." He concluded grandiloquently with a boastful gesture which sent a glass on the teapoy crashing down.

"And that is a challenge," I said firmly.

The war was now on and I swore to myself I would bring the house to such a state of torturous tidiness as to make him thoroughly uncomfortable. The next few days consisted of a series of pitched battles.

"I have spent half the day polishing the door knobs. Don't touch them with your greasy fingers," I would cry out as he returned from office and was entering the house.

At the next opportunity he would retort, "I spent the whole of yesterday polishing the car. When you get in, I would be most obliged if you do not smudge it anywhere with your oily hands."

If he tried to relax on the sofa in the evening, I would make haste to declare, "The cushions are not supposed to be used as pillows. I washed those covers only yesterday. And no pillows allowed in the drawing-room please. And do not put your feet on the sofa. I got that lazy lout of a servant to polish the furniture only today. The way you are using that sofa, we will have to change the upholstery next month."

If I tried to use his table for writing a letter, he would exclaim, "Not my table please. Don't mess about with my things. You may use your dressing-table, or the dining-table, or sit on the floor."

He had been keeping his gardening tools in a convenient corner of the bathroom. I now packed them off to the garage. I smiled to myself as he grumblingly walked the hundred yards to the garage to get them. But not for long, for soon he banished my sewing machine to a small, stuffy room upstairs, alleging that I was strewing bits of broken thread and cut pieces of cloth all over the bedroom.

A stage came when rather than keeping the house tidy, annoying the other became our prime concern. One day when he returned from office, he took off his bush-shirt and draped it neatly over a chair, leaned back on the sofa (Oh no! He did not dare to put his feet up) closed his eyes and tried to relax for a while. I quietly removed his bush-shirt from the chair and took it upstairs to his cupboard.

When it was time for us to start for an evening visit, he looked around the room and said, "Where is my bush-shirt? I thought I put it somewhere here!"

"It is upstairs in your cupboard," I replied crisply. "The drawing-room chair is no place to hang bush-shirts on."

He was in no sunny mood as he went up to fetch the garment.

That night I unwittingly played into his hands, and he had his revenge. I had removed the new sari I was wearing and draped it over a chair, deciding to put it back into my almira the next morning. After I had fallen asleep, he had rolled the sari into a bundle and stuffed it into the small dressing-table drawer. My one consolation was I did not allow him to score over me. I never even mentioned the sari, although I had to iron it before I could put it back.

The domestic atmosphere became tense with these attempts to keep the house 'tidy'. There are people who are by nature 'hospital tidy,' and there are others who become so. And there are the people like us. Since we belonged to the third category, the final stage in our campaign for tidiness was inevitable.

We had reached the point when our attempt at keeping things in their places became an attempt to keep the odd things that insist on cropping up, out of sight in table drawers. He thought I did not know the state of his writing-table drawers, while I hoped he was not aware of the condition of my dressing-table drawers. Then day before yesterday, when we were rushing about getting ready for a formal evening party, I brought the drawer down with a crash, searching for a few extra hair-pins, and scattered things all over the room in the process. He on the other hand had to empty his drawer on the floor, searching for the invitation card. "Please bring this card with you" it said.

All the way to the party we were shamefacedly silent about the way we had cluttered up the drawers. And yesterday in the evening he ventured, "It is a disgrace . . ."

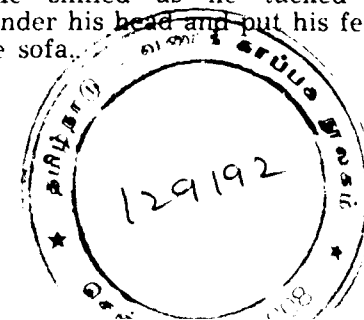
"What is?" I enquired without smiling.

"The way we keep our house" he replied.

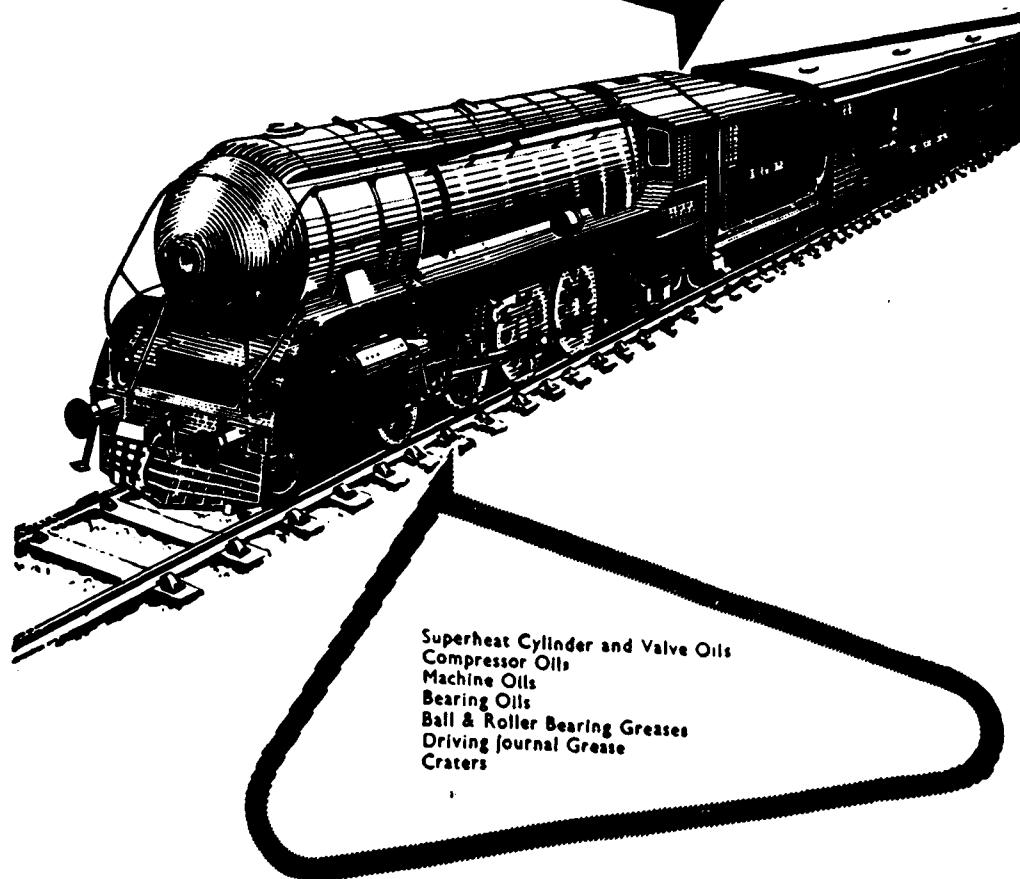
I realised it was a gesture of peace and accepted it.

"Isn't it?" I smiled.

"But oh!" he sighed contentedly. "It is comfortable. Give me an untidy house any time where one can really relax." He smiled as he tucked a cushion under his head and put his feet up on the sofa.



**CALTEX PROUDLY SERVES
INDIA'S VAST RAILWAY
SYSTEM**



Superheat Cylinder and Valve Oils
Compressor Oils
Machine Oils
Bearing Oils
Ball & Roller Bearing Greases
Driving Journal Grease
Craters

PLUS CALTEX TECHNICAL SERVICE

CALTEX PETROLEUM
PRODUCTS



RAILWAY STORES DEPARTMENT AND THE SECOND FIVE-YEAR PLAN

P. N. TALATI

Controller of Stores, Southern Railway



materials until the Works Programme is finally sanctioned by the Railway Board, with the result that the time allowed for procurement was totally inadequate, with consequent delays in supplies of materials, which in turn inevitably delayed completion of the sanctioned works.

To obviate a repetition of such delays, or at least with a view to minimise them, the Railway Board authorised all Railways in November 1955 to take advance procurement action even before the 1956-57 Works Programme was actually sanctioned. Accordingly, the consuming departments were asked to submit lists of their requirements in December last. A special Section had to be formed in the Controller of Stores' Office to deal with these lists and take procurement action as indicated below as per existing rules.

THE Second Five-Year Plan has catapulted the Stores Department into greater prominence than ever before, and it has become the cynosure for all the other major departments of the Railway, since the success of the Second Five-Year Plan will largely depend on how efficiently it functions and how promptly materials required for the sanctioned works are procured and supplied. It is of the utmost importance, therefore, that the Engineers—Civil, Electrical, Signal and Mechanical—should forecast their requirements and submit their requisitions sufficiently in advance to the Stores Department to enable the latter to take procurement action as early as possible and thereby allow more time to the Contractors and Manufacturers to comply with orders placed on them.

In the past, the policy has been that no indents could be submitted for

- (a) Place Planning Orders for all structural steel and steel required for Bridges on the Iron and Steel Controller. For smaller quantities, Enquiries are sent out to controlled stock-holders.
- (b) Submit Indents on D.G./S. & D. for all items other than steel valued over Rs. 10,000 per item.
- (c) Place Supply Orders for items covered by D.G./S. & D. Rate Contracts.
- (d) Place direct purchase orders for items valued Rs. 10,000 and under per item, or any items very urgently required irrespective of their value.

The magnitude of the work involved may be assessed from the value of the

materials under procurement as shown below :—

	Rs.
(i) Electrical Materials ...	13,16,423
(ii) Signal " ...	13,99,656
(iii) Structural Steel ...	27,95,364
(iv) Pipes and Pipe Fittings ...	4,40,954
(v) Steel Sections ...	9,00,000
(vi) Asbestos Sheets ...	2,00,000
(vii) Cement 60,000 tons ...	45,00,000
(viii) P. W. Materials—Rails ...	1,00,00,000
(ix) Fittings ...	11,00,000
(x) Sleepers, C.I. ...	3,00,000
(xi) Sleepers Track ...	3,60,000
Total ...	2,38,12,397

It will thus be seen that procurement action for stores of the value of Rs. 2.38 Crores over and above our normal purchases for maintenance had to be taken within a period of 2 months which was no mean feat, considering that although additional officers and staff were sanctioned for the purpose, the bodies were not available to fill the new vacancies. This has been achieved of course only at the sacrifice of the other day-to-day work which was bound to fall into arrears and it is hoped to pull this up soon after the additional staff is posted. It will then be the responsibility of the Dy. Controller of Stores (Planning) to keep a vigilant check and organise systematic and continuous progressing of the Indents placed, to ensure that Acceptances of Tenders from the D.G./S. & D. and Planning Orders from the Iron and Steel Controller are received in good time.

Once the orders are placed on Producers and Stockholders of steel, and Acceptances of Tenders for other items on Contractors or Manufacturers, copies of all such orders will be sent to the Engineers also, and it will be the duty of the Dy. Controller of Stores (Planning) in consultation with the consumers to "chase" these orders and ensure that the supplies are received by the due date stipulated in the Acceptance of Tender. In case the delivery period is a protracted one and the stores are required urgently, the Dy. Controller of Stores (Planning) will negotiate with the firm if the delivery period cannot be improved upon.

It is to be appreciated that such a large volume of materials cannot be conveniently accommodated in our existing Stores Depots. The Railway Board have, therefore, included the following 2 items in the Plan Frame for the Second Five-Year Plan :—

- Item 10 : Expansion of the existing Stores Depots.
- Item 18 : Construction of a Stock Piling Depot at Arkonam and a Transit Depot near or within the Harbour.

For item 10—Expansion of the existing Stores Depots, a sum of Rs. 1.4 Crores has been allotted for this Railway, and proposals have already been submitted for expansion of the existing Stores Depots at Golden Rock, Podanur, Perambur, Mysore and Hubli. In the case of Perambur General Stores

Depot, it is proposed to shift this to Arkonam, since the existing site is required for the expansion of the Workshops. Similarly, since the scope for expansion of the existing Hubli Depot is extremely limited, it is proposed to shift it to a new site, a mile or so away from the present site. The cost of the various proposals is approximately within the ceiling limit, and when these works are sanctioned and completed, these will go a long way towards greater efficiency by way of prompter issues and incidentally a quicker turn round of wagons.

Transit Depot

The necessity of a Transit Depot near the Madras Harbour has arisen due to the fact that the shortfall of Steel and Rails from indigenous sources is to be made good by importation. It is anticipated that 7 lac tons of steel are to be imported for the Railways, of which at least one lac tons will be received during 1956-57 at the Madras Harbour. To ensure that ships are unloaded in time, and that the quays in the harbour are relieved of congestion as quickly as possible, it is essential to arrange for an adequate number of special types of wagons (B.F.R.) fit to transport 42 feet long rail, etc. The Railway Board propose to increase the availability of this type of wagons. To ensure a quick turn round of these wagons, it is necessary to minimise the distance between the Harbour and the depot where they are to be transported, and hence the need for a Transit Depot within the Harbour premises. Negotiations with the Madras Port Trust are being carried on and they have agreed to allot us a plot of land with Railway sidings which is under construction in their expansion scheme. This Transit Depot is to be located on the fore-shore opposite Fort St. George on the Beach. If such a Transit Depot is not made available, quick turn round of wagons would not be possible, and very heavy 'Transit Dues' would be

incurred, as it would not be possible to move as many as 7,000 tons of Rails, etc., which each steamer may unload, within the free time allowed.

The transit dues may run into several thousands of rupees, and it is, therefore, imperative that materials unloaded are removed from the harbour most expeditiously and transported and dumped at the Transit Depot, from where they will be removed later either to the Construction Depot at Arkonam or to the works spots.

Stock Piling Depot

In the past, materials required for Works Programmes have been arranged to be delivered direct to the consumer at the works spot. But on account of the magnitude of the 1956-57 Works Programme, it has been decided to accommodate most of the materials at a Construction Depot centrally situated under the Stores Department, from where they will be distributed to the various works spots as and when required. It will be appreciated, therefore, that, whereas in the past the actual handling of the materials was done directly by the consumers, it will now be done by the Stores Department. It is, therefore, proposed to build this Construction Depot at Arkonam, which is fed both by the Metre Gauge and Broad Gauge and is the centre of gravity of the proposed Railway Works. All the major items of stores required by the Engineering, Electrical, Mechanical and Signalling Branches of the Railway will be stocked here and properly accounted for. The plans and estimates for this Depot have already been prepared and approved of, and the work is expected to start shortly so that the Depot may be ready within six months' time, when it is expected materials against the indents referred to above will start flowing in.

FOR TIMBER
OF
ALL KINDS AND QUALITY
Consult

THE BRILLIANT TRADING CORPORATION LTD.,
TIMBER MERCHANTS & CONTRACTORS
4-A, BASIN BRIDGE ROAD, MADRAS-1.

Phone : 3876

Grams : "YESKAR"

April 1956

Training of Staff

Since an abnormally large number of recruits has been and will be entertained in this department in connection with the Five-Year Plan, the efficiency of the various sections is likely to suffer on account of their inexperience. Provision has, therefore, been made for training staff, and classes are being held for their benefit to enable them to get a better insight into the working of the Department, and to help them perform their duties more intelligently and efficiently. These lecture classes have been started from 27-2-1956, and in the Inaugural Address the need for a wider knowledge and broader outlook was

stressed. The classes have become popular and are well attended.

In spite of the best efforts on the part of the Stores Department to take prompt action for the procurement of the materials, the 1956-57 Works Programme is bound to suffer on the issue of non-availability of vital items like steel, pig iron, cement, etc., which have been in short supply, unless steps already taken at high levels, to step up indigenous capacity for these items and arrange to import the short-fall from foreign countries, bear fruition. Let us hope that the Second Five-Year Plan will not founder on this issue.

JAI HIND

**DANCING AND FIGURE**

V. S. SHANTHALAKSHMI

YOUR figure is your fortune", so goes one of those Hollywood sayings. And of course it is quite true for though it costs comparatively little to keep your figure, still it costs so much to lose it. The formula for a good figure is faultless posture and exercise, plenty of fresh air, well-balanced diet and the right dress to suit your type. When I say exercise, don't take it for granted that it is only the monotonous One, Two, Three, Four drill or the exercise dictated by a beauty forum—lying down flat on your back and lifting your legs without bending them one by one, and doing cycling in mid-air and things like that. Nor do I mean the strenuous swimming or playing tennis or the tedious walking. But there is another way, an entirely different way, a very aesthetic way of doing your exercise. A way in which your face, neck, limbs, waist and feet are gently exercised in a flow of graceful, swelling movements, so that gradually without too much exertion, and with all the necessary mental exhilaration, the figure is moulded surely but all unconsciously into a symmetrical beauty form. That is what dancing does to you.

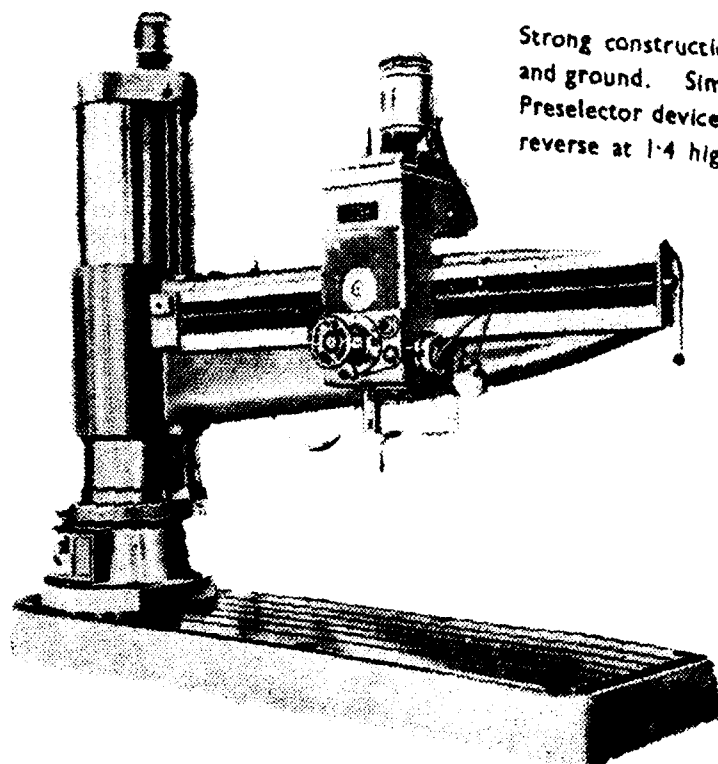
Surely the modern Indian girl realises that beauty of mind and delicate grace are not only her greatest assets but are her legitimate heritage, and hence casts her interested eye on this greatest prelude to loveliness—dance. They consider dancing an

accomplishment second to none, and in it they see a vista of glorious idealism spread before them. Gone are the days when this wondrous art was considered something mean and low, and now it has come to occupy once again its place of dignity and is out in the high category it was originally intended to hold. No wonder that you find in most of the Dancing schools in Bombay girls in their early twenties and even late twenties trying to learn dancing, of course they learn dancing not for the sake of dancing on the stage but just for the purpose of moulding and maintaining their figure without undergoing the rigour of trying exercises.

