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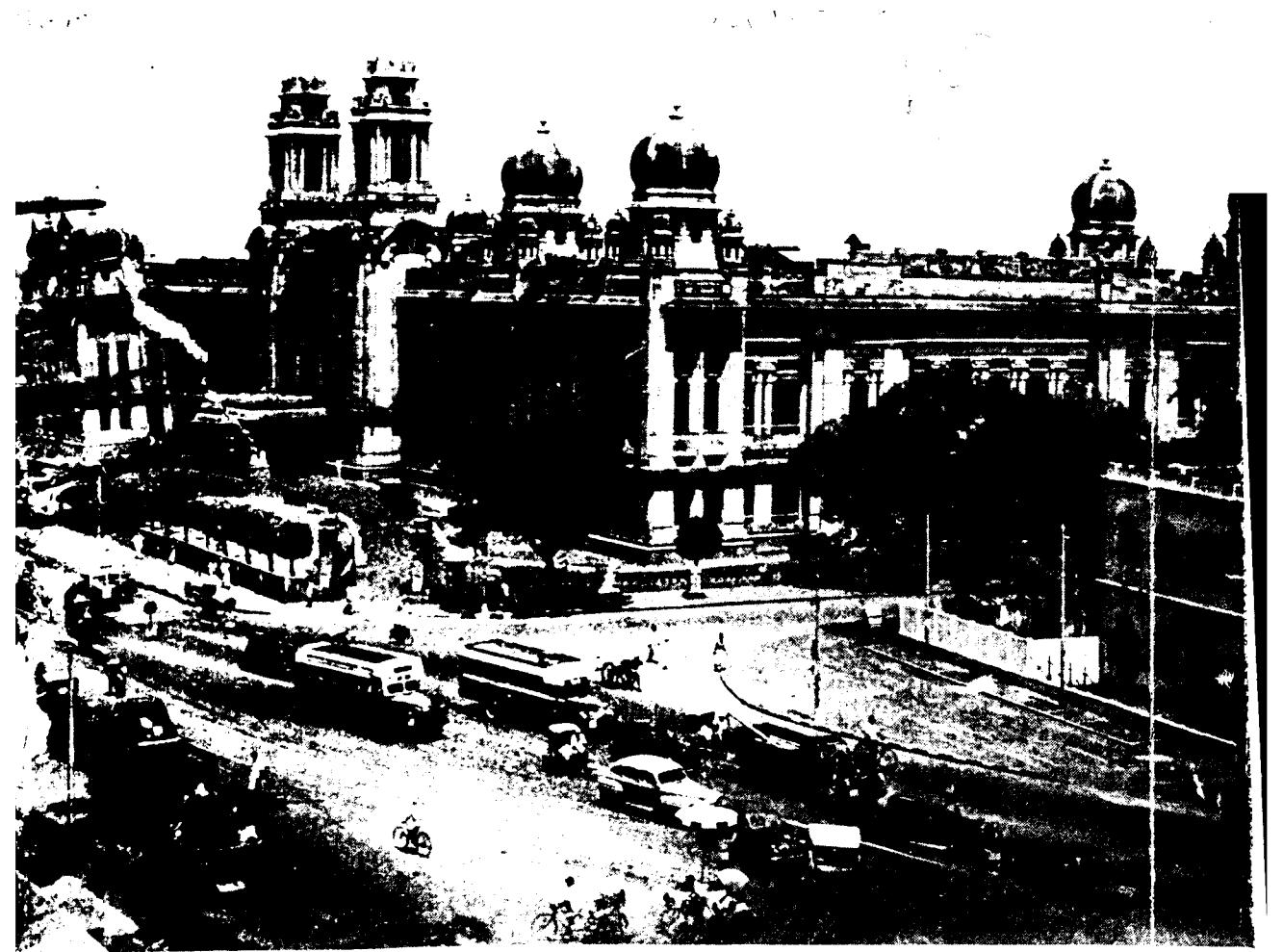


South rail News

1957 - March

VOL - 3, NO. 12

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HEADQUARTERS OFFICE, SOUTHERN RAILWAY, MADRAS



Southrailnews

PUBLISHED BY THE SOUTHERN RAILWAY

VOL. III

MAR 4 1957

NO. 12

"SOUTHRAILNEWS"

ANNUAL NUMBER—APRIL 1957.

Preparations for our Third Annual Number, to be brought out in April 1957, are now under way. With the March 1957 issue, this Magazine will complete its third year of publication. The patronage of our Advertisers and Subscribers and the enthusiasm and interest shown by our Contributors have, in a very large measure, contributed to the success in maintaining a high standard, which, without mock-modesty or self-depreciation we may say, we set for ourselves for the get-up and contents of our Magazine. Besides articles on Railways, this Magazine contains a Children's Corner, Sports Page, Book Review, Medical Page, Railway Miscellany, Women's Page, Commercial Newsletter, Railway Story, etc. Two of the new features in the Annual Number will be "Striving for Enlightenment" and "Grubbing for Facts on Railways." Several of the very important persons in India are being addressed for giving messages and articles.

This Annual Number besides providing articles of lasting interest will serve as a guide to our readers for the best products available in market—from heavy machinery to pencils. It will be of unique value to the advertisers, too. You will be interested in this Annual Number under preparation and would like to advertise in it. We shall thank you to send your advertisement material by 18th March 1957. Kindly advise your space requirements early, so that we may reserve the space and ensure the best possible position for you. The Mechanical details and rules are given below for your ready reference :

RATES FOR ADVERTISING

ORDINARY :				Per insertion
Full Page	..	..	..	Rs. 100
Half Page	..	..	..	.. 55
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Facing—

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By the side of Contents and

Editorial Notice— Half Page	..	..	.. 70
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Facing Contents—

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MECHANICAL DATA

Blocks	..	..	Screen 100
Full Page	..	..	8" x 5½"
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Cover Page	..	..	Art paper two colours.
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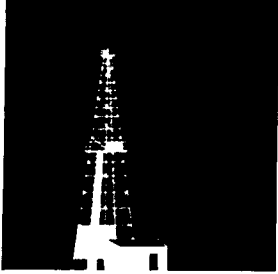
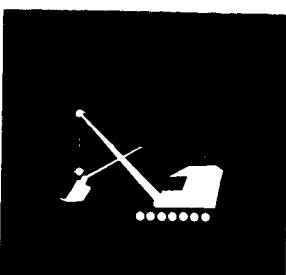
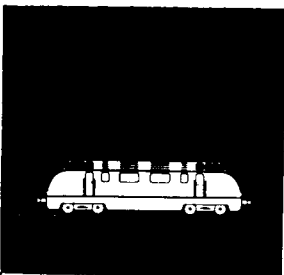
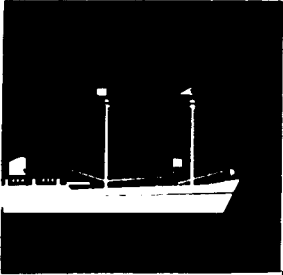
CIRCULATION

The "Southrailnews" circulates over the entire area covered by the Southern Railway which includes the States of Madras, Andhra, Kerala, Karnataka and Bombay. The Minister and Deputy Ministers for Railways and Transport, the Chairman, Members and Directors of Railway Board, General Managers, Controllers of Stores, Chief Engineers (Civil, Mechanical, Electrical and Signal and Telecommunications) of Indian Railways, Members of Zonal Railway Users' Consultative Committee and National Railway Users' Consultative Council, Industrialists and Commercial Firms are on our permanent mailing list. Copies are available at Railway Book-stalls.

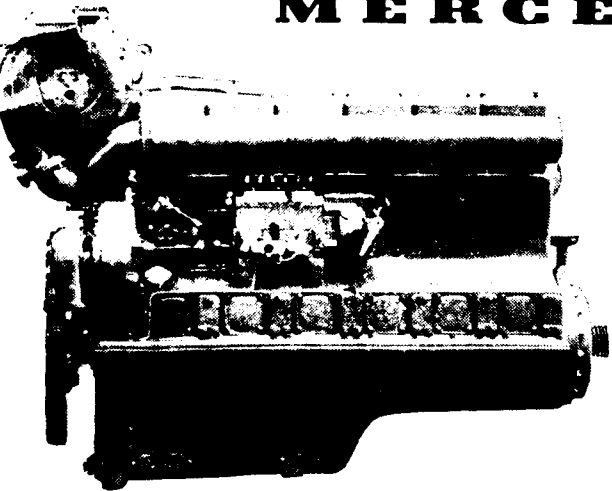
Though this will be a special number with a multi-colour front page and other colour pictures, it will be sold at the usual price of Annas Six to the public and Annas Four to the Railwaymen per copy.

18-A, MOUNT ROAD,
MADRAS-2.

EDITOR,
"Southrailnews."



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THEY SERVE BEST WHO SAVE

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INVEST IN INDIA'S FUTURE
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For further particulars and/or rules governing these investments please write to the NATIONAL SAVINGS COMMISSIONER, Simla or to the

Regional National Savings Officer at your State.



SOUTHRAILNEWS

(Official Organ of the Southern Railway)

EDITORIAL NOTICE

VOL. III

No. 12

Editor :

K SRINIVASAN

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
Subscription Single
copy.

Rs. a. p. Rs. a. p.

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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

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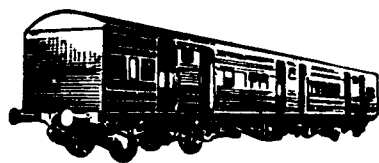
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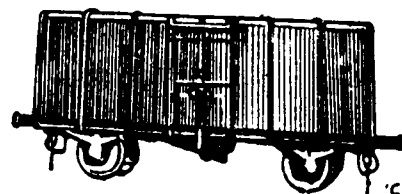
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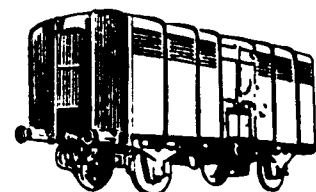
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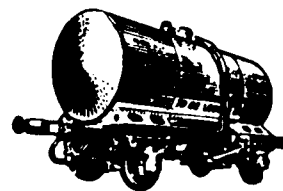
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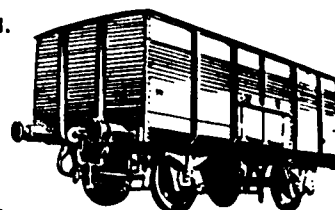
'C.M.R.' TYPE WAGON



'T.P.R.' WAGON



'M.B.O.C.' TYPE WAGON
LOADED ON A 'BFR'
TYPE WAGON



'O' TYPE WAGON

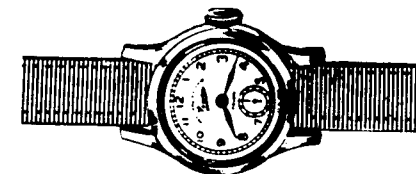


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MSWC-9

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SOUTHERN RAIL NEWS

VOL. III

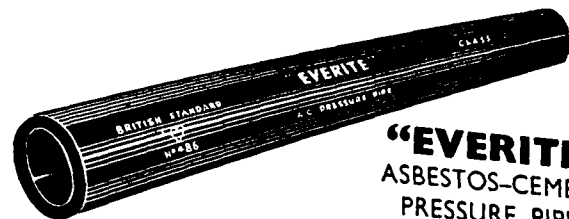
MARCH 1957

No. 12



talking of pipes...

The blowpipe with the poisoned dart is still used by savage tribes in South America and Borneo to solve their problem of procuring food. To solve your problem for the conveyance of water, there is no better choice than "Everite" Asbestos-Cement Pressure Pipes. Manufactured to the highest standards, they are light but strong and easily and rapidly laid. They are bitumen-dipped for added safety. They cannot rust or corrode. Specify "Everite" pipes; they have been in use in India over the past 20 years. This long experience, combined with our unequalled service, is your assurance of satisfaction.



"EVERITE"
ASBESTOS-CEMENT
PRESSURE PIPES



ASBESTOS CEMENT (Private) LIMITED
BOMBAY CALCUTTA MADRAS PODANUR NEW DELHI

W. 90 (B)

DECIMAL COINAGE ON RAILWAYS

IT has been decided by the Government of India to introduce the new decimal coinage system from 1st April 1957. The new coins will be circulated in the market and the existing coins will be current for about 3 or 4 years. The rupee will remain unchanged as also the half rupee and quarter rupee coins. The rupee will be divided into 100 Paise instead of the present 64 pice. There will be coins which represent multiples of 2, 5, 10 and 50 paise. The new Paise called 'Naye Paise' will be current till the old pice is completely taken out of circulation, i.e., only during the transition period. After the old coins have been withdrawn, though gradually, the smallest coin will be called Paise.

So far as the railway staff are concerned, propaganda has been done in this connection for some time. Various stations have been exhibiting samples of the new coins in Enquiry Offices and several public places of the Railway.

To facilitate conversion, necessary tables have been exhibited. In the process of conversion some adjustments have to be made in accepting slight deviations from exact equivalents in the new coin. It is hoped that the Railway Administration can count on the proper understanding and willing co-operation of all the staff, from the people in this major change over. It is also hoped that this will be to the benefit of the staff and the public.