The motive behind India's dance is supremely noble. Deeply stirred by the exquisite ideas of Bharata Natya sastra, the great exponents of the traditional dance in bygone times transferred to their dancing all the soul-full depths of a religious meaning, where gods and goddesses, the immortal counterparts of human beings, played so great a part. Delving deep into the idealistic stories connected with Indian womanhood, through the ages and in the pages of mythology, one pictures them always full of a rare grace, enchanting in their lissom movements. The perfect line of arms and posture, the tilt of the head, the inexpressible gift of walking gracefully, and the whole outline of the dance, wherein expression, tender

“TECHNOIMPEX”**HEAVY DUTY RADIAL DRILLING MACHINE MODEL RH 5**

Strong construction, gears and spline shafts hardened and ground. Simultaneous clamping of saddle and arm. Preselector device for spindle speed and feed. Tapping reverse at 1/4 higher speed through multi disc clutch.



Drilling in steel	3.5/33"
Tapping in steel Whit.	3"
Length of arm	10 ft.
21 spindle speeds	15 to 1500 r.p.m.
Drill spindle motor	12 HP.
Drilling in C. I.	4"
Spindle nose	M. T. 5
Travel of saddle on arm	8' 4"
18 feeds	.0012 to .079 per rev.
Nett Weight	30,000 lbs.

Agents: Western & Southern India



Branches: Cox St., COIMBATORE,
26 Errabalu Chetty St., MADRAS

April 1956

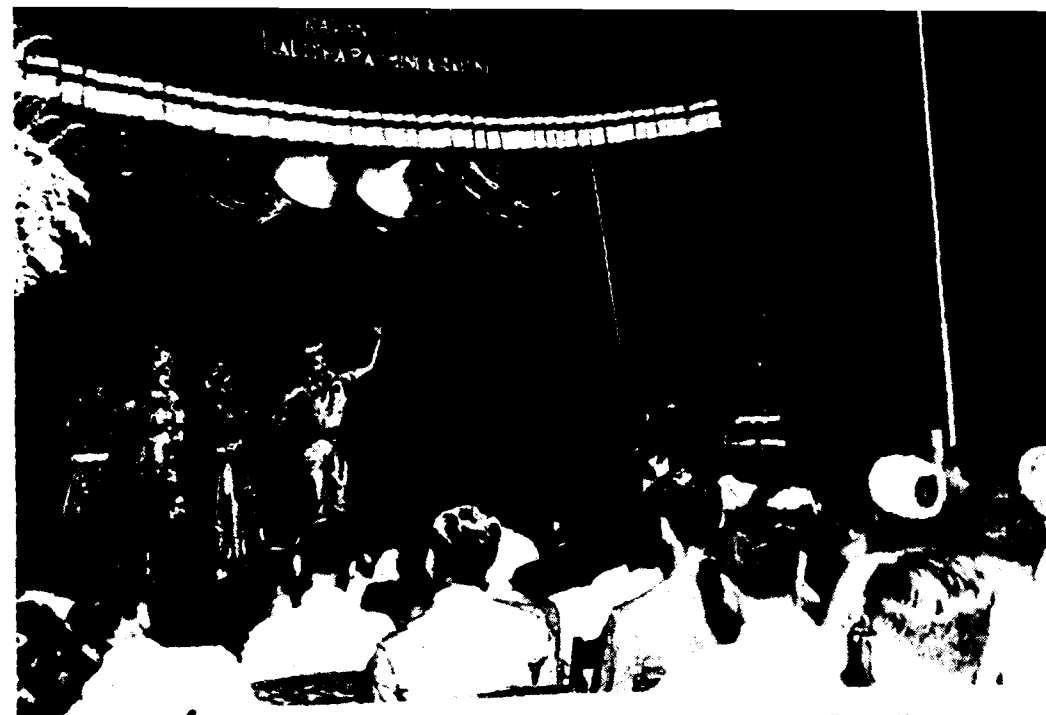
glances, rhythmic timing and the perfect unison of limbs with bodily gesture comes to you unasked—it is these qualities that the modern girl wishes to cultivate along with her desire to move with the times and yet maintain the essential evidences that keep her race subtly different. It is with great emotion that she reads of the sweet Parvathi, who danced before an assemblage of deities on Mount Golden, told in the following glowing words, "so gentle was the flow of her body, like a serenade it joined the heavenly music, and every cadence struck lucid harmony." The revival of Indian dancing throughout the country amongst the cultural classes is helping to bring out the natural grace and beauty of form that seems to have been lying dormant for so long.

The Varna, Jatiswara, Thilana, etc. are more enjoyed by the vigorously constituted girl. Full of dignity and more forceful, these are forms of surhythmic exhibition very pleasing to learn because of the statuesque poses, the fast movements of the hands, the intricate steps or foot-work and the jumps done to an accompanying mridangam and natuvanar's "Tham-thi-tham, thai-thi-thai!" No need is there to attempt reducing exercises and all the drastic un-aesthetic ways of trying to rigorously and temporarily make the body slim. And it is quite devoid of the feeling that it is an irksome task, all the better if quickly done with and got over, as is the case with doing a mere daily dozen. It

must be done regularly with a true love for the art. And it is not difficult, because unconsciously it fascinates the subject with its magical appeal, and the dancer becomes its ardent devotee.

The padha or the abinaya part of the Bharata Natya is a tender type of dance so full of soft supple movements, which appeals to the essentially feminine girl. The neck, the eyes, brows, fingers, limbs, waist, hips, etc., are without much exertion properly exercised. The wrist movements and the many mudras or hand gestures, teach a girl to keep perfect hands soft and tender like the petals of a rose; and help her to achieve what a certain writer says of the princess Usha, that, "as she prayed before the altar of the gods, for the safe return of her husband from a dangerous journey, her lovely slender fingers closed together in supplication, resembled an amber lotus bud shut at eventide and lit by the afterglow of the setting sun". While during the dancing, her body is ever in contact with various delicate movements done to recognised timing to give her rhythmic sense and complete assurance in her walk, a perfection which is so necessary for the flowing folds of her saree and the exotic charm of her jewels and flowers.

Turning to the folk dancing, the dancer finds it very spontaneous and full of free movements stripped of much of that concentrated depth of the classic art. With the present trend for freedom for restrictions and the desire



The delegates to the Fourth Session of the ECAFE Railway Sub-Committee were entertained to a Dance Performance by the Travancore Sisters at our General Manager's residence on 18-3-1956

for creative thought, the intriguing movements of these dances set to joyous songs, heralding the spring; the play of the Gopis as they danced and frolicked on the banks of the Jamuna river and their intimate touch with nature, calls forth the spirit of challenge and youth present in the soul of every girl. In the twirling, the circling, the quick stepping and lively action, she gains simple exercise and stimulating development worthy of preserving that innate and rustic grace of line found in nearly every peasant woman, and which is so much the envy of many a girl in the cities.

Apart from the physical side, Indian dancing moulds the mind and keeps it on the aesthetic plane all the time. With her love for the beautiful, the modern Indian girl goes back to the marvellous old Indian designs for her jewellery, her prints, and her saree borders; and these antique ornaments and patterns lend themselves most suitably to present-day dress. In dressing for the dance too, she pictures the beautiful colours and motifs centr-

ing round the whole galaxy of Indian ornamentation and design. With her creative mind, she keeps perfection of line foremost, and the dance inspires new ideas out of the models that have come down to posterity. Combination of colours, textures of materials, matching jewellery, and how they can be used to the best advantage, constantly recur to her.

So, health and beauty; physical fitness and perfect clothes; a mind that is ever surrounded by the inspiring themes of the perfect women of bygone days; a perpetual touch with nature, the flowers and the bees; the lotus, lakes and the forests; exquisite colours and sparkling gems; high ideals and noble standards; these are the things that the modern Indian girl sees in the vast panorama of India's dance art. And these are what she seeks as a splendid recreation, a sound basis for her aesthetic inclination; and these are what she wishes genuinely to preserve in one of the most cherished and ancient arts existent today.

Telegram: "STEEL WIRE"

Telephone: 3998

ON GOVERNMENT AND RAILWAY LIST

A. ALI HUSEIN & CO.

(REGD. 571/43)

GENERAL HARDWARE MACHINERY MERCHANTS, SUPPLIERS & CONTRACTORS
287, LINGHI CHETTI STREET, MADRAS-1.

SUPPLIERS TO

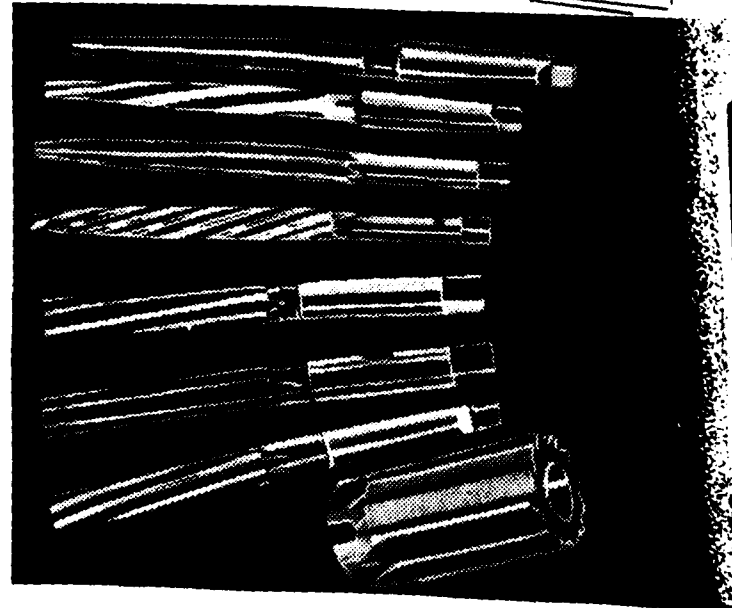
RAILWAYS, GOVT. DEPTS.
ENGINEERING & INDUSTRIAL CONCERNS

STOCKISTS OF

ALL KINDS OF HARDWARE MATERIALS
MACHINERY & TOOLS, ETC.SPECIALISTS IN MANUFACTURING: **ENGINEERING & WORKSHOP TOOLS**
RATES MODERATE

PROMPT DELIVERY

Designed for precision work



PRAGA machine & hand REAMERS

**THE PRAGA TOOLS
CORPORATION LTD.
SECUNDERABAD - INDIA**

MADE FROM 18 %
TUNGSTEN STEEL.
FROM END TO END

MANUFACTURED TO BRITISH
STANDARD SPECIFICATION.

Sole Selling Agents: **BATLIBOI & CO.**
MADRAS, DELHI, CALCUTTA, BOMBAY, BANGALORE, COIMBATORE, KANPUR, AHMEDABAD,
VIJAYAWADA AND SECUNDERABAD

MATERNITY AND CHILD WELFARE

Dr. L. R. PARTHASARATHY, M.B.B.S., D.M.R.

MOTHER and children from two vulnerable sections of the community requiring special health protection in every country. It is said that in India nearly half the total annual deaths are among children under 10 years of age, about half of these being in children under the age of one year. For a country of India's size and population, the efforts so far made for providing adequate health production to mothers and children are far too meagre to make any impression on the existing rates of morbidity and mortality among these sections of the population. Of course in the Railways we have small organisations existing for some years past, called Child Welfare Centres which worked till now as voluntary organisations supported by the Staff Benefit Funds. It is pleasing to note that the Railway Board and the Administration have taken over all these organisations under direct supervision to come under the General Revenues. It has been creditably doing some good work with inadequate facilities and minimum staff. The Railwaymen will be happy to note that under the Second Five-Year Plan 2 lakhs of Rupees have been allotted for providing a well organised Centre one at Perambur and the other at Golden Rock. With speedy plans for modern buildings and appointment of qualified staff taking into shape, and with the Laboratory and X-ray facilities available from the Headquarters Hospitals near to such a Child Welfare Centre, our standard of health among women and children is bound to rise.

With this introduction let me try to give a few hints that may be useful to a layman with regard to the care of his better half and the coming baby. Pregnancy should be a healthy and happy time. How does the woman know that she is pregnant? She observes (1) cessation of menstruation. (2) enlargement of breasts causing a sensation of weight and fullness.

(3) frequency of urination, (4) a tendency to vomit (nausea) especially in the mornings, (5) quickening or in a layman's term 'feeling life' by the woman which refers to the active movements of the child, (6) lastly the enlargement of the abdomen.

The foetus as it is called now slowly and surely develops inside the mother's womb. The determination of sex by even the best physician is not possible before birth but speculation predicting with some degree of assurance are all there as it happens on a Sunday trip to Guindy. The duration of the pregnancy normally ranges between 240 to 300 days. There are tables available now for calculating the expected date of confinement with a fair degree of precision. The pregnant woman must go to a physician and take his advice after complete examination. Periodically she must visit the physician once a month during early months of pregnancy and every two weeks during the later months of pregnancy and every week during the last month of pregnancy. Please do not hesitate to bring to your physician any question that may be bothering you and above all ask HIM your questions, not your friends at the bridge table.

Diet in Pregnancy

The old saying that a pregnant woman must eat for two, is one of those half truths which has done far more harm than good. The amount of food consumed by the pregnant woman should be no more and no less than she has been accustomed to eat when not pregnant. For there is no reason to believe that any appreciable increase in the total quantity of food is necessary in pregnancy. You must take a balanced diet whether you are pregnant or otherwise containing milk, leafy vegetables, fruits, butter, meat, fish, eggs, etc. Codliver oil and iodine in some places in the form of sea food or iodized salt may be taken. Iodine

April 1956

should only be taken upon the advice and under the immediate supervision of a physician. Rich foods, condiments of all sorts, fried foods, sausage, smoked or salt fish and rich pastries may be avoided. Salt should be curtailed. Six glasses of water should be drunk daily and more quantity in hot weather in addition to tea or coffee. The weight gained during pregnancy should be not more than 20 lbs.

General Hygiene of Pregnancy

What dress a pregnant woman should have? All clothes should be full and flowing is the answer. A pregnant woman should wear low broad-heel type of shoes, but this does not apply to the majority of Indian population. Since there is a tendency for the feet to swell in the evenings as the pregnancy advances it is well to purchase sandals (if accustomed to) a trifle larger than usual. It is advisable to wear a maternity corset—the details could be got from a Doctor. Brassieres should also be worn for the comfort of the breast. Long 'soaks' in a very hot bath should be avoided. It is needless for me to say that a pregnant woman should attend to the teeth and cleanse it after meals. The sticky fluid which the breast secretes during pregnancy cakes on the nipples and cause irritation. With a soft cloth, warm water and soap, it should be removed during bathing and nipples should be kept dry afterwards. Please have the nipples also examined by your family doctor and get his advice. Douches

should not be taken during pregnancy without specific instructions from your doctor. Under no circumstances is sexual intercourse permissible during the last six weeks of pregnancy. During the remainder of pregnancy intercourse is harmless in moderation. The bowels should move once daily, better twice. Regular exercise in the open air should form part of your daily routine. Automobile trips in my opinion should be forbidden after the fifth month and travelling distances greater than 100 miles should be done by trains, and travelling late in pregnancy is unwise. The expectant mother who is employed should stop away from her job two months before confinement and she may join six weeks after delivery. Rest is always needed with longer hours of sleep during pregnancy in general.

DANGER SIGNALS

The following symptoms demand immediate report to the doctor: (1) Vaginal bleeding, no matter how slight, (2) Swelling of the face or fingers, (3) Severe continuous headache, (4) Dimness or blurring of vision, (5) Pain in the abdomen, (6) Persistent vomiting, (7) Chills and Fever and (8) Sudden escape of water from the vagina. For the above signals the doctor's advice should be strictly adhered to.

The modern trend towards hospitalization for child birth, a trend that is gaining ground every year, is a

April 1956



development of the past two decades in our country. In the early years of this century, it was well nigh impossible to persuade a respectable woman to enter into a hospital for normal delivery, since only the derelicts of womankind and the destitutes sought hospitalization for such a purpose. The present popularity of the hospital then has been achieved against great odds

and can only mean that hospital care has proved its value to countless thousands of satisfied mothers. After the baby is born, the care of the baby is equally if not more important than that of the mother. The mother has no direct responsibility for the care of her baby during the first week after delivery even though she will naturally want to acquaint herself with all that concerns with this new and precious possession. The usual question that is asked immediately after delivery: is it a boy or a girl and how much does it weigh? The new born baby after being attended to its eyes and the first bath, should be weighed and this record of weight is important for the care of the infant during its growth. The length, bodily contour, the colour of the skin, the presence of hair have all to be noted. The care of the eyes, ears and breasts of the new born, the umbilical cord, the bowels, all have to be attended to. Going home with the new born baby is always something of a gala occasion (I have witnessed breaking cocoanuts, giving alms in the City hospitals) and I think, it should be, for it marks the beginning of a new phase in the life of the mother and child. The surest guarantee of a healthy baby and a worry free mother is to keep in touch with a qualified doctor. The care of the infant is so important that the Railwaymen should make full use of facilities available in Child Welfare Centres and take proper advice.

Mark of



Prestige

For Aluminium Roof Water Tanks, Window Louvres, Castings of all types and Sheet Panelling for Railways, Electrical Louvres and Fittings of various designs, Door Handles, Knobs and Special Castings for Automobile Industry and Kitchen Equipments for Dining Cars and Refreshment Rooms and everything in Aluminium

PLEASE WRITE TO:

JEEWANLAL (1929) LIMITED

Manufacturers of Crown Brand Aluminium Articles
127, MINT STREET, MADRAS-1

Other Offices & Factories: Calcutta, Bombay, Rajahmundry, Delhi, Rangoon, Aden

MYSORE CAFE

MADRAS

Hotel & Restaurant

CATERING DEPT.

178-79, N. S. C. BOSE ROAD

Phone: 3139

LODGING DEPT.

182-83, N. S. C. BOSE ROAD

Phone: 4257

CATERERS TO

1. MADRAS LEGISLATURE
2. INDIAN HOSPITALITY

(Defence Services)

CONTRACTORS, RAILWAY REFRESHMENT STALL, ARKONAM, S. RY.

Proprietor: K. GOPALACHAR

BINNY'S ENGINEERING WORKS LTD.

SPRINGHAVEN ROAD, HARBOUR

MADRAS

Telegrams : 'BINEW'

P. B. 1855

Phones : 3088 & 2558

IRON AND BRASS FOUNDERS

LICENSEES FOR MEEHANITE CASTINGS

IRON CASTINGS UPTO 4 TONS WEIGHT

NON-FERROUS CASTINGS UPTO 10 CWT

ACID RESISTING CASTINGS

HEAT RESISTING CASTINGS

PLATE AND STRUCTURAL ENGINEERS

WELDED OR RIVETTED STEEL WORK

STORAGE TANKS UPTO 2,50,000 GLNS.

ROOF TRUSSES, STANCHIONS & PURLINS

FABRICATED MACHINE PARTS

TRANSPORT TRAILERS & TROLLEYS

BOILER INSTALLATIONS & REPAIRS

MACHINERY MANUFACTURERS

COMPLETE MACHINES OR SPARE PARTS FOR

THE TEXTILE, SUGAR, CEMENT & CHEMICAL

INDUSTRIES MANUFACTURED & REPAIRED

MARINE ENGINEERS AND SHIP REPAIRERS

HOW RAILWAYS ARE TACKLING TASKS BRISTLING WITH DIFFICULTIES

K. SRINIVASAN

PROBLEM OF MOBILE AND IMMOBILE ASSETS

AT the end of the First Plan period about half of the locomotives and coaching vehicles and over one-third of the goods wagons on line would become over-age and due for replacement. Consequently the problem of the renewal of the rolling stock has been urgent and formidable.