DIESELISATION FOR INDIAN RAILWAYS

With the help of "dieselisation" the Railways hope to overcome line capacity limitations. A larger necessary number of heavier workable goods trains are proposed to be run. At present there are no Diesel engines on the main lines of the Indian Railways' broad gauge system. A few shunting engines are in use in yards. There are also a few Diesel engines running on the Kandla-Desa metre gauge line.

Many countries in the world have adopted decimal coinage except India and Pakistan in Asia. This measure has been adopted in consultation with the Planning Commission, State Governments, Chambers of Commerce, etc. As coinage is the visible symbol of an invisible force and affects every human being, the reform is an important one. Brochures have been printed on the subject with pictorial illustrations and descriptions, published by the Directorate of Advertising and Visual Publicity, Ministry of Information and Broadcasting, Government of India. A very handy pamphlet in this connection has been printed by Sree Saraswati Press Ltd., Calcutta-9. It is hoped that the public will be able to adjust themselves to the new system without difficulty.

Alco Products are expected to enter into a collaboration agreement with the Government of India for the training of Indian personnel in the repair and maintenance of the new engine.

March 1957

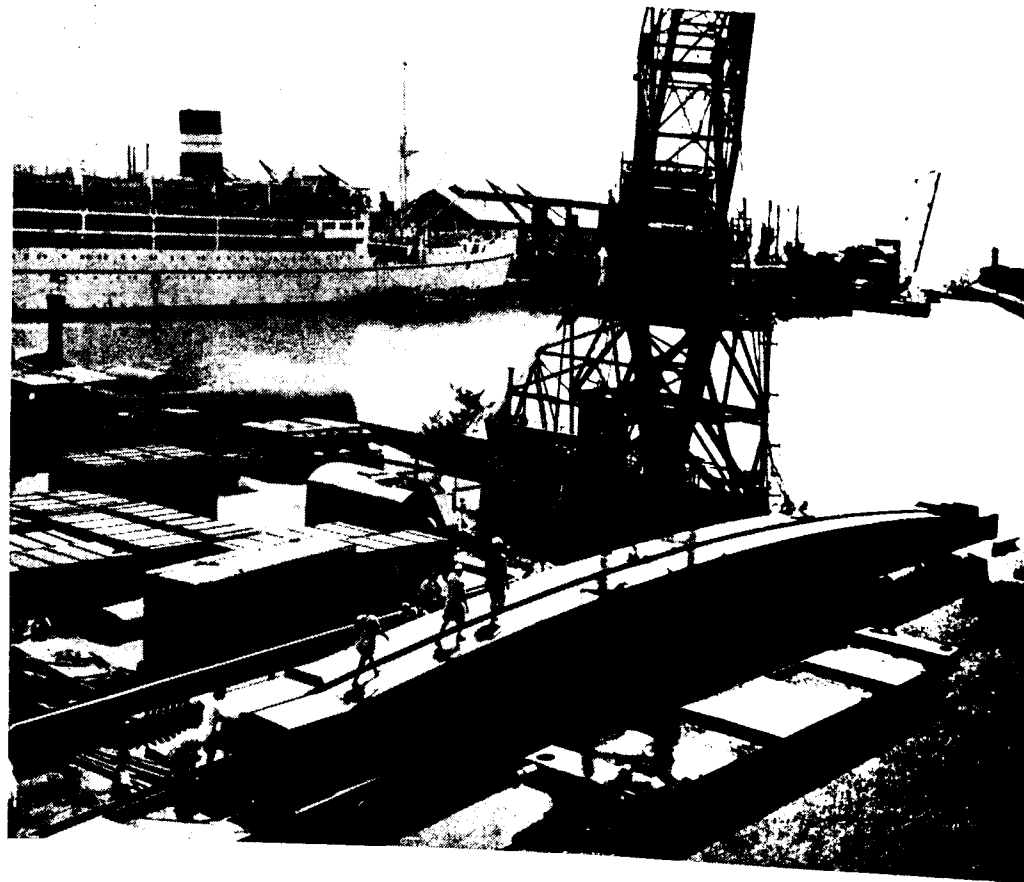
The training is to be given both in India and America.

The Railway Board has placed an order for 100 Diesel electric locomotives of 2,000 h.p. each, as a major step towards meeting the heavy goods traffic demands of the Second Five-Year Plan. The order, which is worth Rs. 10.7 crores, has been secured by the American firm, Alco Products Incorporated of New York.

All engines will be broad gauge and the first lot of 20 is expected to be shipped to India in June this year.

These powerful engines, which will be able to haul bigger trainloads faster, compared to the conventional steam locomotive, will help to relieve the pressure on traffic that is anticipated on account of the new steel plants and the increased coal production.

One of the machinery girders measuring over 118 feet in length and weighing about 20 tons loaded on to three bogie flat wagons at the Bombay Docks on 5th February 1957 for being moved over the Central Railway to destination



SHORT NOTES ON CURRENT RAILWAY TOPICS

RESERVATION ON RAILWAYS

According to the new procedure for reservation notified from 1st February 1957, the Railways have been instructed to obtain from persons applying for reservation their full names and addresses, so that cross-checks can be made and the genuineness of the entries made in the departmental registers can subsequently be verified.

When a request for reservation cannot be complied with, the Railways have been told to place the name of the person concerned on the waiting list in the strict order of priority and to issue a "regret slip", indicating on it the applicant's position on the waiting list. The applicant or his representative may present the regret slip at the reservation office concerned at a nominated hour, approximately 24 hours prior to the departure of the train and if accommodation has in the meantime become available, the reservation office would provide it in the strict order of priority on the waiting list.

The railways have also been requested to carry out periodical test checks of reservations actually made.

RAILWAYS' COURTESY EXPERIMENT

The Indian railways have launched a new experiment in courtesy to passengers who are inconvenienced on account of trains running late.

At selected busy stations, when trains are expected to arrive or leave later than as scheduled, station loud-speakers now carry to the waiting passengers or their friends and relatives courteously worded explanations as to why a particular train is late.

The experiment, which is now working at about 20 stations, will be extended to more stations after watching the reaction of the travelling public for some time.

Among the usual causes for trains running late are difficulties regarding supply of water for engines in summer, limitations of line capacity, breaches of the line due to natural disasters like floods, etc., alarm chain pulling by the passengers themselves, staff slackness, etc. But not knowing the reason why a particular train is late the passengers and

their friends waiting for the train are apt to feel irritated.

Silence exasperates passengers while a short explanation pacifies them on such occasions.

EIGHTY PER CENT INCREASE IN WAGON PRODUCTION

The Railway Board has completed plans for a major expansion of India's 35 year-old railway wagon-building industry in order to raise its present installed capacity by about 80 per cent.

The present installed capacity is 20,000 wagons per annum and this is now being increased by 16,000 wagons per annum. Sixteen new Indian firms have been selected by the Railway Board to assist in realising the new installed capacity of 36,000 wagons per annum.

At present the wagon-building industries are located in Calcutta and Kanpur. The new manufacturing units will be located in Delhi, Rajasthan, U.P., Saurashtra, Madras, Bihar and Bombay.

LOCATION OF NEW UNITS

The location of the new units in different parts of the country has been decided on in order to let these areas enjoy the advantages flowing from industrialisation. This will also reduce the burden on the transport system.

The increased installed capacity of 36,000 wagons will represent roughly a ten-fold increase during the period of the two Five-Year Plans. The total indigenous production of wagons in 1951-52, the first year of the first Five-Year Plan, was only 3,700 wagons.

India has already the largest wagon-building industry in the whole of Asia, not including Japan, which has had an earlier start than India.

The Railway Board is also making efforts to manufacture in India special types of wagons which are now being imported.

The country is at present practically self-sufficient in regard to her requirements of wagons during the Second Plan period. The expansion is intended to prepare for the increased demand for goods wagons during the Third Plan period.

INDIAN RAILWAYS TABLEAUX IN THE CULTURAL PAGEANT PROCESSION OF THE REPUBLIC DAY PARADE

To those who had the opportunity to watch the Republic Day Procession, the presentation of the Railway floats came as a pleasing surprise. A majority of the spectators did not even know that the Indian Railways were participating in the Republic Day Cultural Pageant Procession. Those who were responsible for the construction of the floats had also their anxious moments, for they did not know what the public repercussions would be. However, they soon learnt that their efforts were not fruitless.

That in such a short time we have been able to produce two floats, speaks well for our workers who spent day and night in the construction of these floats. It was not a small job; in fact there were many details to be looked into and there was so much planning behind the entire work.

The story of our participation in the Republic Day Parade will be incomplete without a few words on the two floats. The first was named "Bharat Special". This symbolised the unifying influence of the railways. The national, cultural, economic and social unity amongst the various peoples inhabiting our country during the last one hundred years has been brought about with the linking of the remote areas from Kashmir to Kerala and Manipuri to Saurashtra by rail. We had on the floats men and women from the various States in our country to bring out this idea.

The second tableaux was known as the "Chittaranjan Perambur Tableau". It depicted the progress made by the country towards attaining self-sufficiency of locomotives and coaches.

FIRST COMMONWEALTH WELDING CONFERENCE IN JUNE

INDIAN DELEGATES TO PRESENT PAPERS AT LONDON MEETING

Over 100 firms universities and technical colleges in India, Pakistan and Ceylon have been invited to send representatives to the First Commonwealth Welding Conference, to be held in England in June.

Organized by Britain's Institute of Welding, the Conference will last from June 17 to 29.

For the first week it will be held in London, and for the second the delegates will travel to Saltburn-by-the-Sea, Yorkshire.

The Conference has three main objects: to exchange information on the present technical position of welding processes and their main applications within the Commonwealth; to consider means of improving the flow of technical information about welding; and to emphasize the importance of the increasing contribution welding can make to the development of modern engineering production.

SUBJECTS FOR DISCUSSION

Among the papers presented at the Conference will be "Welding of rail joints on Indian Railways", by Mr. K. C. Sood, of the Central Standards Office for Railways, India; and "Development of the use of welding in India", by Mr. G. Ghosh, Indian Oxygen and Acetylene Co., Ltd.

Other subjects covered will include welding and the industrial application of atomic energy; welding in the oil industry; the welding of bridges and structures; and the training of technicians. Papers on these and other subjects will be presented by welding engineers from Canada, Australia, South Africa and New Zealand as well as from Britain and India.

In addition to technical sessions, the delegates will be able to visit a number of Britain's leading industrial undertakings, including the Atomic Energy Research Establishment at Harwell, Berkshire; the British Railways workshops at Eastleigh, Hampshire; shipbuilding yards; oil refineries; and the British Welding Research Association's laboratories at Abington, Cambridge.

The social programme will include an inaugural reception by the President of the Institute of Welding, Sir Charles Lillierap; a tour of the City of London and a banquet given by the Institute of Welding.

NEW RAILWAY BOARD MEMBER

Sri Karnail Singh, at present General Manager, Chittaranjan Locomotive Works, has been appointed Member (Engineering), Railway Board. He succeeds Sri P. C. Mukerjee, who was appointed Chairman, Railway Board, on December 31, 1956.

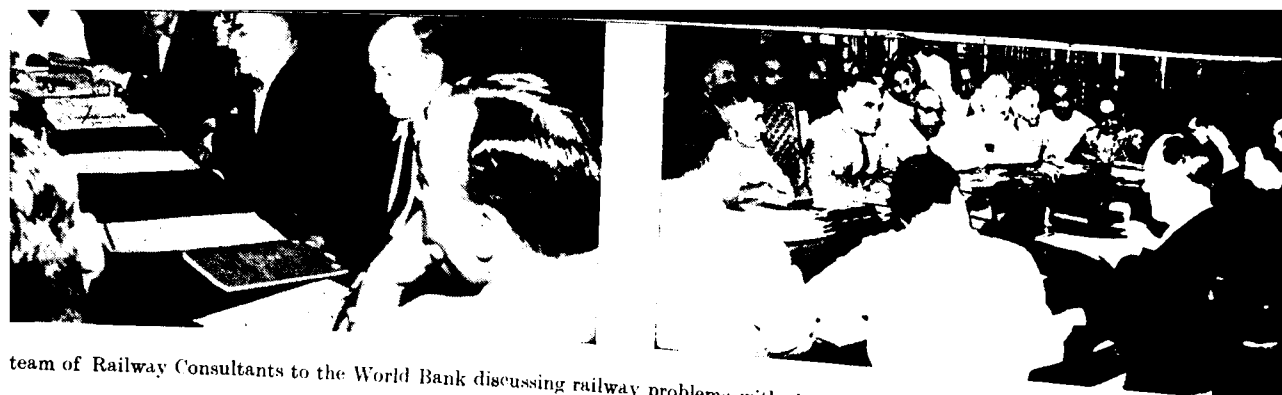
Born in July 1904, Sri Karnail Singh joined railway service in November 1927 as Assistant



"Chittaranjan Perambur Tableau" at the Republic Day Cultural Pageant Procession



"Bharat Special"



team of Railway Consultants to the World Bank discussing railway problems with the GM and other Officers of the S. Rlys. at Madras