In regard to immobile assets, the First Five-Year Plan states 'The state of immobile equipment has been a subject of no less concern. The condition of the track has also deteriorated during the last two decades during which renewals were carried on only to the minimum extent required for safety in operation leaving considerable rehabilitation of the track for completion in future. Speed restrictions have had to be continued on hundreds of miles on Main Lines, as track renewals could not be carried out. The primary task of railways is thus to overtake this heavy accumulation of arrears at as early a date as possible.'

The Railways had also embarked on the programmes for the removal of the principal bottlenecks on existing lines and the provision of additional facilities to meet a part of the present demands from the increase in traffic arising out of the implementation of the First Five-Year Plan.

The rehabilitation and the modernisation of the mobile and the immobile assets will have to be continued so that at the end of the second plan period not more than the permissible over-aged stock is retained in service and speed restrictions over the track due to the past inadequate renewals are eliminated. The production targets in other sectors of the Second Five-Year Plan will generate increases in the demand for rail transport and it is,

therefore, necessary that both increases in line capacity and in rolling stock should be planned adequately.

ROLLING-STOCK POSITION

The rolling-stock position has been receiving careful consideration. During 1954-55, 100 Broad Gauge and 12 Metre Gauge locomotives, 230 Broad Gauge and 250 Metre Gauge coaches and 11,597 Broad Gauge, 55,550 Metre Gauge and 100 Narrow Gauge wagons (4-wheelers) were ordered and 222 Broad Gauge, 77 Metre Gauge and 28 Narrow Gauge locomotives, 553 Broad Gauge, 404 Metre Gauge and 25 Narrow Gauge coaches and 8,698 Broad Gauge and 5,545 Metre Gauge wagons were placed on line.

NEW LINES AND NEW CONSTRUCTION

Within the available resources of funds and materials, the construction of new lines and the restoration of certain dismantled lines have been undertaken.

New lines opened to traffic during 1954-55 and 1955-56 amounted respectively to 97.17 and 52.83 miles.

Restorations of dismantled lines totalling 227.22 and 79.22 miles were completed during 1954-55 and 1955-56 respectively.

HOUSING AND STAFF WELFARE

Indian Railways are the largest single employers in the country and the contentment and welfare of its employees is essential for the satisfactory working of the Railways. Housing and welfare of the staff must continue to receive special attention. Labour welfare and staff amenities are being steadily extended. During 1954-55, 9,901 quarters were constructed and during 1955-56, 10,589 quarters are

likely to be completed. Particular mention may be made of a new scheme of providing rest homes at hill stations for Class III and IV staff at nominal rates for spending their holidays with their families. During 1955-56, 4 rest homes have been opened on the Northern, North-Eastern and South-Eastern Railways. Other Railways are to open rest homes in due course.

APPLICATION OF SCIENTIFIC DEVELOPMENTS TO RAILWAY OPERATIONS

There is also the need for the progressive application of modern scientific technological developments to railway operations with a view to increasing the efficiency of operation. This assumes special importance in view of the serious problem of the rising working costs and the possibility of substantial economies in operation which can be secured by increasing use of the contributions of science in various fields of railway operation. It will have to be carefully thought out what specific technological developments can be adopted for improving railway operations.

CO-ORDINATION OF TRANSPORT

The railway plan has to take into account the development of other means of transport, namely, the road, inland waterways and sea and, therefore, an effective policy of co-ordination of all forms of transport

in their appropriate functions avoiding wasteful duplication, to serve the special needs of the country has to be formulated. The Planning Commission had already formulated a basic policy for the development of road transport and has suggested the formation of tripartite corporations in which railways would be partners, for the development of nationalised road transport by the State Governments. Such corporations should lead to the co-ordination of rail transport with road transport with a view to having 'Integrated operations' in the best interest of the country. There is the problem of the co-ordination of rail transport with inland water transport and this has special importance in the North-East of India where the Joint Steamer Companies carry considerable traffic. There is further the problem of co-ordinating the development of railways and coastal shipping to ensure harmonious development of the two forms of transport.

The Sea-Rail Co-ordination Committee appointed by Government under the Chairmanship of Shri N. S. Lokur, has undertaken a comprehensive examination of fixing up charges by coastal shipping and to submit its report.

IMPROVED SERVICE AND AMENITIES

Special measures have to be undertaken to improve overcrowding in

passenger trains. New passenger trains introduced numbered 132 and the runs of 105 existing trains were extended during 1st January to 31st December 1955. The total passenger train mileage increased from 11 million in 1953-54 to 114 million in 1954-55.

The extent of overcrowding on the different sections of the railways was assessed by actual census of passengers and all efforts were made to relieve overcrowding on the sections worst affected by mobilising the maximum utilization of available resources of coaching stock, locomotives and line capacity. The problem is, however, essentially one of paucity of resources and will be tackled effectively as and when additional resources of coaching stock, locomotives and line capacity (to enable new trains being run) become available. The Committee which investigated into overcrowding is due to submit its report shortly.

The question of providing a minimum scale of amenities at all stations, irrespective of their size and status, and additional amenities at important large stations, continued to be given sustained attention. Special attention was also given to the provision of improved amenities on trains such as, for instance, improvements in fittings, lighting and cleaning of rakes, etc. The number of fans fitted in Third class was 4,418 and in Inter class (now) Second 663 during 1954-55.

ON THE WHOLE, WE HAVE REASONS TO BE OPTIMISTIC

Sri K. B. Mathur, Member (Transportation) Railway Board, while addressing a press conference at Calcutta during March 56 based his claim on the flexibility of the Second Plan and the Planning Commission's assurance to consider revision of the present allocations in the light of changing trends. The Railways are going to launch an all-out drive to improve on the estimate of moving 42 million tons of traffic.

MOVEMENT TASK

How coal transport is arranged is indeed a complicated but an interesting subject. It moves in bulk and its total volume at present is about 39 million tons. Over 4,000 wagons, constituting practically one-third of the entire daily loading on the broad gauge, carry coal. A whole network of Railway sidings, marshalling yards and links aggregating to about a thousand miles of track, has been laid in the coalfields. The layout caters to the needs of 841 collieries and a wide variety of distributional break-down.

Conveyance of sugar also is a difficult task. The sugar industry which has taken a rapid stride this year by its production having mounted from one million to 1.6 million tons, might claim that this is all to its credit, but if rail transport were allowed a say it will naturally seek recognition for having moved correspondingly greater quantity of sugarcane while every ton of sugar requires 10 to 11 tons of cane. It might be of interest to know that during the peak of sugarcane traffic about 650 Broad Gauge and 1,350 Metre Gauge wagons are carried daily to over 100 sugar factories with great regularity, as the traffic is of a perishable nature and it cannot be stocked or delayed in transit.

For bulk transport of oils, it is advantageous and economical to carry in tank-wagons and a fleet of 6,269 tank-wagons has been provided for transport of petrol, kerosene and edible oils.

Among the important industrial developments in recent years are the Fertilizer Factory at Sindri and the multi-purpose projects of Damodar Valley, Hirakud and Bhakra Nangal. Each of these projects, for its huge constructions, has so far absorbed about a million tons of goods, all of which have had to be carried by rail.

The Sindri Factory takes 165 Metre Gauge wagon loads of gypsum a day from far-off Jamsar and Kavas near

Post Box 1523

Telegrams: "STRANDWIRE"
Phone: 3328

FAKRUDEEN & CO.

GENERAL HARDWARE & MACHINERY MERCHANTS

STOCK-HOLDERS, IRON AND STEEL, PIPES & PIPE FITTINGS

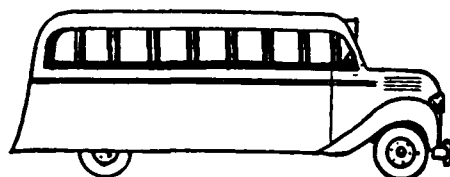
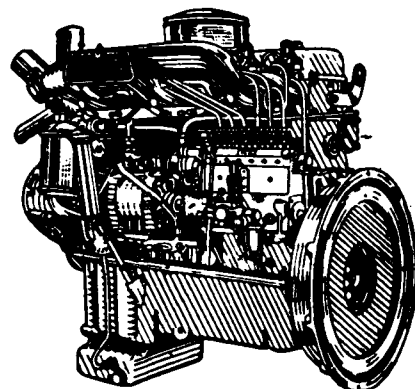
307, LINGHA CHETTY STREET, MADRAS-1

Direct Importers and Stockists of

Engineering and Precision Tools, G. M. Pipe Fittings, Copper & Brass Tubes and Rods, Bolts, Nuts, Rivets, Washers, Beltings, Hosepipes, M. S. Sheets, W. I. Split Pulleys, Plummer Blocks and all other Engineering Tools and G. I. Pipes, Iron Plates, Iron Rods, Galvd. Iron Wires, Galvd. Strandwires, Barbed Wires and Wirenails, etc.

BUS OPERATORS!**FLEET OWNERS!****4 Big reasons!**

Check these four big reasons why it will pay to standardise on Perkins Diesel for most economical dependability and cost per mile.



1. In this country alone over 25,000 Perkins Diesel engines are in daily use which prove the superiority of Perkins Engines—the preferred choice of the wise!
2. Automobile engineers who know diesel engines best prefer Perkins and this is borne by the fact that year after year more and more of Perkins engines are supplied as original equipment to transport vehicle manufacturers.
3. Perkins engines are the choice of many fleet owners who buy on the basis of closely maintained cost records of fellow bus operators and also of their own.
4. In the complete range of Perkins engines there is an engine designed to meet the requirements of every make and type of vehicle or bus.

Perkins
DIESEL ENGINE

Simpson & Co. Ltd
MADRAS-2.

Branches: OOTACAMUND—BANGALORE—TIRUCHIRAPALLI—SECUNDERABAD (Dn.)
SALES & SERVICE THROUGHOUT INDIA
CONTACT YOUR NEAREST PERKINS DEALER

Bikaner and Jodhpur for the production of chemical fertilizers.

MAIN OBJECTIVE

Indian Railways would be in a position to meet their current requirements of locomotives and rolling stock within the next Plan period.

To make good the immediate deficiencies, India had to place large-scale orders for locomotives and other rolling stock outside the country. However this was a temporary phase. Indigenous capacity would be so increased as to be adequate for current requirements certainly within the next Plan period.

The principal objectives before Indian Railways was to augment the Railway capacity to meet the increasing demands for both passenger and goods traffic. In the next five years, passenger and freight traffic would increase by 15 per cent and 51 per cent respectively. Such rapid increase in the volume of traffic called for accelerated expansion of the resources of the Railways, principally in new rolling stock, line capacity works including large-scale doublings, larger maintenance facilities and new lines. There would also be big schemes of electrification, dieselisation and installation of improved signalling. The standard of passenger amenities had to be raised and labour welfare schemes pursued.

The task of developing economic self-sufficiency in regard to certain vital requirements was an urgent task facing Indian Railways. The Chittaranjan Locomotive Works, the Integral Coach Factory at Perambur and the building of Metre Gauge locomotives at the Telco were efforts at self-sufficiency in the matter of imported items of rolling stock. This objective was being pursued in other directions as well for example, the building of other types of passenger coaches Railway wagons, signal equipment, etc.

Second Five-Year Plan Reduced

The Railway Board has prepared the Railway's second plan costing Rs. 1,480 crores, on the basis of an increase of 30 per cent in passenger transport (15 per cent for increased traffic and 15 per cent to alleviate overcrowding) and of 60.8 million tons in goods transport assuming the demand at the end of the first plan at 120 million tons.

The Railway Minister said that the Planning Commission, whose task was none too easy, had indicated that the allocation for the Railway would be only Rs. 1,125 crores, out of which Rs. 375 crores would have to be found by the Railways from their own revenues. It had been agreed that if the resources of the Railways exceeded this figure, they would be allowed to expand the plan outlay accordingly.

FILLING GAP IN PLAN RESOURCES

Dealing with the assessment of earnings and expenditure during the second plan period, the Railway Minister said that against Rs. 375 crores which the Railway themselves were expected to provide, their own resources would amount only to Rs. 325 crores, made up of Rs. 225 crores as contribution to the Depreciation Reserve Fund and Rs. 100 crores from revenue.

The gap of Rs. 50 crores, he said, had to be filled to avoid a further restriction in the scope for the development of the transport capacity. The Railways must endeavour to increase their earnings so as to meet the contribution required of them and if possible something more in order to reduce the shortfall in the transport capacity. On these grounds, the Railway Minister, proposed a surcharge of one anna in the rupee on all freight traffic, with the exception of grains and pulses, fodder, manure, khadi, newspapers, newsprint and books.



M. E. (I) Ltd. find themselves in a similar situation on account of the ever-growing popularity of their Kassels quality fans. The range includes A. C. & D. C. ceiling fans, table fans, cabin fans, pedestal fans, air-circulators, etc.



**MATCHWEL
ELECTRICALS
(INDIA) LTD.**
P.O. Box No.
1430 DELHI.

MODELS: Kassels, Anand, Lucky & Azad

Kassels Fans

Approved by Central & State Governments
Sales Offices: Bombay, Poona, Calcutta, Patna & Nagpur
Selling arrangements all over India

Delhi Phone Nos. 24111 & 24112

Sole Selling Agents for South India:

Messrs. Gordon Woodroffe & Co., (Madras) Ltd.
P. O. Box No. 42, Madras

Phone: 2978 (3 lines)



Children's CORNER



Hello Children!

I am sure you must have heard one of the grown-ups in your family say, "Oh, he has a guilty conscience." Well, you must have wondered what they meant by the words 'guilty conscience'. I shall now tell you what these words mean, and you will understand it better when I have told you the story of the 'The Clever Boy Judge'.

Boys and girls in school often play jokes on others. For example, one day before school starts, you sneak in and stick a pin into a desk-seat, with the point upwards. When class starts, a boy sits down, not knowing what is on the seat, and suddenly jumps up with a yell of pain. "Ooooh" To the others in the class this is a grand joke for a good laugh, but it is by no means a laughing matter for the boy who has had the pin stuck into his seat. The joke may end there, but supposing the pin-point was dirty or rusty, and some days later the boy who got the poke gets a big and painful boil, which has to be cut open by a doctor. Now, the boy who planted the pin perhaps feels sorry that he has caused pain and trouble to his class-mate. So, we say he has a guilty conscience, because he has been to blame for what has happened. Our conscience is really a sort of guardian of our good feelings, and even when we do something wrong and may never be found out, it is this conscience of ours that makes us feel sorry for what we have done. Now, let us get on to the story I want to tell you about a guilty conscience.

"The Clever Boy Judge."

A long, long time ago, there was a certain rich man who had a habit of keeping large sums of money in his house, hidden in odd corners and places. Now, this rich man had three servants to take care of him, and even though they had worked for him for many years, yet he could never trust them. Whenever he hid away any of his bags of money, he would send all his servants away from his presence, and then, alone, would go from room to room looking for some place to put the money. Whether these servants were really honest men, we cannot say, because none of them knew that their master was hiding large sums of money in the house. But one day, the rich man got a little careless and left the door of a room slightly open. One of the servants while passing saw the master through the open slit of the door, and do a strange thing. The master reached up to the wall, took down a huge stuffed head of a bear, and put something inside. When the master had finished doing this and replaced the bear's head on the wall, and before he turned towards the door, the servant quickly moved away. The master never for a moment thought that anybody had seen him.

Some few days later when the master needed the money he had hidden in the bear's head, he went to that room, took down the head, pushed his hand into the open mouth, and drew it out—empty. His money had been stolen. The rich man knew that only one of his three servants could have stolen the money, as no one else was allowed into the house. But he did not want to call his servants and tell



Sundaram retreads keep your vehicle well-tyred. Here are low-cost, reliable retreading for any make of car, bus or lorry tyre. Yes, they cost much less than half the price of a new tyre!

Full circle mould retreading, after precision vulcanising with the latest machinery in our workshops with air conditioned warehouse for storing materials, ensures the highest standard of work. This is the finest factory of its kind in India.

CALL IN AT THE NEAREST SUNDARAM INDUSTRIES
SERVICE STATION CONVINCING YOURSELF.

SUNDARAM INDUSTRIES LTD.,

Tyre Retreaders with full circle moulds

Head Office:

PUDUKOTTAI

* Grams "MOTOR" Phone 33

Madras Factory:

37, Mount Road, MADRAS-6

* Grams. SUNRETREAD Phone 86985

TVS 67 D

them about it, or take them to a magistrate, as if he did so, everybody would soon know of his habit of hiding a lot of money in the house.

For days he kept thinking what he should do to find out who was the thief. Then, one morning, he went to one of his trusted friends, and after a lot of hesitation, told him what had happened. He also said that he did not want to go to the magistrate about it, and so let everybody know his secret, and look a fool. His friend smiled and agreed that it would be foolish to go to the court, but he must find out who was the thief. He told the rich man, "I know the right person who can find the thief for you, and he is no magistrate. Also you will not have to go to him, but he will come to you. He is a young boy, not more than twelve years old, but very, very clever and wise. If you had not been so busy making and hiding your money, you would have heard about this wonderful boy and the wise judgments he has given."

The rich man was pleased. "All right, if he will come to my house, this boy judge, and will help me find which one of my servants stole the money, I shall see that he gets something for his trouble." His friend replied, "I shall bring him tomorrow morning, but don't tell your servants a word about this, until they have to be brought before the boy judge, as you call him."

The next morning the rich man's friend brought a little boy to his house. When the rich man saw him, he was disappointed. The boy looked quite ordinary, and was so shabbily dressed. In fact, he did not at all look to be a bright, clever boy. But when the boy was seated in one of the large chairs in the rich man's huge dining room, he looked at the rich man, who felt as if the boy's eyes were boring right into his heart, and that he knew even his secret thoughts. The rich man did not like this, and wanted to tell his friend to take the boy back to where

he came from, but his greed for finding his lost money was stronger.

The boy sat silently and the rich man's friend said, "Call your servants." When the servants came into the room, they were told to stand in front of the boy judge. Although the rich man had not noticed it before, he now saw that the boy had three small sticks in his hand. These he now gave to the servants, one to each. At last the boy spoke to the servants: "A large sum of money has been stolen from your master's house, and only one of you could have taken it. Now each of you have got a stick, exactly the same length, and remember these are magic sticks. Each of you will be locked up in a separate room for one hour. Then you will be brought before me again, and I shall know who is the thief, because his stick will have grown longer than the other."

The three servants were led away and locked up in separate rooms by the rich man. After an hour they were again brought before the boy. They were then asked to place their sticks side by side on the floor near the boy's chair. Two of the sticks were still exactly the same length, but one was about three inches shorter. The boy then pointed to the servant who had laid down the short stick and said, "He is the man who has stolen your money. His guilty conscience told him to break off a piece of his stick to make it shorter than the others, which was very foolish of him, because these are just ordinary sticks and not at all magical."