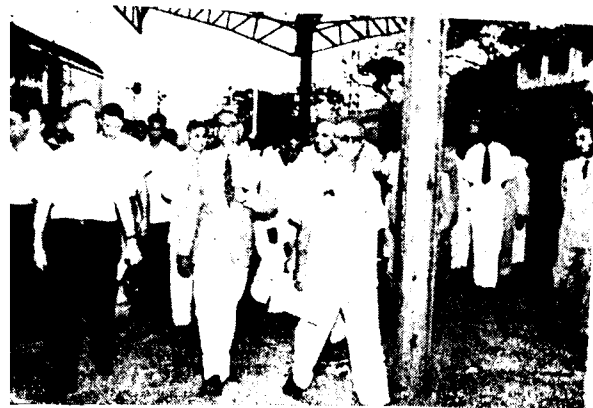
Members of the World Bank Technical Mission discussing railway problems with the GM and Heads of Departments of the Eastern Railway

WORLD BANK TEAM TOUR SOUTHERN RAILWAY (14-2-57)



Sri S. K. Mukerji, C.C.S. and Sri Ratan Lal, COPS, with members of the team at Bezwada station

Consulting Engineer at Madras Central Station with GM and heads of departments: Sri K. Sadagopan, CAO, Integral Coach Factory is also seen in the photo (extreme left)



The team with Railway Officers at Bezwada Station



Executive Engineer on the North-Western Railway. He served this Railway in various capacities till August 1947, when he had to migrate to India on account of partition.

Sri Karnail Singh worked on the newly created East Punjab Railway for a short while, and was in November 1947 appointed as Engineer-in-Chief, Assam Rail Link Project. He was mainly responsible for completing this difficult project in record time.

Sri Karnail Singh was appointed General Manager, Northern Railway, in April 1952 and General Manager, Chittaranjan Locomotive Works, in February 1954. During his tenure at the "loco-town" Chittaranjan's production went up to 14 locomotives per month.

RAILWAY PHOTOGRAPHIC EXHIBITION

A number of foreign railways, including those of U.S.A., France and West Germany, have agreed to participate in the Railway Photographic Exhibition being organised by the Railway Board in New Delhi during the Railway Week in April 1957.

The Exhibition will be preceded by a Railway Photographic Competition open to amateur and professional photographers, in which prizes totalling Rs. 3,500 have been offered by the Railway Board.

The Exhibition will coincide with country-wide celebrations marking the 101th anniversary of the running of the first train in India.

"WAGON-LIFTERS" WORSTED RAILWAY POLICE SMASH A RACKET

The reorganised Eastern Railway Protection Force has succeeded in smashing an attempt to defraud the railways and the general public by "lifting" wagons.

The *modus operandi* was quite simple. Entering goods yards where wagons loaded with valuable freight were awaiting despatch, the criminals used stealthily to substitute addressed card labels on the wagons with fresh ones marked to new destinations of their choice. Unsuspecting yard officials passed the wagons on to the new addresses where the gang "took delivery".

Nine "wagon-lifting" cases were brought to light in 1954, and the miscreants actually succeeded in taking delivery of four wagons with the help of forged receipts. The Protection Force flashed warnings to the staff to be on their guard.

Seventeen more cases occurred during 1955 and nine in 1956 up to the end of November, but in every one of these the Eastern Railway Protection Police has worsted the "wagon-lifters".

Sri Jagjivan Ram, Union Railway Minister, met the top-ranking representatives of the National Federation of Indian Railwaymen and of 13 recognised Zonal Railway Unions on 10th February





SEE

india

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"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, first, second, 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.

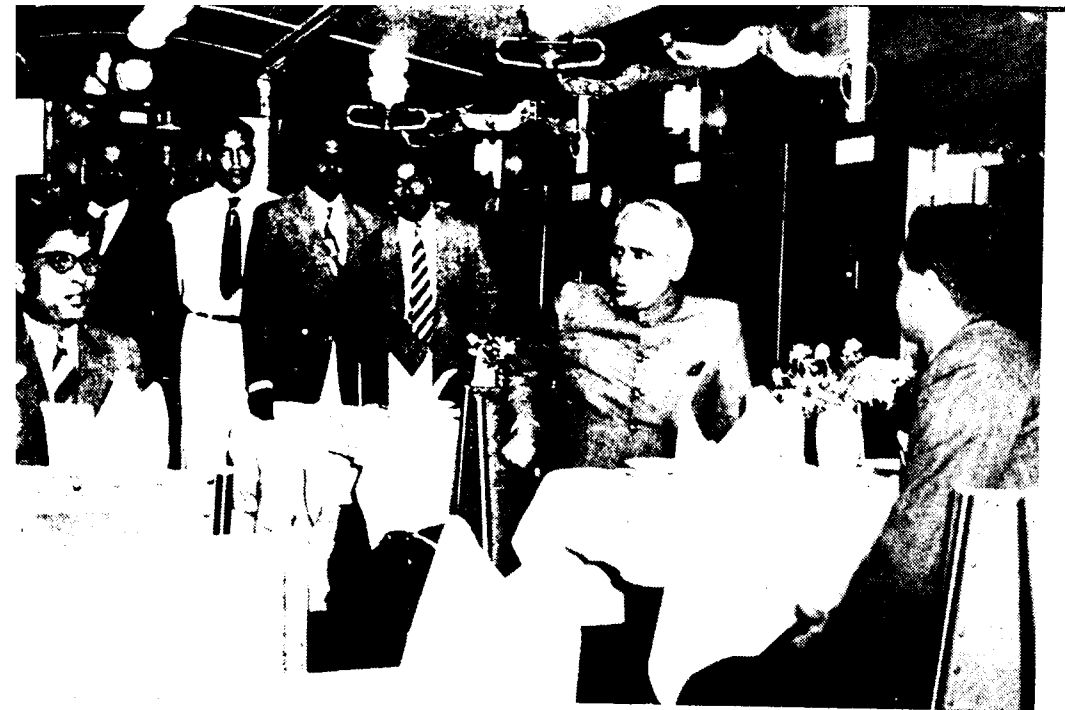
Special Trains

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, Kashmir Gate, Delhi.

THE PUBLIC RELATIONS OFFICER, NORTHERN RAILWAY



Sri S. R. Kalyanaraman, Additional Member (Commercial), Railway Board and Sri B. Venkataramani, D.C.S. (Catering), seen along with the staff in the Dining Car of the Delhi-Madras Bi-weekly De-Luxe Express Train, before departure from New Delhi Station, on 9th February 1957

Sri S. R. Kalyanaraman and Sri B. Venkataramani seen along with passengers in the Dining Car of the De-Luxe Express Train

(Photos by P. S. Vedhachalam)



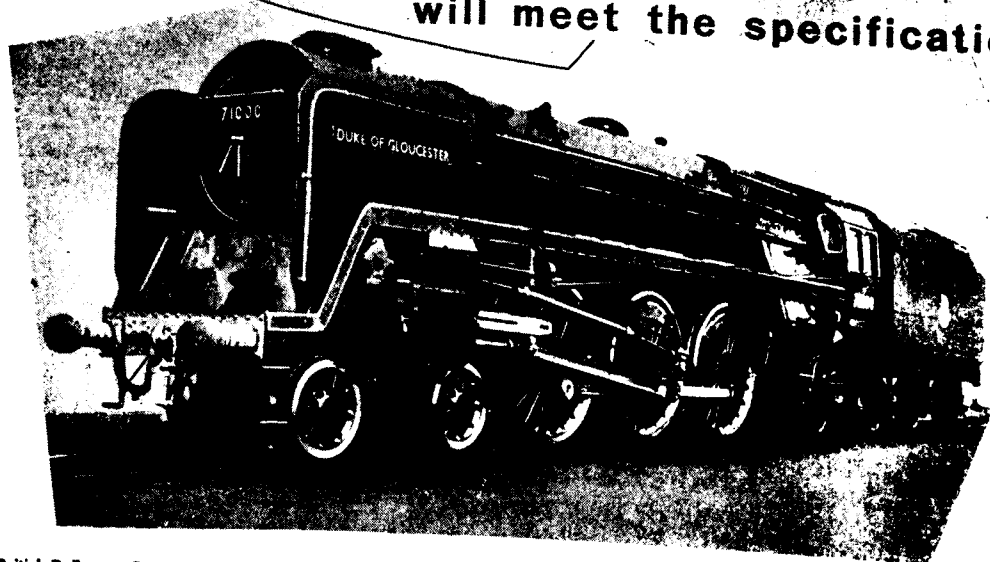
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POPPET VALVE GEAR

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British Railways Standard Class 8, 3-cylinder, 4-6-2 Type Locomotive designed for heavy express passenger services. Steam distribution is by A.L.E. Rotary Cam Poppet Valve Gear with duplex outside drive to the camboxes of the outside cylinders. This system, which incorporates British-Caprotti principles, ensures optimum cylinder performance over extended service-free periods, an effective aid to improved traffic-handling capacity with fuel economy and higher locomotive availability.

Photograph by courtesy of British Railways.

Further order in hand for 30 sets of complete equipment for British Railways' Standard Locomotives.

Approved & specified by Railway Authorities in many parts of the world for practically every design and condition of service.

ASSOCIATED LOCOMOTIVE EQUIPMENT LTD
LOCOMOTIVE ENGINEERS

Agents in India:-

GUEST, KEEN, WILLIAMS, LIMITED
CALCUTTA - BOMBAY - MADRAS - NEW DELHI



Interior of the Central Station at York

WORLD OF RAILWAYS

ARTHUR L. STEAD

Our London Correspondent

RAILWAYS in all corners of the globe today are paying increasing attention to the preservation and public display of outstanding pieces of equipment—historic locomotives, carriages, signal apparatus, and so forth—which illustrate in striking fashion the colourful story of the "Iron Way". Usually, exceptionally interesting railway items are gathered together and housed in one central museum, and of all of these establishments none presents greater fascination than the York Museum, on the North-Eastern Region of British Railways.

Possessing what is probably the world's finest single collection of railway exhibits, the York Museum is actually the "daddy" of all such establishments. Started many years ago by the former North-Eastern Railway Company whose tracks grew out of George Stephenson's Stockton & Darlington Railway of 1825—the York Museum has developed

into a huge national show-place featuring priceless transport exhibits from far and wide.

You reach the York Museum by a walk of a few hundred yards from the Central Station, passing *en route* under the massive Roman Wall that still surrounds the centre of the city. The museum is divided into two sections. One consists of large exhibits, such as historic locomotives, early passenger carriages, early rails and track equipment, and pioneer signal apparatus. The other section comprises a multitude of small exhibits, including railway prints, photographs, time-tables and guides. The locomotive and other big exhibits are housed in a former locomotive fitting shop, and most of the exhibits, both large and small, carry suitable printed descriptions for the visitors' enlightenment.

Immediately you enter the large exhibits section of the York Museum, your eyes catch sight of one of the most historic locomotives

March 1957

in the world. This is the famous Hetton Colliery engine, of 0-4-0 wheel arrangement, built by George Stephenson and Nicholas Wood, in 1822. Rebuilt in 1857, and again in 1882, this fine old locomotive was actually in service at Hetton Colliery, England, until 1908. At the Railway Centenary Exhibition in Darlington in 1925, the Hetton engine proudly led a procession of world-famous locomotives, running under its own steam, and in 1975, when Britain celebrates the 150th birthday of her railways, the good old Hetton machine will doubtless still be found "sound in wind and limb"!

Compare the Hetton's dimensions with those of modern giants: Cylinders, 10½ in. by 24 in.; driving wheels, 3 ft. diameter; boiler length, 10 ft. 2 in.; diameter 4 ft. 4 in.; grate area, 7.9 sq. ft.; heating surface, 157.5 sq. ft.; boiler pressure, 80 pounds; tractive effort, 4,775 pounds; and weight of engine and tender, 9½ tons.

Behind the Hetton engine is displayed a most interesting machine—the Weatherill Winding Engine, a direct-acting non-condensing winding engine built in 1833 for the Stanhope & Tyne Railway. This engine, fitted with two hauling drums driven through spur gearing, used to haul wagons of limestone up a 5,640 ft. incline with a grade varying from one in 11½ to one in 43. In early days, winding engines of this type were common for handling both goods and passenger trains up steep grades.

Close by the ancient Hetton engine, too, is a very famous British locomotive. This is the Great Western Company's "City of Truro" express passenger machine. Built in the railway shops at Swindon, the "City of Truro" made history in 1904 by achieving the highest speed recorded up to that time for a railway train—102.3 m.p.h.—on a run with an ocean mail special from Plymouth to London. On an adjoining stand, there is seen another grand old locomotive—the London, Brighton & South Coast Company's "Gladstone", built in 1882 and retired in 1926 with a total mileage of 1,346,918 to its credit.