The clever boy judge was right, because when that servant's room was searched, all the money he had stolen was found hidden under his bed mattress. He thought he would bluff the boy Judge by making his stick shorter, but the boy judge was so much more wiser.

UNCLE TELLATALE.

THE PREVAILING PACHYDERM

S. R. SRINIVASARAGHAVAN

Integral Coach Factory, Madras

THE elephant is known for its majesty and memory. The story of how a huge pachyderm remembered the evil deed of a tailor who pricked its trunk with the point of his needle and was not happy until it had gathered sufficient mud to shower on the head of the evil-doer on its way back from its bath, ought to be known to our readers.

The elephant is not so much admired in our country for its powers of memory as for its majesty. It is really a sight to see the huge animal wending its way in gala mien, with its head erect and the trunk waving in a majestic oscillation. Its uniform thud over the earth as it is walking on, gives one an idea of its weight and strength.

The elephant has adorned the palaces of our Maharajahs from a hoary past and, ours being a land of temples and festivals, the pachyderm has been the master of ceremonies in every festivity. The elephant formed the main part of an army till the times of "Porus" and Chandragupta Maurya.

Milton should have called the elephant unwieldy in one of his bad moods. Its hugeness ought to have struck him as a calamitous drawback. But the elephant does not suggest sheer weight in an onlooker. On the contrary, it suggests a wholesome agility much in contrast to the mountainous flesh it is made of.

Our Puranas tell us that eight huge pachyderms are carrying the earth on their heads at eight different corners. The sons of Sagara met all the eight and paid homage to their majesty.

The latest news about this huge animal reveals that the country has not yet lost its love for the elephant. The authorities, it seems, had first decided that elephants would not feature in this year's cultural pageant in Delhi on Republic Day. They might have lost sight of the popularity of the majestic animal; but later on, they understood that an elephant could not be so easily dispensed with. The pachyderm has prevailed!

The elephant forms part, and that an essential part, of the tradition in which we are steeped; it adorns our culture as distinctly as the Himalayas and the Kanyakumari. It is God's own animal in both the literal and metaphorical sense. It might perhaps look ugly while consuming the huge masses of rice it is fed with, but, after all, even men have their crudenesses.

The majestic pachyderm cannot and should not be dispensed with. It is part of our history and myth, it has adorned the pages of our classical bards and poets and has enlivened the processions of great Emperors and Queens. As the Tamil proverb goes, an elephant is worth 1,000 gold coins either alive or dead.

IMPROVED METHODS OF FLAT SHUNTING

T. S. PARTHASARATHY

Deputy Chief Operating Supdt. (Coaching)

MORE than ninety per cent of railway marshalling yards in the world are flat yards. Hump yards are a costly proposition and unless they are provided with retarders, braking of wagons humped has to be done by the manual application of skids or brake-shoes and these are not often effective, considerable damage occurs to wagons and consignments loaded in them. Early railway systems thought that yards dealing with more than a thousand vehicles in twenty-four hours should be hump yards and on some railways, the limit was pitched at two thousand wagons. The Ex. M. & S. M. Railway considered it expedient to provide a hump marshalling yard at Tondiarpet (near Madras) although the number of vehicles dealt with was under a thousand. These ideas have since changed and modern railways, with improved methods of flat shunting and up-to-date equipment, are able to deal with thousands of vehicles on flat yards and go in for hump yards only when the number of vehicles to be handled is far in excess of the capacity of a flat yard. The Colehour Yard of the Pennsylvania Railroads in South Chicago, for example, is a flat yard but handles from 4,000 to 5,000 wagons each day.

The quality of the work turned out in flat yards and the expedition with which trains are broken up and formed depend largely upon the experience and intelligence of the shunting staff. There is no standard procedure or clear-cut practice which is adopted even in the different marshalling yards of the same district or division, not to speak of a railway or a country. At places where the men are less experienced, the proceedings are greatly prolonged. It is not uncommon for a junior hand, after striving long and laboriously in vain

efforts to marshal some loads to find that he has got them into the sorry state of 'confusion worse confounded' and then he has to undo what he has done and start all over again. Most yard men acquire their knowledge in the hard school of experience on the 'sink-or-swim' method and they are taught by people who only too often have no qualifications for the task.

These conditions, if not entirely curable, are at least open to much mitigation. Here is a province where better operational methods would be of incalculable benefit to goods transport as a whole. Train working would be speeded up, wear and tear of rolling stock would be reduced and there would be big economies of engine power and vast savings in the consumption of coal.

These thoughts strangely enough, exercised the mind of Edward S. Hadley, a British railwayman, in 1944 when German bombs had half-paralysed Britain's transport services and he convened a conference of shunters engaged in marshalling yards up and down the country. More than a hundred shunters responded to his invitation and described how they would perform a specified marshalling operation which was a straightforward job of a nature that the men would ordinarily be doing every day; indeed many times a day. From the description given by the shunters it was manifest that the men had been at pains to show the best performances they could. Only a small minority of the men worked to methods that secured anything like a minimum expenditure of engine power, expeditious procedure or a moderate total amount of wagon conveyance. Among the others, many employed methods that were roundabout and cumbersome and involved a great waste of time and labour, much needless conveyance of

Approved Contractors to Governments & Railways.

Phone : 2689

Grams : 'SAJJAD'

H. ABBASBHOY AHMEDALLY & CO.

288 LINGHI CHETTY STREET - Post Box No. 1358 - MADRAS-1

Pioneer House for :

Bolts, Nuts, Rivets, Washers, Spring-Washers, Carpenter's & Engineer's Tools, Files, Hacksaw Blades, G. I. & G. M. Fittings, Asbestos goods, Non-Ferrous, Ferrous Metals, etc.

wagons and excessive use of engine power.

The task was one which should have been done—and actually was done by some of the men—with the aggregate number of about 150 wagons conveyed during the to-and-fro movements in the whole operation; but there emerged the disturbing fact that for the majority of the shunters the number was upwards of 250, for some it was over 400 and in one case it ran as high as 466.

These excesses—up to double and treble the amount of work really necessary—have, of course, to be translated into terms of time occupied, wagon journeys, occupation of the yard, delays to trains, engine usage and consumption of coal.

General Principles of Shunting and Marshalling

No two marshalling yards or shunting yards are alike. There are differences in gradients, general construction, extent of accommodation, train service requirements and many other features, each of which governs in some degree the manner in which shunting and marshalling can best be done. For example, where the gradients of sorting lines falls towards the dead ends, the process known as "saving the points" enables a man to dispose of a 'string' of wagons for different sidings without it being necessary to reverse the engine throughout the operation. At places where the sidings are on the level, also, this

process is usable but to a less extent; but where there is an upward gradient towards the end of the sorting lines, this process is unsuitable.

In the wagons, too, there are differences that affect the methods of handling them. Those with oil axle-boxes run more freely than those with grease axle-boxes; then the wagon in hand may be empty, lightly loaded, heavily loaded or made up of some of each—all differences that have a bearing upon the handling of the wagon; there may be wagons of exceptional construction or some whose loads call for extra careful movement (e.g., live-stock, long timber trucks, etc.). Then there may be 'quick transit' wagons which have to be given special consideration in the operation.

There are but a few of many conditions that give every yard and in fact, every portion of shunting work, a character of its own, and preclude the setting-down of any precise formula of universal application for this or that kind of operation.

Nonetheless, there are principles and methods that apply to shunting and marshalling everywhere and at all times and are extremely helpful. With a knowledge of these, a shunter is able to conform to them in whatever operation he is conducting. On the other hand, without a knowledge of them, he is at a great disadvantage and the quality of his work is adversely affected in consequence.

It is an axiom that the less a shunter uses his head, the more he has to use

his heels', which, besides being arduous, is a time-absorbing process. However, it is more often his misfortune than his fault that he gives his heels so much to do because he has never happened to 'tumble to' the better methods of doing the work. He will have seen other men getting through their work with a facility that is beyond himself but he has no conception of how they are able to do it except that all the while they are manifestly observing more than he sees, planning their movements in conformity therewith and thus achieving snort-cuts to their ultimate purpose.

Many shunters will get on with the job in the old way and the result of this policy is that these men will still be getting on with it long after the work would have been finished if they had known how better to use their eyes and their wits while conducting the operation.

Dominant Features and How to Observe Them

Engine 1 1 3 3 4 5 5 1 1 2 2 3 5 5 5

Here are 15 mixed wagons. The numbers represent the successive destination stations. The wagons have to be marshalled into station order; the 1's next to the engine, the 2's next and so on—the 5's at the rear. Take a careful look at them and visualize how you would proceed to do the job. The same wagons can be shown with some divisions between them, thus:—

1 1 3 3 4 5 5 1 1 2 2 3 5 5 5

It will now be readily seen that by the simple process of placing the third section between the first and second sections, all the wagons will then stand in the order required, thus:—

1 1 1 1 2 3 3 3 3 4 5 5 5 5 5

Therefore the shortest plan is to draw forward the wagons comprising the **front three sections**, shunt aside those in the **third** section, place the **second** section against the fourth and then, with the first section on the engine, pick up the third (bringing the four 1's together) and back the

combined first and third sections against the others.

Here is another example—a batch of wagons with those in front of the 3's to be put into station orders:—

Engine 1111 2222 111 3333 444 55

Two procedures present themselves. One is to shunt aside the intermediate batch of three 1's and then to shunt the four 2's against the 3's and finally with four 1's on the engine, pick up the three 1's from the siding and place all the seven 1's against the 2's as illustrated below:—

Engine 1111 2222 3333 444 55

111

Instead of this, however, it should be observed that the 2's and the four 1's in front of them may be separated; and after the batch of three 1's have been shunted aside, the other 1's should be shunted off along with the 2's leaving only the three 1's to be picked up by the light engine, thus:—

Engine 1111 2222 3333 444 55

111

The difference between these two procedures may be shown thus:—

I method

		No. of wagons conveyed.
1 Put off	3	11
2 Put off	4	8
3 Pick up	3	7
4 Put off	7	7
		33

II method

		No. of wagons conveyed.
1 Put off	3	11
2 Put off	8	8
3 Pick up	3	3
4 Put off	3	3
		25

By the first method, the work is needlessly made heavier than by the second method.

ABBASBHAI TAHERALY & CO.

Telephone : 55510

Suppliers to Government, Railway, Municipalities and to

**THE INTEGRAL COACH FACTORY
AND TO THE SOUTHERN RAILWAY, MADRAS**

SPECIALISTS IN BOLTS, NUTS, GENERAL HARDWARE & MACHINERY MERCHANTS
IRON, ENGINEERING TOOLS, METALS, RIVETS, SPRINGWASHERS, ETC., ETC.

81, SEMBUDOSS STREET, MADRAS-1

April 1956



St. George's
Cathedral,
Madras

COTTON YARNS

OF ALL DESCRIPTIONS FOR HANDLOOM, POWERLOOM & HOSIERY FACTORIES

MADURA MILLS COMPANY, LIMITED

Phone: 250 (5 Lines)

MADURAI

Telegrams: 'HARVEY'

MILLS AT MADURAI, TUTICORIN & AMBASAMUDRAM

5,00,000 Spindles

Counts up to 80s

WE SUPPLY:

WARP YARNS, COMBED YARNS, HOSIERY YARNS
CONE, CHEESE & HANK YARNS SINGLE & FOLDED

SPECIALITIES:

YARNS FOR THE MANUFACTURE OF
ROPES - HEALDS - CANVAS - TAPE
BELTING DUCK - TYRE CORD FABRIC - SEWING THREAD
MULTI-PLY & CORD YARNS

MANAGERS:

A. & F. HARVEY LIMITED

Phone: 420 (4 Lines)

PANDYAN BUILDING

MADURAI

S. INDIA

Telegrams: 'HARVEY'

RAILWAY INTER SCHOOL SPORTS AT PERAMBUR

A. B. KRISHNASWAMY, S.L.W.I. (Sports)

The Fifteenth Railway Inter School Sports was conducted at the European and Anglo-Indian Institute Grounds, Perambur, on Saturday the 17th March 1956. The meet was declared open by Shri S. Chaudhury, B.Sc. (Calcutta), B.Sc. (Man.), M.R. SAN. I., ASSOC. INST. C.E., A.M.I.E. (Ind.), Officer on Special Duty (J.A.) Standing Selection Committee.

The highlights of the opening ceremony was the march past by 120 school children representing eight middle schools from all over the Southern Railway, proudly bearing their respective banners. The green-ribbon bordered simple white uniform of Golden Rock School athletes contrasted pleasingly

with their military march and lent them a distinctive sartorial elegance. After the completion of the march-past all the teams lined up in deep columns before the Tribune of Honour.

Four girls and four boys representing eight schools came forward to the **Tribune of Honour** and simultaneously took the following oath:

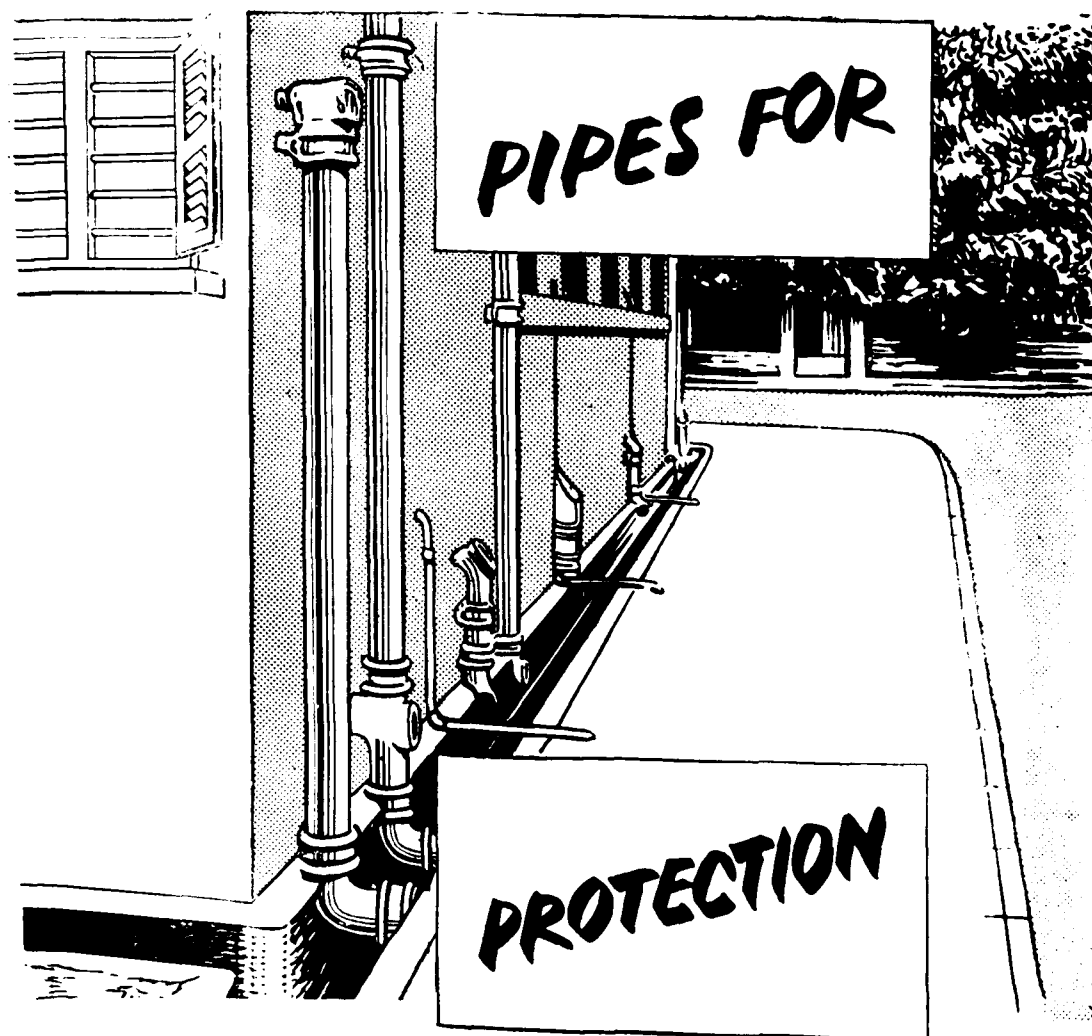
"We swear that we will take part in the games in loyal competition respecting all regulations which govern them and are desirous of participating in them in the true spirit of sportsmanship for the honour of our railway and for the glory of sports."

Miss Zana Laffray clearing 4'41" in the high jump. The Indian Railway women's record is 4'41"

Winners of the junior girls 50 metres race on the Victory Stand



(Photos: C. S. Alcom).



Protect your building by  Cast Iron
Rainwater and Soil Pipes
manufactured by IISCO to B. S. Specifications.
They are strong, dependable and pleasing in appearance.

THE INDIAN IRON &
IISCO
STEEL COMPANY LTD.

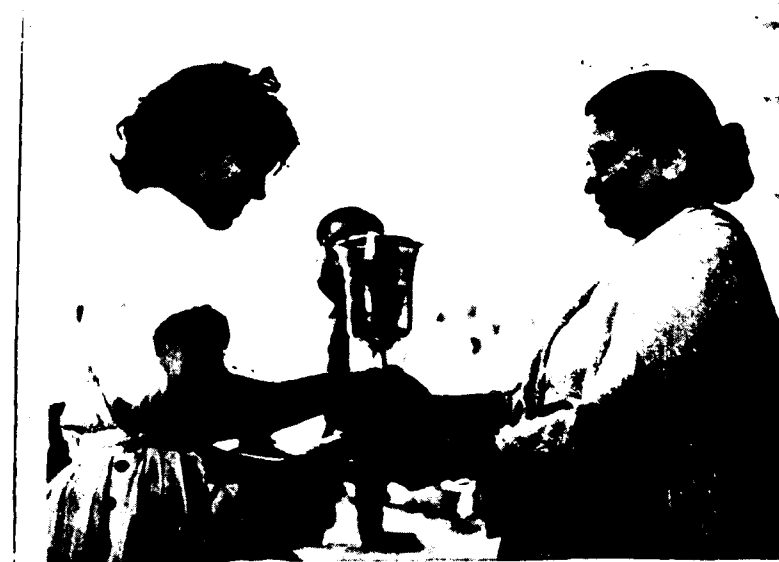
THE INDIAN
IRON & STEEL CO., LTD.
Managing Agents.
MARTIN BURN LTD.
12 Mission Row, Calcutta

Branches
New Delhi Bombay Kanpur
P. O. Box 44 P. O. Box 276 P. O. Box 222

11X-49

April 1956

RAILWAY INTER SCHOOL SPORTS



Mrs. Chaudhury
presenting the Girls'
Championship to
Miss Zana Laffray

As many as seventeen events were gone through and the crowds' most popular athlete was Zana Laffray of Bitragunta who scored a double, creditably winning the high jump gracefully clearing 4 feet 6½ inches which is two inches above the Indian Railways Women's record and the 100 metres in a good timing of 14.7 seconds. Rita Rowlands of Rajahmundry returned a fast timing of 8 seconds in the 50 metres race which is another noteworthy performance. Among the boys Alastair Lavender of Golden Rock School displayed (what is called the Western role) a perfect technique in high jumping. It was a feast for the eyes of the spectators to see this young 11-year old 4 feet tall athlete clearing a height 6½ inch above



Bada Hussein,
Indian Railway
School, Guntakal,
receiving the Boys'
Challenge Cup from
Mrs. Chaudhury

(Photos : C. S. Aleem)

RAILWAY EQUIPMENT SHOWROOM

M A D R A S

*

The Railway Equipment Showroom next to the Carriage Works Station, Perambur, continues to remain open to all interested persons between the hours of 10 a.m. and 1 p.m. and 2 p.m. to 5 p.m. on Mondays to Fridays and from 10 a.m. to 1 p.m. on Saturdays. A booklet giving the approximate estimates of future requirements of Imported Railway Equipment and important Indigenous Railway stores in short supply issued by the Ministry of Railways is now available for sale at a cost of Rs. 2 each, postage As. 3 extra, and this can be had on application to the Officer-in-Charge, Imported Railway Equipment Showroom, Perambur, Madras-23.

**SOUTHERN RAILWAY AND
INTEGRAL COACH FACTORY**



Mrs. & Mr.
Chaudhury
watching the
progress of the
sports.

(Photos : C. S. Aleem).

his own height. I am sure these young athletes whose bones are flexible and minds impregnable will one day put India in the world map of athletics.

An interesting event of the day was the Visitors' Children's 50 metres—all prize no blank race. As many as 50 children below the age of 8 years participated in this event. All the participants were presented with a packet of sweets each.

Both the Boys Championship and the School Championship went to Guntakal while the Girls Championship was won by Bitragunta Anglo-Indian School. At the conclusion of the day's meet Shri S. Chaudhury thanked the management for the opportunity and the honour given to him to associate himself with the events and to enjoy the sports that afternoon. He said that the credit for the day's success went



Indian Railway
School, Guntakal,
who annexed
both the School
Championship
and the Boys'
Championship
at the meet

EASTERN RAILWAYMEN'S CO-OPERATIVE LIFE INSURANCE SOCIETY LIMITED CHAKRADHARPUR

RAILWAY WORKERS

The Second Five-Year Plan is already afoot for making our Country prosperous and keeping it in par with other Countries of the World.

As Railway Employees, it is our primary duty to assist the 'Nation' and forge the plans successfully. With meagre salaries we cannot contribute to our National Assets. We can only assist our Country through Co-operative method.

The Eastern Railwaymen's Co-operative Life Insurance Society Ltd., Chakradharpur, which is working for the betterment of the Railway Workers by encouraging the habit of thrift by having the Premium of the Society recovered through the Pay Bills of **all the Railway Workers**, has already contributed to the Nation by way of Investments in Government Securities, substantially. This proud achievement is only due to your co-operation.

Small savings towards premium in the long run will give every Employee a round figure at the time of maturity or at earlier death to the dependants.

SAVE — THRIVE — PROSPER

through yourself, the Nation, by joining the

EASTERN RAILWAYMEN'S CO-OPERATIVE LIFE INSURANCE
SOCIETY LTD., CHAKRADHARPUR

the Premiums of which will be recovered through the salaries of All Railway Employees.

SNATCH THE OPPORTUNITY AND OWN A POLICY

**BONUS Rs. 16 PER THOUSAND PER ANNUM ON ALL
WIFE PROFIT POLICIES**

Business in force	...	...	over Rs. 2½ Crores
Life Fund	...	...	over Rs. 53 Lakhs
New Business 1955	...	...	over Rs. 66 Lakhs

For particulars contact local agents or write to

THE SECRETARY
Eastern Railwaymen's Co-operative Life Insurance Society Limited
CHAKRADHARPUR



Shri S. Chaudhury, addressing the gathering after the conclusion of the sports.
To his left are Shri E. S. Kalyanaraman and Shri A. B. Krishnaswamy.
(Photos : O. S. Aleem).

to the organisers who had worked so well and to the competitors who had done their best in spite of the hot sun. He further praised and congratulated one and all and advised that nothing is more **noble** than to be a sportsman not only in the field of sports but also in the battlefield of life and assured all those who participated in the sports and those who could not do so, can become good sportsman if they observe faithfully the spirit of the oath they have taken at the commencement of sports that afternoon. In conclusion

he expressed his hope that some day some of them, if not many of them, will become famous sportsmen in the International field and bring glory and laurel to our motherland.

Mrs. Chaudhury then gave away the prizes to the winners.

Shri E. S. Kalyanaraman, Assistant Personnel Officer/Labour and Manager of the meet, proposed a hearty vote of thanks. With the cheers to Mrs. & Mr. Chaudhury the function came to a close.



Shri. M. P. Narayana
Babu, RAO's Office,
Madras and
Sow. Vetto Bai,
who were married
on 16-2-1956

INTER RAILWAY CRICKET



Southern Railway Cricket Team, Runners up in the Inter Railway Cricket Tournament held at New Delhi on 18th and 19th March, 1956

Below : Eastern Railway Team, Winners, with the Runners up



ENGINEERING GANG-DAY AND SPORTS AT PAKALA

The annual Engineering Gang Day and Sports of the Pakala Sub-Division, Bellary District organised by the AEN/FAK was celebrated with great enthusiasm on 12-2-56 at Pakala. The Gangs from all the sections in the Sub-division took part in the several interesting events arranged for them on this day, and evinced great interest and gave an excellent display of their quickness and skill. Events such as Assembling Track, stacking Sleepers, Dismantling Track, Assembling and Dismantling Trolley, etc. were held for the gangs and special tests were also held for Bricklayers, Carpenters, Painters and Black-smiths. Sports such as Chadugudu and Tug-of-war were also held for the gang staff. For the supervisory staff, apart from running race, special items such as Crib-building and Levelling were also arranged.

There was a large gathering witnessing the various events where the gangs and other staff were engaged in a healthy rivalry vying with one another to show their ability in their art and knock off the prizes meant for each event. The events being of a competitive nature were in themselves entertaining to the participants and spectators.

Sri G. Ganesan, District Engineer, Bellary, presided over the meeting in the evening and distributed the prizes for the winners of the various events. Cash prizes awarded by the Railway Administration for the best maintained gang-length in the Pakala Sub-division



Statue of Radha and Krishna at Brindavan Gardens, Mysore

for the year 1954-55 which had been won by Gang No. 9 of ex.-PAK section and also the certificate of merit due to P.W.I. Sri P. S. Veeraraghavan were distributed at the function. The District Engineer explained to the staff and all those present at the junction the significance of Gang Day and advised the staff to realise the importance of the work in which they were engaged and to do their best for the service of the country.

Mr. W. A. Satur, PWI/PAK—A section, was the recipient of the Championship Shield presented by the District and Assistant Engineers for the best permanent-way section as adjudged by the events of the day.

After this, the staff were entertained with the following dramas :—

'The Last Days of Socrates' in Tamil staged by the Pakala Tamil Sangham, "Pathithidu" in Telugu enacted by local Railway employees and 'Vazhkai Sulal' in Tamil by the dramatic group of the District Engineer's Office, Bellary. The dramas were very much appreciated and drew a huge audience from the town.

At the close of the drama Sri B. P. Kesava Moorthy, Assistant Engineer, Pakala, proposed a hearty vote of thanks to all concerned. The day's function came to a close with the singing of the National Anthem.

OBITUARY NOTICE

The Administration regrets to announce the death of Sri M. S. Mani, Assistant Officer (Goods), Madras on 28-3-1956.

Born on 15-9-1906 Sri Mani entered Railway service as a clerk on 26-4-1926. By dint of hard work, he rose to the position of a class II officer to which cadre he was promoted on 1-5-53.

In his death the Railway has lost an industrious useful and conscientious officer.



OPENING OF NEW RAILWAY DISPENSARY AT GUDUR

An elegant function was got up by the Southern Railway employees of the stations between Elavur and Nellore on the 9th March when the newly constructed Railway dispensary was formally declared open by Dr. A. Lakshminarayanan, District Medical Officer, Southern Railway, Bezwada.

Sri P. Sidhaiah Naidu, Chairman of the Gudur Municipal Council unfurled the National Flag. Mr. N. K. Seth, I.A.S., Sub-Collector, Gudur presided over the function.

The pleasant manners and spirit of service of Dr. M. Ramakrishna Rao, the Medical Officer-in-charge towards the Railwaymen since the functioning of the Dispensary for the last one month attracted many admirers who voluntarily co-operated and ennobled the function. Besides large number of railway employees, officials, non-officials and the elite of the town participated in the function.

Mr. K. C. K. Moorthy, Assistant Engineer, Bitragunta introduced the guests to the audience.

Mr. Seth, in his presidential remarks detailed the various welfare measures taken by the Railway administration for the benefit of railway employees and said that the location of a dispensary at Gudur was a blessing to a large number of families and children of railwaymen who were formerly attached to Bitragunta and who were suffering.

Mr. M. S. Panchapakesan, Station Master, Gudur and Chairman of the Reception Committee welcomed the gathering and said that the original proposal for having a dispensary at Gudur was mooted about 28 years back and while detailing the circumstances under which the dispensary was started thanked the Railway administration as also the officials who were responsible for the accomplishment of the long-cherished goal.

Mr. A. Munuswamy of the Gudur Railway Employees' Association urged for the proper maintenance of the dispensary with sufficient stocks of medicines and suggested the provision of beds and appointing a midwife to the Railway dispensary.

The Dispensary was then formally opened by Dr. Lakshminarayanan who said that the health programme of the Railway administration was a reflection of welfare state and that the intention of the administration was to secure maximum possible benefits to railwaymen. He assured Mr. Munuswamy and other employees of proper, efficient medical service and said that all the medicines that were essential were being supplied and that if supply of specific medicines were considered necessary, arrangements will be made. He wished that in the long run, this dispensary may be upgraded as a Hospital when equipments and additional establishment will be made available.

The President in the concluding remarks exhorted the Railwaymen to



WOOD- WORKING MACHINERY

HIGH SPEED BANDSAWS

for higher output and
reduced breakages

FEATURES

One piece substantial
frame to absorb all
running and cutting
stresses.

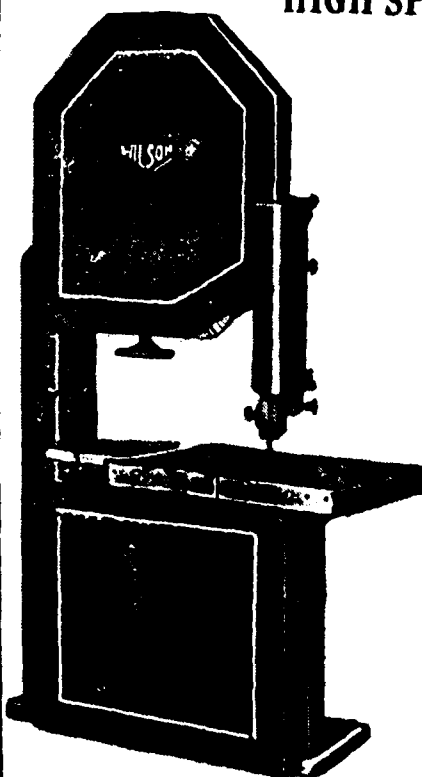
Directly motorised, self
contained motor
driven, or belt-driven
machines are avail-
able.

Unique design of top
head and tension re-
duces dead weight to
a minimum

Application of synchro-
nised two-wheel brakes
automatically cuts off
power.

Perfect balance,
speedy, smooth and
safe.

Made in three sizes,
26 in. 30 in. and 36 in.
diam. wheels.



THE WILSON range of machines includes— Circular Saw-benches,
Straight-line Saws, Chain and Chisel Mortisers, Tenoning
Machines, Surface Planers, Panel Planers, Combined Planers,
Heavy Duty Spindle Moulders, Universal Woodworkers, etc

Write for information to the Sole Agents in India

MACHINE TOOLS (INDIA) LTD.

Calcutta
Box 585

Bombay
Box 522

Bangalore
Box 697

PPS/MT-103/6.

April 1956

S. R. NEWS

avail of the medical facilities afforded by the Administration and said that these amenities go along with the corresponding obligation on the part of Railwaymen to serve conscientiously towards the Nation's progress.

Other items in the programme were service of light refreshments and Tea by 'Modern Hotel' of Gudur and variety entertainments by Messrs. Natesa Iyer, Hanumantha Rao, Smt. Sarojini Devi and some artistes of the Vijayawada A.I.R.

Mr. C. Moreira, Shed Turner-in-charge and Secretary of the Reception Committee proposed a vote of thanks.

GOVERNOR OF ANDHRA AT ANANTAPUR

February, this year marks an important period in the history of the Railway station at Anantapur. The Governor, Andhra State, Sri C. M. Trivedi with Srimathi Kusum Trivedi, stayed in our station from 10th to 12th of February, during their tour. Sri M. Narayanan, District Traffic Superintendent, Guntakal and Sri K. V. Gopalakrishnan, Traffic Inspector, were also present supervising all the arrangements.

The Governor stayed in his saloon and his officers in the First Class carriage; all the carriages were conveniently placed at their disposal and a small platform was specially constructed for them.

In front of the Governor's saloon, a finely erected shamina over a small verandah with colourful festoons by the side of a semi-circular arch bedecked with varieties of colens and crotans and ferns with fine foliage presented a picturesque panorama. From here a small nice roadway led to the main road of the Municipality. In the centre of this miniature park in front of the Governor's saloon was his own saffron-coloured flag with Ashoka emblem flying in a grandeur, all its own, aloft a green painted staff fixed on a base of circular masonry of three steps, specially constructed for the occasion.



Sculptural work in one stone.
Hill Temple, Mahabalipuram



For more than 40 years since the introduction of the first electric lighting on Indian Railways, CHLORIDE 'LUX', and later EXIDE-IRONCLAD Batteries have been the first choice of Railway Engineers. Since air-conditioning was introduced, EXIDE-IRONCLAD Batteries have been fitted on air-conditioned coaches in service in India. EXIDE-IRONCLAD Batteries are fitted also on the new Swiss Lightweight coaches on the Indian Railways.



Our battery designers with many years practical experience of the arduous climatic and operating conditions of this country have produced a battery unsurpassed for efficiency, reliability and long life... and with an eye to the future they continue endlessly the research for new materials, and new designs, to give you batteries that will be even better than the best we know today.

Exide-Ironclad

CELLS FOR TRAIN-LIGHTING, FANS
AND AIR-CONDITIONING

for CARS, TRUCKS, TRACTORS & BUSES
The New *Silver* Exide BATTERIES with PORVIC
— the Separator which is virtually indestructible in service

A CHLORIDE AND EXIDE PRODUCT

EXX 217

April 1956

S. R. NEWS

95

From the Municipal road, one could see on either side of the small roadway leading to the Governor's saloon, small tents pitched for the various officials on duty. There were two taps in the Camp area with water always available. There were policemen on guard throughout. It was a veritable township and beauty spot. The arrangements were simple, but excellent and the whole view was a feast to the eyes.

The Governor with Srimathi Kusum Trivedi accompanied by the A.D.C. had a number of pleasant functions to attend during his three day stay.

When a letter requesting him to grace a photograph with his presence with us, was sent in, he graciously acceded to our request.

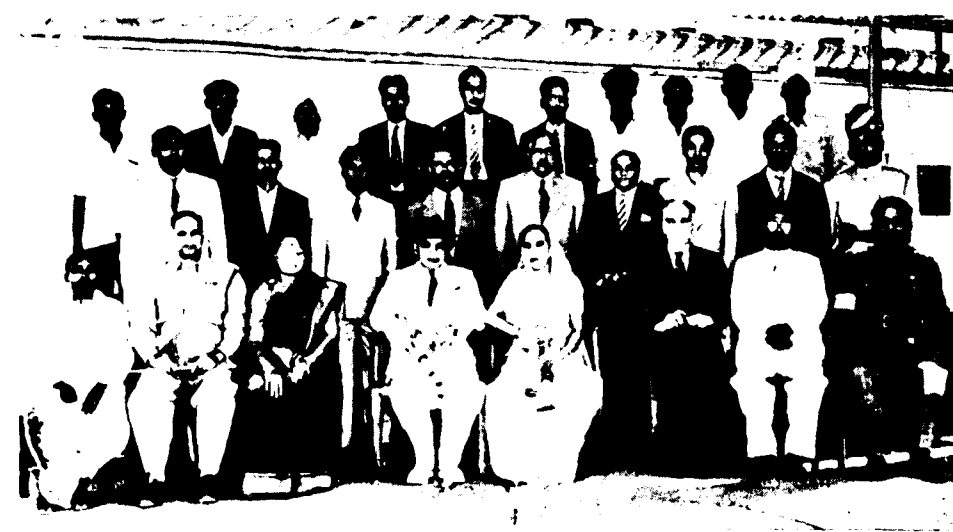
The photograph represents all the departments, viz., Traffic, Engineering, Mechanical, Electrical, Medical and Police. The Governor was garlanded by Sri Narayanan, the District Traffic Superintendent, and Sri Santhanam, the Station Master, garlanded Srimathi Kusum Trivedi.

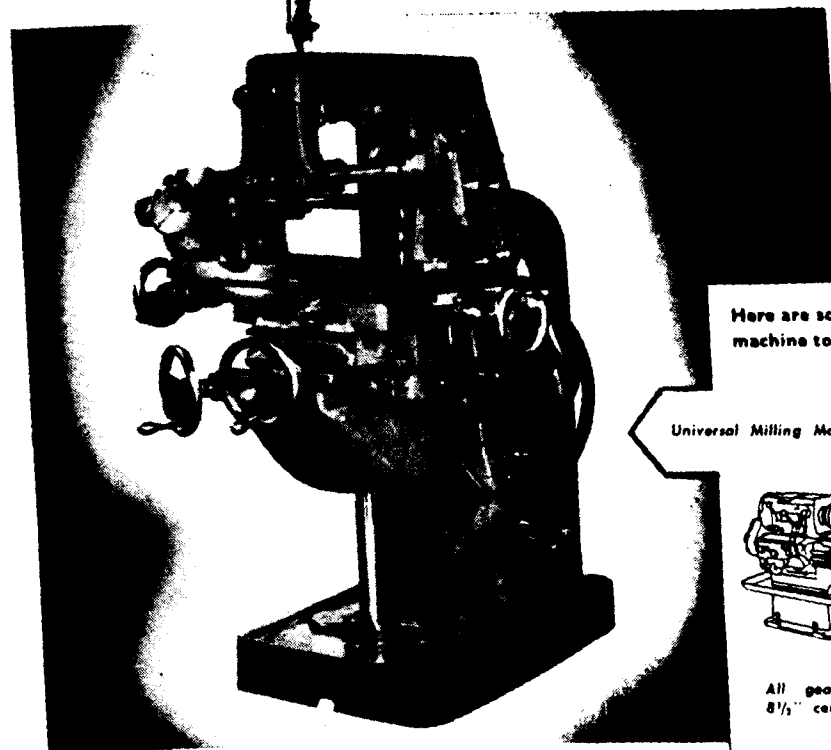
This success of ours could not have been complete but for the presence of Sri M. Narayanan, the D.T.S., under whose direction every one of the staff played his part. "Step by step with

one another" as our beloved Prime Minister says, this success was, in a large measure due to active co-operation of the officials of the Public Works Department under the guidance of the Executive Engineer, Mr. Jeevan Rao. Particular mention must be made of the Permanent-way Inspector Mr. Asadullah Gani, who designed and gave a lively shape to the platform and the small "Township" with all facilities. Sanitary and lighting arrangements left nothing to be desired.