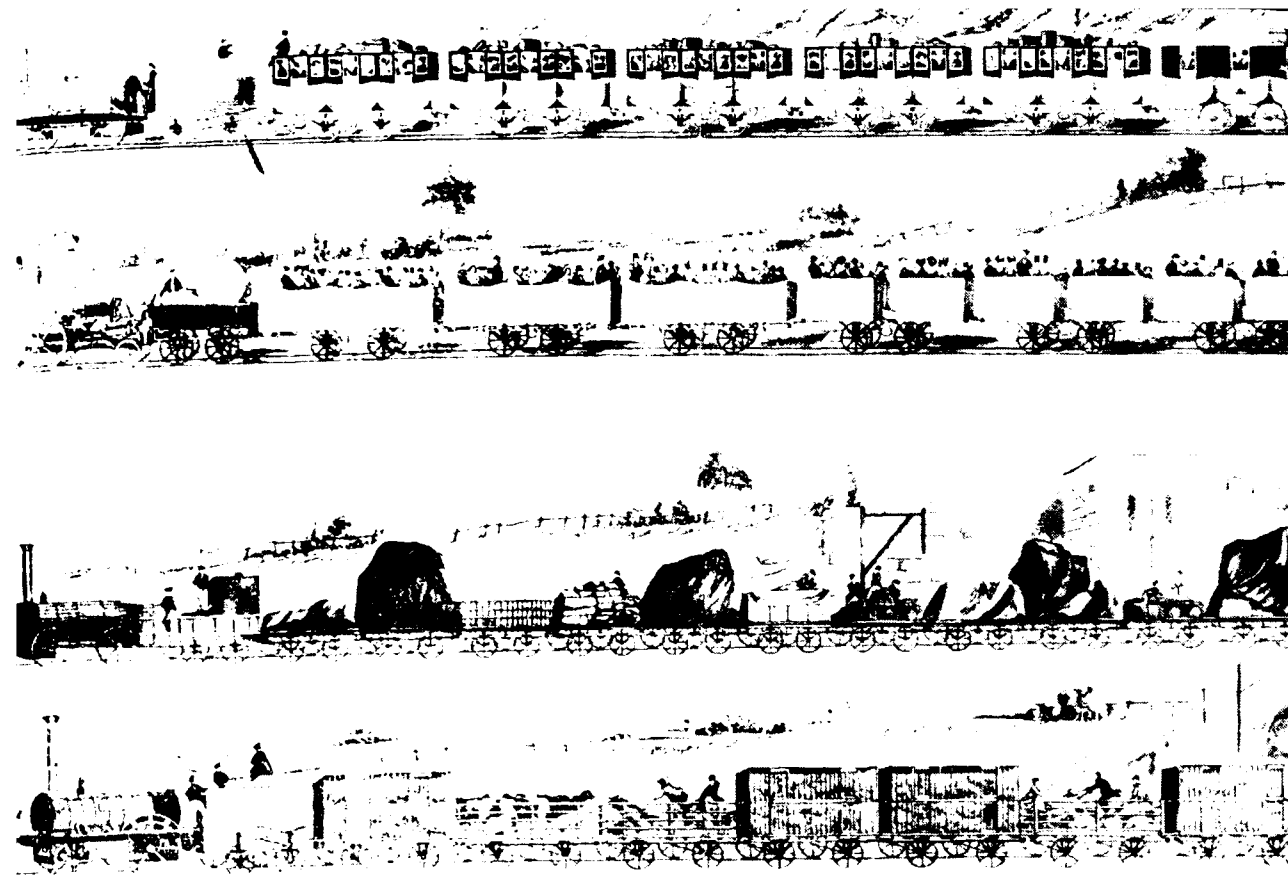
A high-light among the York locomotive exhibits is that unique British engine, the Great Northern Company's single-wheeler No. 1. This was built at Doncaster in 1870 to the design of Patrick Stirling. For many years, Stirling No. 1 headed express passenger trains between King's Cross Station, London, and York, running 1,404,663 miles before being

retired in 1907. Alongside Stirling No. 1 is exhibited another Great Northern machine that made history. No. 990, built in 1908 and the first 1 1/2 ("Atlantic") type to be constructed in Britain.

Our attention next is directed to a very famous old engine—the "Columbine", built at Crewe in 1845. Its designer was Francis Trevithick, son of Richard Trevithick, the first man to build a full-size railway locomotive (in 1803), and "Columbine" was the first machine to be turned out of Crewe Works. In active use until 1902, "Columbine" has dimensions as follows: Driving wheels (single), 6 ft. 3 in. diameter; cylinders (two) 15½ in. by 20 in.; working pressure, 120 pounds; tractive effort, 6,325 pounds; and weight of engine and tender, 34½ tons.

A great many other interesting engines are on show, but we must pass on to other items. Old passenger carriages, for example, reveal much about early railway working. Among vehicles displayed at York is a second-class coach used from 1834-1886 on the Bodmin & Wadebridge Railway; an open third-class carriage employed on the same line, with buffers of solid timber; a Stockton & Darlington first and second-class coach of 1845, with a place for the guard on the roof, from which elevation he controlled the brakes; and a car from the City & South London Railway, London's pioneer "tube".

A particularly valuable exhibit at York is the world's first iron railway bridge. This bridge, re-erected in the museum, was designed by George Stephenson, and it carried the Stockton & Darlington line over the River Gaunless (1825). A special feature is the absence of rivets, the girders being socketed into tubular pillars. Total length of the original bridge was 50 ft., in four equal spans. Each girder consisted of two curved wrought-iron bars meeting at the ends in cast-iron bosses. Five vertical posts, cast round both bars, were extended upwards to form supports for the longitudinal timbers on which the rails were laid. The girders were supported at their ends on five pairs of inclined cast-iron pillars, braced together and connected at the top by a cast-iron cross-beam, from which cantilevers projected to carry the side platforms on the bridge. The parts were socketed together to keep them tight, and the bridge actually remained in service in its original form until 1901.



An old print in the York Railway Museum showing early days on the Liverpool and Manchester Railways, 1830. Top to bottom is a train of First-class passenger carriages, Second-class carriages, mixed train (passenger and goods) and a train of livestock.

Nowhere in the world is there such a wonderful display of early railway track as at York. Exhibits include switch plate, run-on plate and crossings of the Outram Tramway of 1775; stone blocks from the Surrey Iron Railway (1801); short cast-iron fish-bellied rails of 1825 or earlier; and malleable rail (28 pounds to the yard) on stone sleepers from the Stockton & Darlington line (1825).

In the small exhibits section at York, thousands of separate items cover railway working in all its branches. Fittingly enough, in the entrance hall is a fine engraving of George Stephenson (1781-1848). Around this are prints and photographs of Stephenson's pioneering colleagues to whom we all owe so very much. On glass-topped tables and in show-cases there are displayed all kinds of railway items, from old time-tables to parts of locomotives.

Items of unusual interest are spring safety valves of 1827, the first ever invented, designed

by Timothy Hackworth for the "Royal George" engine; an old railway hand-bell of the eighteen-thirties; a ticket-dating machine of 1840; and two fine Wedgwood busts of George Stephenson and Robert Stephenson (engineer of India's first railway between Bombay and Thana), dated 1858.

Real treasures at York are a fine collection of painted hat badges, used on the Great North of England Railway, 1841-1851. These badges were worn by the guards and policemen (signalmen) of the period, and were intended to impress upon all and sundry the importance of the job performed by the particular employees concerned. The railway "policemen" of 1830-1850 were charged with the control of traffic at junctions before the advent of signalling, and they continued on the job until signalmen as we now understand them were first appointed.