In this connection, a copy of the D.O. letter received from Capt. D. S. Rao, A.D.C. to the Governor of Andhra, Raj Bhavan, Kurnool, to our G.M., is reproduced below:

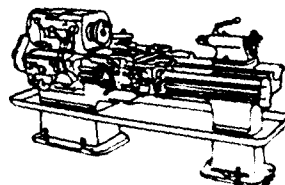
"I am directed by the Governor to convey his appreciation for the nice arrangements made at the Anantapur Railway Station during his stay at that place. The Governor stayed in the saloon during his three-day stay and felt no inconvenience as the arrangements made by the Government and the Railway authorities were exemplary. Shri M. Narayanan, D.T.S., Guntakal, and the staff deserve all the credit for the pains they have taken and making the stay of the Governor as comfortable as possible. Thanking you once again."



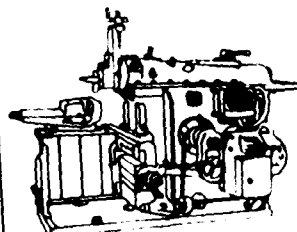


Here are some of the modern machine tools we are making :

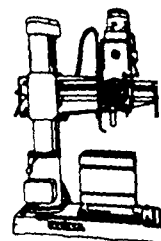
Universal Milling Machine



All geared head, motorised, 8 1/2" centre lathe



All geared, heavy duty Shaping Machine, 24"



All geared head, Radial Drilling Machine, 40mm capacity x 3 ft.

See these modern machine tools before you buy next!

All Grade I tools—

Individually certified by Government inspectors

Before you think of buying expensive foreign machine tools, see the modern high-speed lathes, shaping machines, milling machines, fully geared head pillar drills and radial drills that are made in India!

Each machine tool is tested by Government inspectors to ensure that it conforms to Grade I specifications—a standard of precision equal to any in the world. Besides this, every Grade I machine tool we make conforms to Dr. Schlesinger's international specifications.

Quick delivery, excellent service

We can promise early delivery—no long delays in shipments. Accessories and spares are always immediately available, of course. Hundreds of Indian machine tools have been giving fine service for years, in Government and railway workshops and in private industry.

Issued by :

COOPER ENGINEERING LTD., Satara Road, Bombay State
INVESTA MACHINE TOOLS & ENGINEERING CO. LTD., Bombay
MYSORE KIRLOSKAR LTD., Harihar, Mysore State
PRAGA TOOLS CORPORATION LTD., Secunderabad

Members of

**THE INDIAN MACHINE TOOL
MANUFACTURERS' ASSOCIATION**
Ewart House, Bruce Street, Bombay 1



Shri B. K. Kuppuswamy,
new Engineer-in-Chief (Construction)

Shri T. S. Ahobilacharya and Shri V. G. Naidu (right) who were recently promoted as Deputy Chief Engineers





M. Ganapathy, C.-E., S.Ry., eulogizing Mr. Sule at the party given on the eve of the latter's transfer to the Inspectorate, Ministry of Railways, New Delhi



Mr. Sule thanks for good wishes and the entertainment

Classes being conducted for the benefit of the Staff of the Stores Department



FIRST SEVEN COACHES MOVE OUT OF INTEGRAL COACH FACTORY

THE I.C.F. had another historic day on the 22nd February 1956 when the first seven coaches assembled by the Integral Coach Factory glided out of the Shops on their journey to the Central Railway Workshops for furnishing. The occasion was marked by a gala function held in the lawns near the main works entrance and a large number of Officers, staff and workers attended.

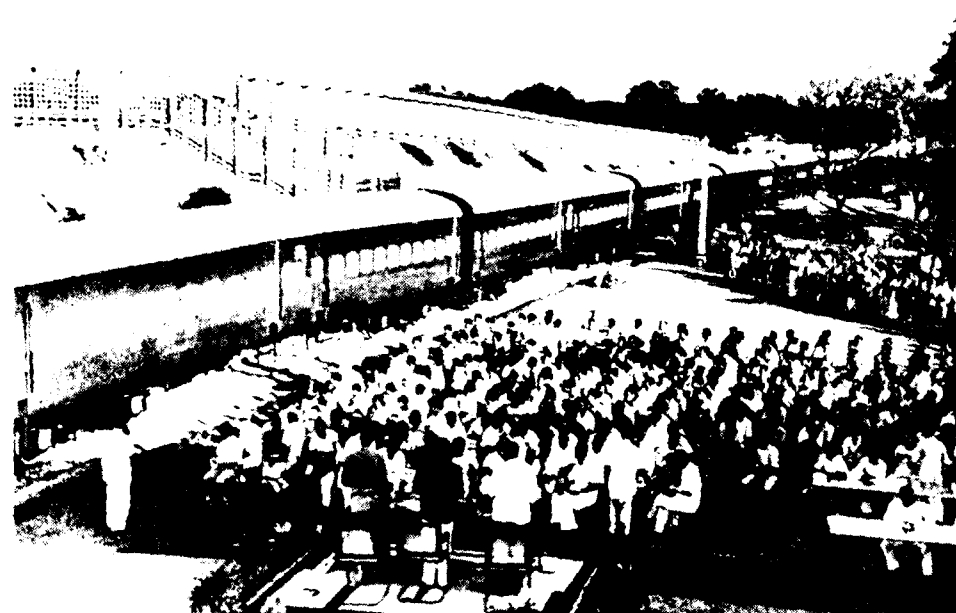
As the Chief Administrative Officer, Sri K. Sadagopan, arrived and took his seat along with Sri K. Swarup, Deputy Chief Mechanical Engineer, and Sri W. Braem, the Swiss Chief Technical Manager, the seven coaches that had to be despatched to the Central Railway moved majestically on the rails beside, and stopped at a convenient spot for the performance of Puja.

At the outset, Sri K. Swarup said that the production of the first seven coaches which were to be despatched to the Central Railway had been possible by the unstinted-co-operation of all the staff and workers of the

Factory. The Integral Coach Factory was already ahead of the schedule for production fixed in the Supplemental agreement between the Government of India and the Swiss firm. Sri Swarup hoped that the same team spirit and co-operation would continue in the future also. In conclusion Sri Swarup thanked all the staff and workers for the wonderful team spirit and co-operation they had exhibited all along.

Sri W. Braem, the Swiss Chief Technical Manager, then addressed the gathering. He said that the year that had passed away could be looked upon with great satisfaction. They were all there to bid farewell to the 7 coaches that had been assembled in the Integral Coach Factory. They could well be proud that they had been able to step up the target in the Assembly lines. In such a manufacturing unit like the I.C.F., it was not the number of men that were at the works that counted but the manual labour they were able to put in. Everyone had a part to play in this growing machine.

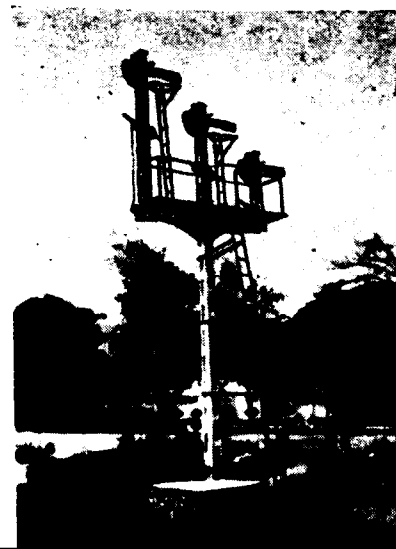
A view of the First Seven Coaches assembled at the I.C.F.



CONCRETE FOR THE RAILWAYS

Concrete is of inestimable value in the construction of station buildings, platforms, bridges, signal posts, car washing platforms, staff quarters, and various other structures needed by the railways.

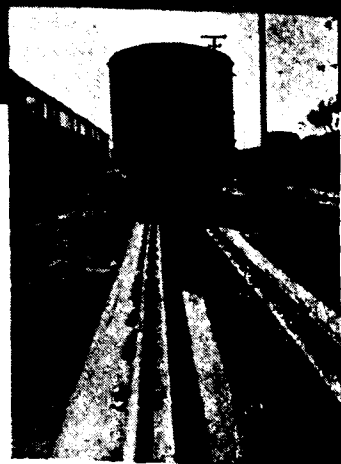
The moderate first cost of concrete structures—plus their long life and low maintenance—results in true low annual-cost service.



Concrete signal gantry ►



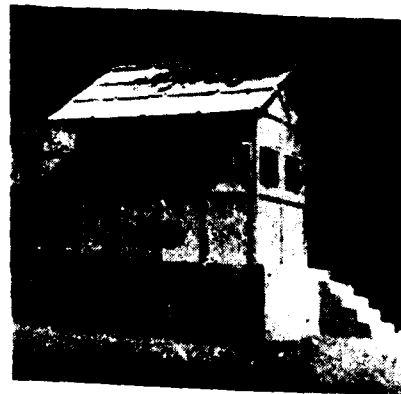
Precast concrete fencing in railway yard



Concrete ash pit

Build to last with
ACC cement

Signal cabin



**THE ASSOCIATED CEMENT
COMPANIES LIMITED**

Sales Managers:

**THE CEMENT MARKETING
COMPANY OF INDIA (PRIVATE) LIMITED**

April 1956

FIRST SEVEN COACHES

101

By not working properly there was the risk that the whole machinery might be slowed down. The I.C.F. had already earned a name for quality work and he hoped that it would in future enhance its prestige by superior workmanship. The Indian Government and the Indian Railways had provided all facilities for the workers in the I.C.F., to facilitate smooth working and it was their duty to utilise all those facilities.

Sri Braem said that in dealing with the machinery in the Shops great care had to be devoted as breakdowns of machinery would lead to interruption. They were still in the very initial stages of production. In order to achieve success in their common endeavour they should put their shoulders together, and work tirelessly. The Millwright department, the Electrical department, the Stores department and the many other units had to co-operate with each other for this purpose. This team spirit and co-operation would surely go a long way for making India industrially progressive. In conclusion Sri Braem thanked all the workers for their co-operation and the nice treatment the Swiss Team had received all along ever since they came to India.

The Chief Administrative Officer's address was scintillating and charged with noble emotions. At the outset he felt grateful for the opportunity given to him to participate in the gay function. He felt that it was another

landmark in the history of the I.C.F. that they were able to despatch seven coaches to the Central Railway. It was on the 2nd of October last year, Mahatma Gandhi's birthday, that production was inaugurated by our revered Prime Minister, Sri Jawaharlal Nehru. Since then they had bent their energies for the production of coaches. It was a matter of no small satisfaction to the Government of India that the I.C.F. had done more than what was expected of it on the production side. From the start it had been their good fortune to have been a model project in the country. In 3 years' time they had been able to build up what the Prime Minister called a magnificent factory. The Administrative Office, the Technical School, the Shops in the Factory, the workers' Canteen and the water supply arrangements—all these had been completed in a record period of 3 years. Sri Sadagopan said that he owed a deep debt of gratitude to the workers. The whole credit went surely to them. Sri Sadagopan continued that his heart went out in gratitude to the team spirit and cordial and harmonious co-operation between the Swiss technicians and their Indian counterparts. He hoped that with such encouraging beginnings the target set for the Factory would easily be reached one year ahead of time. In conclusion Sri Sadagopan exhorted all the workers to give of their very best by not looking upon their daily task as a means of livelihood but a noble contribution towards the betterment of the country.

After the speech the Chief Administrative Officer waved the green flag solemnly, saying that the first products of the Factory were going out. A locomotive provided by the Southern Railway gently hauled the carriages out as the evening sun tenderly caressed them while they passed from the shade into the open.

The function was charged with noble emotions and high hopes.



BOOK REVIEW

THE GANGA BRIDGE

Booklet issued by the General Manager and Chief Engineer, Ganga Bridge Project, Mohameh, P.O. Hathidah, Bihar.

The River Ganga sacred to millions in India originates from the Gangotri glaciers of the mighty Himalayas and has a catchment area of 3,92,000 sq. miles. After traversing a distance of 1,569 miles in the States of Uttar Pradesh, Bihar, West Bengal and East Pakistan, the river falls into the Bay of Bengal. In Bihar it virtually cuts the State in two parts, the one in the North being served by the North-Eastern Railway and the other in the South by the Eastern Railway. The Ganga Bridge site is about 1,048 miles from the source and 521 miles from its outlet into the sea. The river is nontidal in this area, but is subject to heavy flooding.

The passenger and goods traffic across the Ganges at Bihar is at present handled on barges across the river, a system which is a serious hindrance to free movement between the two Bihars. The absence of a direct rail and road link between North and South Bihars is a great handicap. The frequent shifting of the ghats to suit the moods of the river not only makes the working of the barges a costly affair but is also responsible for the severe restrictions in traffic which have to be imposed. The economies of the two parts of the State are complementary to each other. North Bihar is primarily agricultural in nature and produces large quantities of sugar and foodgrains. The economy of North Bihar depends mainly on the seasonal rainfall. South Bihar is also agricultural but its importance lies in its mineral wealth and industries. It has got iron and steel works at Tatanagar, Cement Works at Dalmianagar and Japla and coal in a number of collieries on the Eastern and South-Eastern Railways. Inadequate facilities of transport between these two parts

have had a deleterious effect on the development of Bihar. It would, perhaps, be no exaggeration to say that this factor has to a large extent, been responsible, comparatively speaking for the backwardness of North Bihar in industrial development in spite of its industrious people, and an exceedingly fertile soil. Financial consideration and return on capital cost apart, the Bridge is essentially required to connect North and South Bihar which will also assist North Bihar to develop industrially.

The question of constructing a railway bridge across the Ganga near Mohameh in Bihar has been under consideration since 1907, but it was only in 1945 that engineering and traffic surveys for a rail-cum-road bridge either at Mohameh or at Patna were decided upon. With the completion of the Assam rail link and a far greater demand of traffic to and from North Bengal and Assam via the transshipment points of the Ganga, it was found quite necessary to have a bridge across the river and Mr. M. Visveswaraya, the noted Engineer, was asked to go into the question. Mr. Visveswaraya adjudged Mohameh as the suitable site in September 1953.

Besides the construction of the main bridge, the other works to be carried out by the project are :

- (1) Broad Gauge rail connections with Barauni in the North and Patna and Kiul in the South.
- (2) Diversion of the existing Up Main line.
- (3) Junction arrangements at Barauni and Tilrath in the North (Metre Gauge) and Tal and Dumra in the South (Broad Gauge).
- (4) A modern Broad Gauge/Metre Gauge Transshipment Yard with a self-contained colony, engine sheds, etc. in the North near Barauni.

April 1956

BOOK REVIEW

103

Over 14,000 men of all categories are employed at present in the project. The Bridge site is about 5.50 miles downstream of Mohameh Jn. and is connected by a motorable road with it. Mohameh Jn. is situated on the main line of the Eastern Railway between Calcutta and Moghalsarai at a distance of 275 miles from the former which is also the nearest Port. The Bridge will be connected with Barauni Jn. on the North-Eastern Railway and Tal and Dumra on the Eastern Railway. The Bridge will replace the ferry barge working at Mohameh and will allow the traffic between North and South Bihars to move without hindrance, throughout the year, irrespective of the intensity of the floods of the river. It is hoped that the Bridge can be used to take up to 20 trains a day in each direction out of which it is assumed, 10 to 12 trains equivalent to 1,400 metre gauge wagons will carry goods, while at present the capacity of the wagon ferry is limited to a maximum of about 250 metre gauge wagons per day.

The Ganga Bridge will go a long way in easing the present situation of overcrowding of the trains on the North-Eastern Railway. The completion of the Rs. 15 crore Bridge Project would not only benefit Bihar, but also the entire country. Besides connecting the North and South Bihars, it would facilitate communications with other parts of India to North Bihar and remove the main problem of transport bottleneck in this region. Also, the Kosi Project which is the biggest project going on North Bihar now, will reap the benefits of the construction of the Ganga Bridge and both combined will change the face of North Bihar.

The foundation of this Bridge Project was laid by the President on February 26. The booklet under review has been specially brought out on this occasion by the General Manager and the Chief Engineer of the Project, in excellent art paper with attractive deep brown cover. The booklet is quite informative and contains full details of the project from its

preliminary stage, first surveys, site selection, description about the River Ganga, the economic significance of the project, the technical details of the project, and such other information besides a detailed route map of the project site. Also, it contains excellent photographs of the different sites of the project and other gigantic machineries used for the construction, staff quarters, and a statistics of the goods traffic expected after the completion of the project. The centre-spread, an artist's impression of the Ganga Bridge—an excellent tri-colour drawing of the Bridge under construction—is specially illuminating.

The Ganga Bridge is one of the biggest bridges under construction in the world at present. According to the booklet, it will consist of 14 main spans of 397 feet centre to centre of bearings each, with four shore spans of 104 feet 9 inches centre to centre of bearings each. The main spans will be supported on piers 403 feet 4½ inches apart on centres with foundations sunk 190 feet to 200 feet below the high flood level and the Bridge will carry a broad gauge track on the lower deck and a 24 feet wide road with two footpaths, each 6 feet wide, on the upper deck. The girders of the Bridge will be 60 feet high and the main girders 29 feet apart on centres. As far as known, these are the deepest foundations for any bridge in the world.

As stated by the President while laying the foundation-stone, the Ganga Bridge, which will link North and South Bihars will be symbolic of the unity and strength of the Indian Nation, which was once so well reflected in the glory and grandeur of Mithila on the one hand and of Magadha on the other—the two regions which this Bridge will join together. Everyone who lends a helping hand to this work, whatever his status and whatever the function assigned to him in this project, will be able to look back with pride to this joint national venture.

S. VEDANTAM, C.C.S.'s Office, N. Ry.
(Continued on page 105).

**SUPPLIERS TO THE
INDIAN RAILWAYS**

FOR OVER A QUARTER CENTURY

PARAMITE

INDIA'S FINEST CABLES

**TRAIN LIGHTING CABLES • RAILWAY SIGNALLING CABLES
COUPLING CABLES • LOCO HEADLIGHT CABLES**



THE INDIAN CABLE CO., LTD.

9, HARE STREET, CALCUTTA-1. WORKS: TATANAGAR.

**BRANCHES: BOMBAY, MADRAS, NEW DELHI, AHMEDABAD, AMBALA, SECUNDERABAD
NAGPUR, JAMSHEDPUR, KANPUR, BANGALORE, COIMBATORE & TRIVANDRUM**

NOW YOU KNOW IT

ASSETS AND LIABILITIES OF A SCIENTIST

A scientist's assets lie in a powerful intelligence, a logical bent and training in detached research. His debit balance is his world-shy temperament, the alien quality of his values to microscopic vision, which comes of seeing into narrowly restricted fields of work and which causes him to forget too easily the plan of the whole. This last is a serious disability indeed.

In short there is an absent mindedness about the scientist, arising from an exaggerated singleness of purpose which makes him prone to throw away the family with the bath water.

DIFFERENCE BETWEEN THE NORMAL AND THE GENIUS

A genius may be regarded as a power utilising a wider range than other men can utilise, of faculties in some degree innate in all. The word normal is ordinarily used to imply either conformity to a standard or a position as an average between two extremes.

WHAT IS THERE IN THE ZODIAC?

"The Ram, the Bull, the heavenly twins

And next the crab the Lion shines, the virgin and the scales

The Scorpion Archer and he-goat

The man has the water pot and fish with shining scales."

Shortsightedness

Shortsightedness is what happens when the eye-ball is too long from back to front. This error of refraction means that the light is focussed before it reaches the retina and when it does reach the retina the picture it makes is rather blurred. Sometimes shortsightedness may be due to the cornea being too much curved, so that it acts as too strong a lens, and the rays of light are focussed too soon.

When a thing is held close to the eyes, the eye catches the light rays from it as they are spreading.

Breathing

Normally there are 16 to 18 respirations per minute. They are slower during sleep than during wakefulness.

Tongue

A dry tongue: Internal irritation. Furred tongue occurs in nearly all fevers.

Yellow, white or brown: constipation, liver trouble, indigestion.

Trembling tongue: Nervous prostration.

Blue tongue: Interference with respiration and circulation.

Redness: Intestinal irritation. A blue line above upper teeth indicates lead poisoning. Bleeding may be the result of mercurial poisoning.

Pale gums: Anæmia.

BOOK REVIEW

(Continued from page 103)

• YOUR HOLIDAYS IN INDIA •

Sri R. T. Shahani's book 'Your Holidays in India' will be useful not only to the foreigner who wants to tour our land and imbibe its ancient traditions and culture but also to the Indian tourist. The vivid descriptions of the Indian hill stations, of the beautiful beaches, of the noted places of

pilgrimage and of the monuments which show the glory of Indian sculpture and architecture, all show that the author not only knows every inch of the country but also that he is very susceptible to and appreciative of beauty in all its forms and manifestations. This book will become one of the essential requisites to every tourist in India.

April 1956

SOUTHERN RAILWAY'S 1ST CHILDREN'S HOLIDAY CAMP

Educationalists all over the world agree that the theoretical instructions imparted in the class room has to be complimented by extra curricular activities, i.e., excursions, if education is to be fruitful. Further such trips instill into juvenile minds several desirable qualities like discipline, esprit-de-corps, loyalty to leadership, endurance of personal inconveniences and a sympathetic attitude of mind, which are so essential for cultural citizenship. Seldom do we hear of excursions organised by the Railway Administrations for its employees' children to enable them to reap the harvest of inspiration, instruction and delight which travel yields.

The Southern Railway, under the able guidance of Sri R. Nagaraja Pillai, Personnel Officer (Labour), and with the co-operation of the camp commandant Sri Ambrose with a band of his good and able assistants including a doctor, an excursion to Mysore was conducted from 6th to 9th January, 1956 and it was called 'Southern Railway Children's Holiday Camp'. They visited the places of interest around Mysore, Chamundi Hills, Somnathpur, Sivasamudram Power Station, Cauvery Falls, Seringapatam, Krishnarajasagara Dam and the famous enchanting Brindavan Gardens. 86 children in all took part. They came from different

places, viz., Hubli, Rajahmundry, Calicut, Podanur, Madras, Tambaram, Trichy, Golden Rock, Srirangam, Madura and Tuticorin. Guides escorted the children from their homes and safely handed them over to their parents after the end of the camp.

Children never knew high and low—language, caste and creed never stood in their way. After their bed tea they had their physical exercises with fun and frolic in full. Their camp teachers taught them discipline while at play. They were jubilant and hilarious wherever they went. It was a great success due to the hearty co-operation rendered by RME, WM and Mrs. and Mr. Krishnamoorthy [(APO (L))]. Mysore. The arrangements they made for the convenience and comfort of the children left nothing to be desired. Special mention is to be made here of Mrs. and Mr. Krishnamoorthy who never missed while the boys were at their bed tea, breakfast, lunch, tea and dinner. The Southern Railway deserves the warmest thanks of the children's parents for the facilities afforded to their children to see them back safely to their homes with their hearts expanded, minds developed, emotions quickened and the outlook broadened.

'Long Live Railways'.

By a follower of the Camp

Telegram : "TAIYBCO"

P. O. Box No. 1215

Phone No. 2053

Suppliers to

Railways and Government Workshops and the INTEGRAL COACH FACTORY, MADRAS

H. A. TAIYEBALI & COMPANY

GENERAL HARDWARE & IRON MERCHANTS
294 LINGHI CHETTY STREET, MADRAS-1

DIRECT IMPORTERS & STOCKISTS OF:

Carpenters, Engineers, Precision & Workshops, Tools, etc.

High pressure jointing packings, Beltings, Bolts & Nuts, Rivets, Washers, Screws
Copper Tubes & Rods, etc. etc.



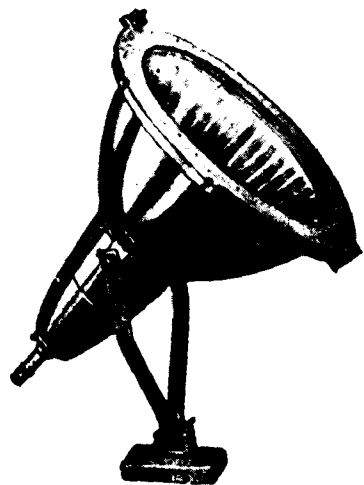
1. Children at the Zoo, Mysore
2. At Lalitha Mahall, Mysore
3. Somnathpur.
4. Going down in trolley to see Sivasamudram Power House
5. Cauvery Falls



6. Brindavan Gardens.
7. Tea with Guests.
8. Tippu Sultan's Summer Palace Seringapatam.
9. Visiting the Government Sandalwood Factory at Mysore.
10. Saint Philomena's Church, Mysore.

Telephone : 4577.

Telegram : "LIGHTING"



STOCKISTS OF
FLOOD LIGHTS

GERMAN & BRITISH MAKES

INDUSTRIAL REFLECTORS

WALSAL

INTERLOCKED SWITCH FUSE WITH PLUGS AND
ALL ELECTRICAL WIRING ACCESSORIES

MEM :

IRONCLAD SWITCH AND FUSE GEAR

THE MADRAS ELECTRICALS LTD

RATTAN BAZAAR

MADRAS-3.

RAILWAY, INTEGRAL COACH FACTORY, MUNICIPAL & GOVERNMENT STORE SUPPLIERS

Telegram : "LIGHTCAST"

Phone 1802

THE CALCUTTA LIGHT CASTING SUPPLY CO.

19, ERRABALU CHETTY STREET, MADRAS-1.

Direct Importers & Stockists of up-to-date Sanitary Wares, Stoneware
C. I. Rain Water & Soilpipes & Fittings, G. I. Pipes & Fittings, Hardware
A. C. Pipes & Fittings, Iron, Machinery, Cement & Building Materials Merchants

FOR ECONOMICAL & EXCELLENT WASHING, USE OUR FAMOUS

MURLAY BAR SOAP
KHATRY BAR SOAP

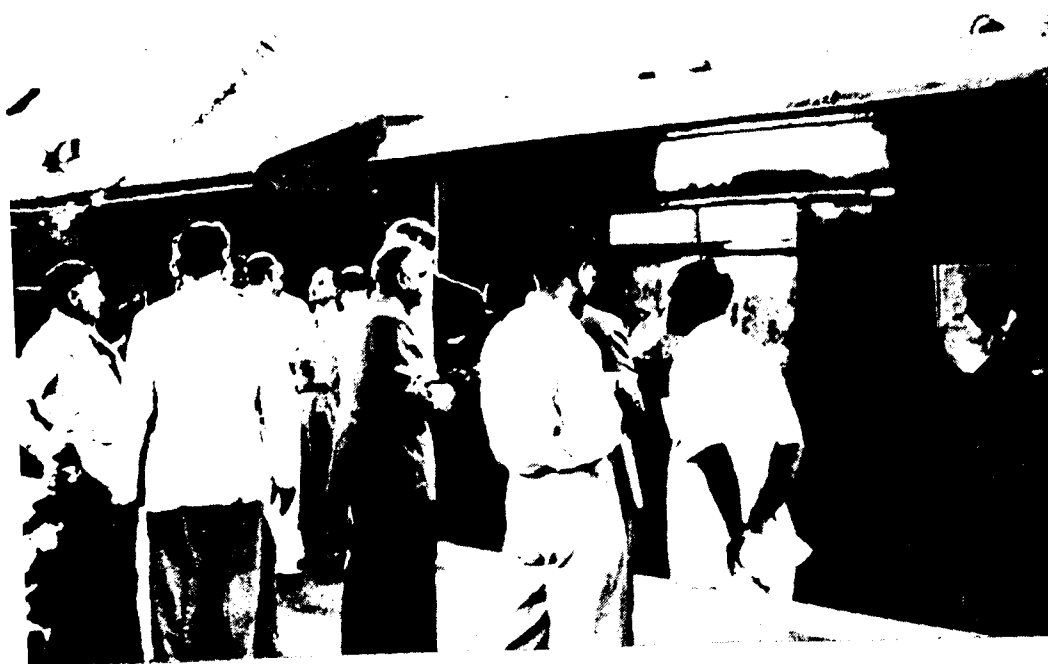
MANUFACTURED WITH SELECTED, PURE VEGETABLE OILS UNDER EXPERT SUPERVISION
A trial will convince you

MURLAY INDUSTRIES LIMITED

53-A, SECOND LINE BEACH, MADRAS-1

TRY OUR SILICATE OF SODA BEST IN THE MARKET

ECAFE DELEGATES VISIT MADRAS



GM and COPS welcoming the ECAFE delegates on arrival by special train
at Royapuram on 18-3-1956

The delegates witnessing a show in the cinema car attached to the special



Garden Party at GM's Residence



GM welcomes Shri Kamaraj, Chief Minister and Shri Parameswaran, Transport Minister

Shri Sri Prakasa, Governor of Madras, graced the occasion



GM leading the ECAFE delegates to the garden party at his residence on 18-3-56.

Below : GM shaking hands with Shri N. Gopala Menon, Speaker of the Madras Legislative Assembly





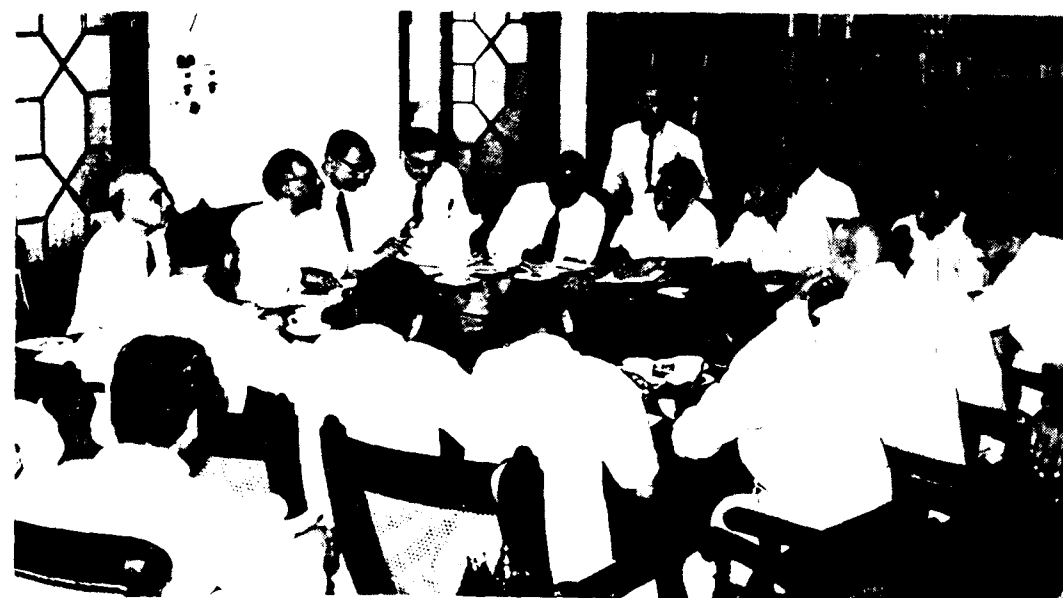
Shri C. N. S. Rao (facing the camera, extreme right) with other delegates and guests

Shri Lokanathan, Shri Joseph, Smt. Lokanathan, Shri A. R. Rao, Shri Sri Prakasa and others at the tea-table



A section of the guests witnessing the dance performance by the Travancore Sisters (see page 61)

GM's Press Conference on 26-3-56. Shri A. R. Rao, SDGM, is on GM's right and Shri S. K. Mukerjee, CCS and Shri Ratanlall, COPS, seated to the left of GM



For adequate coverage in Madras and adjoining States, to reach a discriminating and valuable market provided by 35,000 reader families, and for an economical rate per column inch, "The Mail" is the most influential advertising medium

Apply for Rates

The Mail

MOUNT ROAD, MADRAS 2

LONDON	BOMBAY	CALCUTTA
302/8 REGENT STREET W. 1.	ASIAN HOUSE, NICOL ROAD BALLARD ESTATE	4 EZRA MANSIONS 10 GOVT. PLACE EAST

MEMBER A. B. C. IN INDIA

THE LEADING PUBLICATION SOUTH OF THE VINDHYAS

SOUTHERN RAILWAY

TENDER NOTICE

1. The Regional Engineer, Southern Railway, Mysore, invites sealed percentage schedule tenders for the work "Tadepalli—Improvements to tranship facilities—Proposed shed for dumping goods, etc."—Guntakal District to reach him not later than 16-00 hours on Tuesday the 1st May 1956. The approximate value of the contract is Rs. 1,05,000.

2. The tender should be submitted in the prescribed form, obtainable from the Office of the Regional Engineer, Southern Railway, Mysore, on production of a receipt for the amount of Rs. 10 (Rupees Ten only) paid to the Regional Accounts Officer, Southern Railway, Mysore, or Trichinopoly or Chief Cashier, Madras or to any Station Master on the Southern Railway, towards the cost of each form. In no circumstances will the cost of the tender forms be refunded. The tender form is not transferable.

3. Tender forms will be issued up to 15-00 hours on Friday the 27th April, 1956 only.

4. The Earnest Money of Rs. 5,285 (Five thousand two hundred and eighty-five only) should be paid in advance to the Regional Accounts Officer, Southern Railway, Mysore or Trichinopoly or Chief Cashier, Madras not later than 12-00 hours on Saturday the 28th April, 1956 and the receipt submitted along with the tender. No demand draft or cheque, etc., should be attached to the tender.

5. The amount of Earnest Money is based on 5 per cent of the approximate value of the contract and the successful tenderer will be required to furnish a further sum which, together with the earnest money will represent 10 per cent of the value of the contract, as per his accepted tender towards the security deposit.

6. Tenderers are required to submit Income-tax Clearance Certificate along with the tender.

7. The tenders will be opened at 12-00 hours on Wednesday the 2nd May, 1956 at the Office of the Regional Engineer, Mysore.

8. The Regional Engineer reserves to himself the right to reject without assigning reasons any or every tender or part thereof, and does not bind himself to accept the lowest or any

SOUTHERN RAILWAY

REVISION OF TIME TABLES FROM 1ST APRIL 1956

Changes in timings, introduction, extension or alteration of train services and introduction or elimination of stops are involved. The important items are listed below. Please refer to the Time Tables available for sale at stations or Sheet Time Tables exhibited at stations for details:

I. TRAINS INTRODUCED:

BROAD GAUGE (MADRAS REGION)

Train No. and Description	Station	Departure		Station	Arrival	
		H.	M.		H.	M.
T 45 Local (Daily)	Madras Beach	17	55	Villivakkam	18	30
587 Local (Week days)	Trichinopoly Jn.	16	15	Trichinopoly Fort	16	30
588 Local (Week days)	Trichinopoly Fort	16	55	Trichinopoly Jn.	17	10

METRE GAUGE (MYSORE REGION)

986 Mixed	Castle Rock	8	0	Londa	9	20
985 Mixed	Londa	18	50	Castle Rock	20	05

METRE GAUGE (TRICHINOPOLY REGION)

632 Passenger	Cuddalore Jn.	16	00	Cuddalore N.T.	16	15
723 "	Maniyachi Jn.	16	20	Tuticorin	17	20
722 "	Tuticorin	13	30	Maniyachi Jn.	14	45
867 "	Salem Jn.	17	34	Salem Town	17	55
868 "	Salem Town	16	45	Salem Jn.	17	05
1222 "	Manaparai	5	15	Trichinopoly	6	15

II. TRAINS EXTENDED:

Train No. and Description	Station from	Departure		Station to	Arrival	
		H.	M.		H.	M.
A 35 Madras Central-Villivakkam Local (Daily)	Madras Central	19	37	Arkonam	22	00
C 86 Trivellore-Avadi Local (Week days)	Arkonam	3	35	Avadi	5	05
C 86 Trivellore-Avadi Local (Sundays)	Arkonam	3	35	Trivellore	4	23
D 64 Villivakkam-Madras Central Local (Daily)	Trivellore	7	7	Madras Central	8	37
565 Cochin Harbour Terminus-Shoranur Pass.	Cochin Harbour Terminus.	7	50	Cannanore	21	00
566 Shoranur-Cochin Harbour Terminus Pass.	Cannanore	5	55	Cochin Harbour Terminus.	18	40

METRE GAUGE (TRICHINOPOLY REGION)

675 Cuddalore-Mayavaram Passenger	Cuddalore N.T.	16	50	Mayavaram	19	50
RC 201 Mayavaram-Kumbakonam Passenger	Mayavaram	11	45	Tanjore	14	45
RC 204 Kumbakonam-Mayavaram Passenger	Tanjore	15	15	Mayavaram	18	20
RC 224 Present Trichinopoly-Srirangam Passenger	Trichinopoly	19	15	Lalgudi	20	40
RC 670						

III. IMPORTANT CHANGES IN TIMINGS:

BROAD GAUGE (MADRAS REGION)

Train No. and Description	Station	Departure	Station	Arrival
		H. M.		H. M.
15 Madras-Delhi Grand Trunk Express	Madras Central	10 30	Delhi	7 10
16 Delhi-Madras Grand Trunk Express	Delhi	18 30	Madras Central	16 30
17 Madras-Bezawada-Delhi Janata Express	Madras Central	11 25	Bezawada	22 05
			Delhi (tri-weekly)	14 35
18 Delhi-Bezawada-Madras Janata Express	Delhi (tri-weekly)	15 45	Bezawada	8 15
			Madras Central	18 35
513 Madras-Mangalore Malabar Express	Madras Central	19 30	Mangalore	16 40
514 Mangalore-Madras Malabar Express	Mangalore	9 40	Madras Central	7 25
510 Mangalore-Coimbatore Express	Mangalore	18 15	Coimbatore	6 50
10 Madras-Bombay Mail	Madras Central	21 30	Bombay (VT)	6 15
9 Bombay-Madras Mail	Bombay (VT)	22 00	Madras Central	5 55
44 Madras-Howrah Mail	Madras Central	20 25	Howrah	11 00
43 Howrah-Madras Mail	Howrah	16 40	Madras Central	7 15
45 Howrah-Bezawada Janata Express	Howrah	22 10	Bezawada	5 00
141 Madras-Puri Passenger	Madras Central	19 20	Puri	14 15
536 Mangalore-Cannanore Passenger	Mangalore	17 00	Cannanore	21 30
535 Cannanore-Payyanur Passenger	Cannanore	22 15	Payyanur	23 50
570 Shoranur-Cochin Harbour Terminus Passenger	Shoranur	3 20	Cochin Harbour Terminus	7 45
578 Coimbatore-Trichinopoly Passenger	Coimbatore	7 35	Trichinopoly	16 10
408 Guntur-Repalle Passenger	Guntur	20 10	Repalle	22 45
541 Shoranur-Nilambur Road Mixed	Shoranur	14 00	Nilambur Road	16 45
542 Nilambur Road-Shoranur Mixed	Nilambur Road	18 20	Shoranur	21 04
K 23 Local (Week days)	Madras Central in- stead of from Rayapuram.	15 9	Pattabiram Mili- tary Siding.	16 06
T 84 Madras Beach-Madras Central Local	Villivakkam in- stead of from Madras Beach.	18 42	Madras Central	19 09

METRE GAUGE (MYSORE REGION)

902 Poona-Bangalore City Mail	Poona	22 00	Hubli	12 35
903 Bangalore City-Poona Express	Hubli	15 40	Bangalore City	5 55
1023 Mysore-Bangalore City Mail	Bangalore City	9 50	Poona	14 25
Bangalore City-Hubli Passenger	Mysore	15 45	Bangalore	19 30
908 Poona-Miraj Passenger	Bangalore	21 30	Hubli	18 20
918 Hubli-Arsikere Passenger	Poona	17 00	Miraj	1 55
922 Dharwar-Gadag Passenger	Hubli	10 20	Arsikere	21 15
917 Arsikere-Hubli Passenger	Dharwar	19 30	Gadag	22 05
	Arsikere	8 10	Harihar	14 00
933 Hubli-Dharwar Local	Hubli	15 13	Hubli	19 35
954 Miraj-Kolhapur Passenger	Hubli	18 30	Dharwar	19 15
956 Sangli-Miraj Passenger	Miraj	6 35	Kolhapur	8 35
953 Miraj-Sangli Passenger	Sangli	5 50	Miraj	6 25
955 Kolhapur-Miraj Passenger	Miraj	4 55	Sangli	5 30
1004 Gadag-Bijapur Passenger	Kolhapur	4 25	Miraj	6 08
1001 Sholapur-Gadag Passenger	Gadag	5 10	Bijapur	11 55
1005 Sholapur-Bijapur Passenger	Sholapur	3 40	Gadag	15 30
1011 Sholapur-Hubli Passenger	Sholapur	17 15	Bijapur	21 25
	Gadag	21 10	Gadag	8 25
984 Castle Rock-Londa Passenger	Gadag	9 25	Hubli	11 20
1068 Bangalore City-Mysore Passenger	Castle Rock	16 00	Londa	16 50
1082 Mysore-Arsikere Passenger	Bangalore	22 5	Mysore	5 25
1077 Arsikere-Mysore Passenger	Mysore	19 50	Arsikere	1 05
1096 Chikjajur-Chitaldroog Passenger	Arsikere	15 30	Mysore	20 40
1095 Chitaldroog-Chikjajur Passenger	Chikjajur	17 30	Chitaldroog	18 55
1120 Birur-Talguppa Passenger	Chitaldroog	19 40	Chikjajur	21 05
1119 Talguppa-Birur Passenger	Birur	15 50	Talguppa	22 00
1132 Sattanapalle-Guntur Passenger	Talguppa	16 15	Birur	23 15
1131 Guntur-Sattanapalle Passenger	Sattanapalle	13 10	Guntur	15 25
1152 Villupuram-Gudur Passenger	Guntur	11 10	Sattanapalle	12 50
1151 Gudur-Villupuram Passenger	Villupuram	4 18	Gudur	22 15
1159 Renigunta-Katpadi Passenger	Gudur	5 10	Villupuram	22 35
	Renigunta	4 15	Katpadi	9 50

NARROW GAUGE

Train No. and Description	Station	Departure	Station	Arrival
		H. M.		H. M.
1174 Kolar-Bangarapet Passenger	Kolar	7 00	Bangarapet	7 40
1173 Bangarapet-Kolar Passenger	Bangarapet	19 00	Kolar	19 35

METRE GAUGE (TRICHINOPOLY REGION)

603 Madras-Tuticorin Express	Madras Egmore	21 50	Tuticorin	15 55
620 Tinnevely-Madras Express	Tinnevely	15 30	Madras Egmore	7 30
615 Madras-Virudhunagar Parcel Passenger	Madras Egmore	22 10	Virudhunagar	0 30
616 Virudhunagar-Madras Parcel Passenger	Virudhunagar	3 35	Madras Egmore	5 05
655 Mayavaram-Trichinopoly Passenger	Mayavaram	4 50	Trichinopoly	9 42
676 Mayavaram-Cuddalore N.T. Passenger	Mayavaram	7 10	Cuddalore	9 55
743 Punalur-Trivandrum Passenger	Punalur	7 45	Trivandrum Central	12 50
819 Villupuram-Pondicherry Passenger	Villupuram	4 15	Pondicherry	5 35
803 Villupuram-Pondicherry Passenger	Villupuram	10 15	Pondicherry	11 35
759 Maniyachi-Shencottah Passenger	Maniyachi	15 35	Shencottah	20 50
1211 Olavakkot-Palghat Passenger	Olavakkot	4 55	Palghat	5 10
1212 Palghat-Olavakkot Passenger	Palghat	4 13	Olavakkot	4 28

IV. STOPS INTRODUCED:

BROAD GAUGE (MADRAS REGION)

Train No. and Description	Stations
307 Madras-Bangalore City Mail	Krishnarajapuram.
308 Bangalore City-Madras Mail	
325 Jalarpet-Bangalore City Express	
501 Jalarpet-Calicut Passenger	Molakarampatti.
517 & 528 Jalarpet-Erode Passengers	
505 & 506 Jalarpet-Cannanore Passengers	
502 Shoranur-Jalarpet Passenger	Trichi-Palakarai, Kambarasampettai, Mekku- Elamanur and Petaivaitalai.
581 Trichinopoly-Erode Express	
461 Narasapur-Cocanada Passenger	Manchali Halt.
468 Rajahmundry-Narasapur Passenger	
C 39 Madras-Arkonam Local	Perambur Carriage Works.
1034 Narasapur-Masulipatam Passenger	Venrappagada Halt.
415 & 416 Guntur-Tenali Passengers	Angalakoduru, Sangam Jagarlamudi, Vajendla.
426 Raichur-Madras Passenger	Sevvapet Road.

METRE GAUGE (MYSORE REGION)

1119 & 1120 Talguppa-Birur Passengers	Masarahalli.
---------------------------------------	--------------

METRE GAUGE (TRICHINOPOLY REGION)

637 Madras Beach-Conjeeveram Passenger	Vandalur, Villiyambakkam and Palayasisivaram.
638 Conjeeveram-Madras Beach Passenger	Kattupakkam, Vandalur, Perungalattur, Palayasisivaram, Pallur and Villiyambakkam.
607 Madras-Dhanushkodi Passenger	Perungalattur.
609 Madras-Trivandrum Passenger	Theralandur.
628 Trichinopoly-Mayavaram Parcel Passenger	Theralandur.
615 Madras-Virudhunagar Parcel Passenger	Pallappatti.
706 Shencottah-Dindigul Passenger	Pallappatti.
764 Trivandrum-Tinnevely Passenger	Kappil.
610 Trivandrum-Madras Passenger	Mayyanad.
619 Madras-Tinnevely Express	Ulundurpet.
773 & 774 Dindigul-Olavakkot Passengers	Gomangalam (on Thursdays only)

V. STOPS CUT OUT:

BROAD GAUGE (MADRAS REGION)

Train No. and Description	Stations
600 Erode-Trichinopoly Passenger	Pettaivaytalai and Elamanur.

METRE GAUGE (MYSORE REGION)

1148 Dharmavaram-Katpadi Passenger	Kottakota, Puthalapattu, Peyanapalli, Ramapuram, Bommasamudram.
--	---

METRE GAUGE (TRICHINOPOLY REGION)

603 Madras-Tuticorin Express	Ulundurpet.
------------------------------------	-------------

VI. TRAINS CANCELLED:

BROAD GAUGE (MADRAS REGION)

Train No. and Description	Station	Departure	Station	Arrival
		H. M.		H. M.
537 Salem-Cannanore Passenger	Shoranur	.. 13 45	Cannanore	.. 21 00
538 Cannanore-Erode Passenger	Cannanore	.. 5 55	Shoranur	.. 13 7
A 32 Villivakkam-Rayapuram Local	Villivakkam	.. 20 20	Rayapuram	.. 20 45
T 84 Madras Beach-Madras Central Local	Madras Beach	.. 17 48	Madras Central	.. 18 12

METRE GAUGE (MYSORE REGION)

1158 Katpadi-Gudur Passenger	Renigunta	.. 5 23	Gudur	.. 10 40
1157 Gudur-Katpadi Passenger	Gudur	.. 8 50	Renigunta	.. 14 09

METRE GAUGE (TRICHINOPOLY REGION)

RC 216 Trichinopoly-Lalgudi Passenger	Srirangam	.. 20 13	Lalgudi	.. 21 00
---	-----------	----------	---------	----------

VII. THROUGH CARRIAGE SERVICES:

A. Through Carriage Services introduced—

BROAD GAUGE (MADRAS REGION)

Departure from	Time	Arrival at	Time	Trains to which attached	Class of accommodation
	H. M.		H. M.		
Trichinopoly	.. 11 40	Cochin Harbour Terminus.	7 45	577/509/570	.. I, II & III.
Cochin Harbour Terminus 19 05		Trichinopoly	.. 16 10	571/510/578	.. I, II & III.

METRE GAUGE (TRICHINOPOLY REGION)

Tinnevelly	.. 17 42	Trivandrum Central	.. 5 55	759/609	.. III.
Trivandrum Central	.. 20 30	Tinnevelly	.. 9 37	610/712	.. III.

B. The following changes in the Through Carriage services are notified:

BROAD GAUGE (MADRAS REGION)

Departure from	Time	Arrival at	Time	Trains to which attached	Class of accommodation
	H. M.		H. M.		
Cochin Harbour Terminus 19 05		Mangalore	.. 10 5	571/509	.. I, II & III.
Mangalore	.. 18 15	Cochin Harbour Terminus.	7 45	510/570	.. I, II & III.

METRE GAUGE (MYSORE REGION)

Mysore	.. 19 50	Hubli	.. 12 32	1082/901	.. I, II & III
Hubli	.. 15 40	Mysore	.. 8 35	902/1081	.. I, II & III
Mysore	.. 19 50	Shimoga Town	.. 7 26	1082/901/1118	.. I, II & III
Shimoga Town	.. 20 28	Mysore	.. 8 35	1119/902/1081	.. I, II & III

METRE GAUGE (TRICHINOPOLY REGION)

Dhanushkodi	.. 18 15	Tinnevelly	.. 8 11	608/784/611	.. III.
Tinnevelly	.. 17 50	Dhanushkodi	.. 7 15	612/785/607	.. III.

C. Through Carriage Services cancelled:

METRE GAUGE (MYSORE REGION)

Kurnool Town	.. 14 28	Katpadi	.. 11 45	CR. 553/1021/1024/1148	.. III.
Katpadi	.. 15 20	Kurnool Town	.. 12 39	1147/1023/1022/CR. 554	.. III.

METRE GAUGE (TRICHINOPOLY REGION)

Tiruchendur	.. 14 40	Shencottah	.. 20 45	796/759	.. III.
Shencottah	.. 6 20	Tiruchendur	.. 14 05	712/1207	.. III.

PICKING UP NEW TIMINGS:

Trains will pick up new timings on the mid-night of 31st March/1st April 1956 or as soon as possible thereafter.

Chief Operating Superintendent.

Phone No. 4538

Estd. 1922

Please Contact

PALOTT ABDUL AZEEZ & CO.

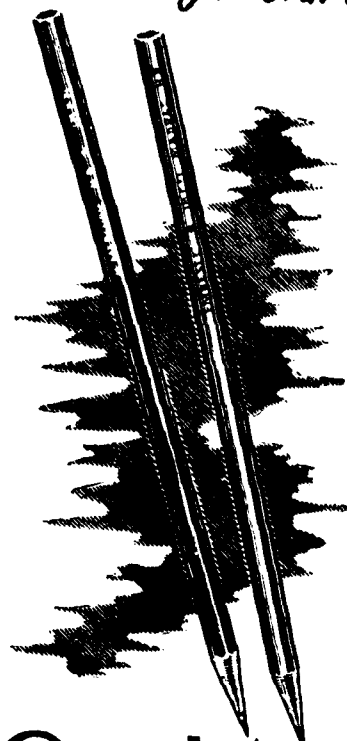
TIMBER AND PLYWOOD MERCHANTS

74, SYDENHAMS ROAD, MADRAS-3

FOR BEST VENTEAK

COUNTRY WOOD, JUNGLE WOOD, MANGO PLANKS AND PLYWOOD, ETC.

For office & general use



**Quality
PENCILS**



THE MADRAS PENCIL FACTORY
WASHERMANPET - MADRAS - INDIA

INTEGRITY SHOULD BE PLACED ON A HIGH PEDESTAL

Railway is our greatest national asset. Indian Railways, as a whole, are said to be one of the largest single commercial organisations in the world. If an employee will accept illegal gratification, he will also give facilities to some customers, which are not authorised. If some members of the public are unduly favoured, it is difficult to do justice to all the customers of the Railway. This is neither in the interest of the railway nor in the interest of the public.

It is necessary that every citizen including every Government employee, should have a reputation, which is free from taint of suspicion. Mahatma Gandhi advised us to cleanse our hearts of pettiness, meanness and deceit. If one aspires for unfair gains, he will interfere with the sacredness of service and become corrupt. Those who serve the railway are serving the public. If an employee is intent on illegal gratification, he is likely to impair the efficiency of the railway. Service before 'self' was one of Gandhiji's principles. If one seeks illegal gains in the course of doing his duties, the public motive will be impaired and impurity and corruption will result. This is not in the national interest.

Prime Minister Shri Jawaharlal Nehru has stressed these ideals to be observed by all citizens. It is necessary for railwaymen as well to follow what our leaders have said. If the public offer illegal gratification to the railway staff, it will aid and abet malpractices, which is not in the national interest. The co-operation of railway staff and the public is requested for eradicating corruption wherever it exists.



Officers and Staff of the Southern Railway who were at Kumbakonam in connection with the Mahamakham Festival. Shri S. S. Viswanathan, Officer on Special duty, Shri M. R. Swaminathan, FA & CAO and Shri P. K. Madhava Menon are sitting in the front row.

SOUTHERN RAILWAY TENDER NOTICE

Tender No. S/P5 GB5/95 PER.

Sealed Tenders are invited for the supply of 910 Imperial Gallons Paint Ready Mixed Red Lead non-setting to specification IS 102/1950 and will be received in the Office of the Controller of Stores, Southern Railway, Ayanavaram P.O., Madras-23, before 15-00 hours on 27-4-1956 and opened at 3-00 p.m. on the same day.

2. Tenders should be submitted only in the prescribed form obtainable from the Office of the Controller of Stores, Southern Railway, Madras-23, on payment of Rs. 5 per copy in cash or by M.O. with full name and address of the remitter. Remittance by any other means will not be accepted. Tender forms are not transferable.

3. Tender forms will not be issued after 12-00 hours on 24-4-1956.

Office of the Controller of Stores,
Southern Railway,
Ayanavaram P.O., Madras-23.

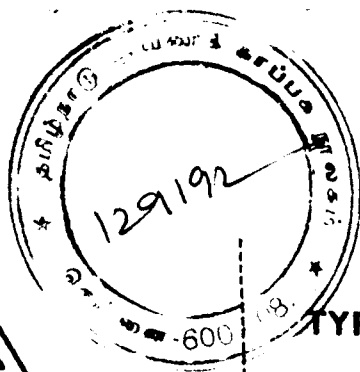
P. N. TALATI,
Controller of Stores.



Automatic Die-Sinking Machines

WITH ELECTRIC TRACER CONTROL

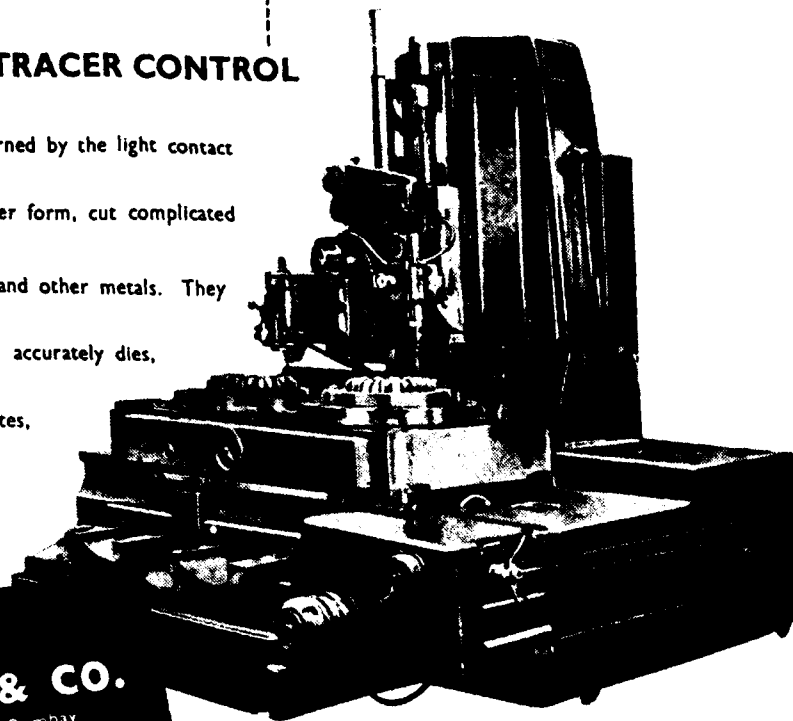
These copying machines, governed by the light contact between a tracer and a master form, cut complicated and irregular shapes in steel and other metals. They manufacture automatically and accurately dies, moulds, metal patterns, templates, cams, etc.



TYPE Fk08a — Basic machine for copying of objects identical with copied master form.

TYPE Fk08b — Same working scope as Fk08a, on which shapes which are mirror-image of master form are also produced.

TYPE Fk08c — Same as Fk08b, but having in addition two rotary tables for circular copying.



BATLIBOI & CO.
Fortis Street, Fort, Bombay

Branches:
Mumbai - Calcutta - Delhi
Ahmedabad - Kanpur - Vijayawada

In all models, either one larger part can be machined or two smaller objects can be machined simultaneously by two tools.

ASSOCIATES IN BANGALORE AND SECUNDERABAD-DN.