Another intriguing exhibit at York takes the form of a passenger guard's red coat from the Stockton & Darlington Railway. The



An English smoking carriage of 1846

coat is of scarlet cloth and has brass buttons. Coats of this type were used on many of the early railways and must have added much colour to the scene.

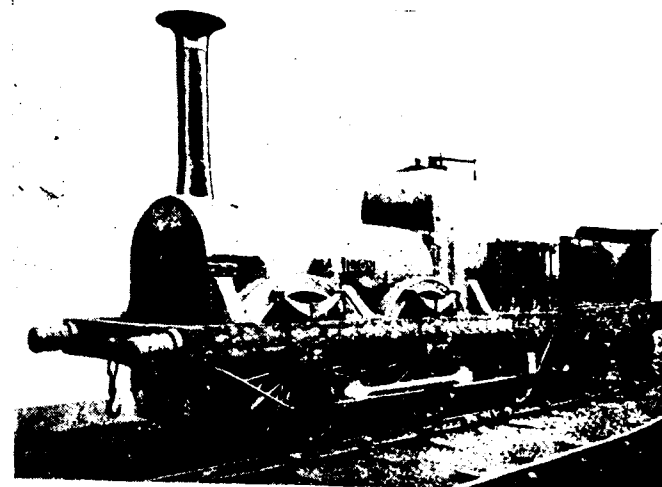
For locomotive men visiting the York Museum, great interest is provided by a case displaying "taps" for making screw threads, used by George Stephenson in the construction of his early Killingworth engines (1814-1823); another case containing outline drawings illustrating the development of the locomotive from 1771-1884; and a third containing a speed recorder stamped "Newcastle & Carlisle Railway, 1858", supposed to have been connected up with the locomotive crank. When the wheel is revolved, a click is produced at each fifth revolution, and at each fiftieth click a small pointer indicates a quarter of a mile.

Railway documents on show at York include numerous original letters from George Stephenson to suppliers of material for his early engines, while one interesting display consists of Patent specifications of Trevithick and Vivian (1802) for "steam engines for propelling carriages"; William Hedley (1813) "adaptation of steam engine for haulage";

George Stephenson (1822) "pumping engine"; and Robert William Brandling (1825) "to enable carts to travel both on railroads and common roads" (one of the earliest ever references to combined railroad movement).

Of historic books in the York Museum there are almost no end. Here are a few gems available for inspection: "Descriptive History of the Steam Engine", by Robert Stuart, 1824; "Observations on a General Iron Railway for Land Steam Conveyance", by Thomas Gray, 1825; "History of the Steam Engine", by Elijah Galloway, 1827; and "Historical and Descriptive Anecdotes of Steam Engines", by Robert Stuart, 1829. Alongside these treasures are equally valuable copies of early issues of "Bradshaw's Railway Guide" (1843), and public and working time-tables of most of Britain's early railways.

York Railway Museum is undoubtedly a show-place for Indian railway man or woman fortunate enough to visit Britain should miss. York, 188 miles north of London, is on the



A very famous old British locomotive-- the 0-4-2 "Lion"

direct route of the Eastern Region of British Railways from King's Cross Station, London, to Edinburgh, and is served by many express trains daily. Admission to the York Museum is entirely free, and at all times a very cordial welcome there awaits visitors from India.

THE COMMERCIAL DEPARTMENT

(II)

OPRAIL

IF asked the question: what is the main function of the Commercial department? the answer would come promptly--to sell transport and earn the revenue of a railway administration.

Now, railway revenue comes from two major sources: the earnings from coaching and from goods traffic. Coaching traffic comprises everything transported by mail, express and passenger trains: such as, passengers, parcels and luggage; and goods traffic consists of everything transported by goods trains, which can be anything from bales of cloth to an elephant or a locomotive boiler.

The executive under whom the entire commercial department functions is usually designated as the Chief Commercial Superintendent. This department is also subdivided into two main sections, viz., Coaching Revenue and Goods Revenue. Each of these subdivisions is controlled by a Deputy Chief Commercial Superintendent, and is manned by Superintendents, Assistant Superintendents, Inspectors, Supervisors, and a large number of clerical and other staff.

Goods

The major portion of all railway revenue comes from goods traffic, and therefore the Goods side of the Commercial department is usually considered the more important of the two sections. The source of goods revenue emanates mainly from the dispatching station. The merchant brings his goods to the station where forwarding notes, invoices, etc., are prepared by a station master or goods clerk. If the consignment is being booked as freight paid, the cash value of the freight due is collected at the time of booking. If it is booked freight-to-pay, the amount due is collected at destination on delivery. After all documentary procedure is completed the goods are loaded into wagons. The Operating department then takes over until the wagon moves forward on its journey and is finally placed in the goods shed at destination, where the

goods are unloaded and await delivery by the consignee.

The Goods section has a number of problems to deal with in day-to-day working, but mainly, this section is concerned with the classification of commodities, quoting various types of rates, such as station-to-station, etc. Goods traffic trends also have to be investigated, as quite often in a particular area new industries come into being, and commercial and industrial concerns naturally look for the means to transport their commodities to various parts of the country at favourable rates. It is the Goods section of the Commercial department which has to probe deeply into these matters to decide on the rate to be charged, taking all factors into consideration.

Coaching

Coaching revenue is derived mainly from the passengers who travel in mail, express and passenger trains, and it is the third class passenger who provides the largest amount of coaching revenue. Before a passenger can board a train to go on a journey he must first obtain a ticket from the booking office and pay cash down for the ticket which is his authority to travel. Where passenger traffic is concerned there is no question of 'fare-to-pay' at destination. It is 'fare-in-advance', as in spite of the elaborate organisation maintained by railways to ensure that every passenger is in possession of a ticket for his journey, the human being finds ways of evading the means provided for the prevention of dishonesty, whether intentional or otherwise. This is what creates the problem of ticketless travel, which is the cause of an enormous loss of revenue amounting perhaps to a few crores of rupees annually. This problem is the responsibility of the Coaching section, who must provide adequate measures and precautions in the way of special flying squads of ticket examiners, backed up by magisterial surprise checks, mobile courts, etc., to stop the leakage of vital revenue.

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The Coaching section also has to ensure that the passenger gets all reasonable facilities to enable him to buy his ticket, be guided as to what trains he must board, be given information with regard to his journey, etc. For this, adequate booking office facilities must be available at stations, and also passenger guides, enquiry clerks, etc., to help the passenger get all the information he desires when going journeys by train.

There is another very important aspect of Commercial department work on railways. This is the problem of dealing with compensation claims. This work is handled by the Claims section, which functions mainly in co-operation with the Goods section, as most of the claims preferred are in respect of merchandise booked by goods train. In spite of the elaborate machinery available on railways for the safe documentation, loading, unloading and handling of goods in transit from forwarding to destination stations, the liability of human error, or carelessness on the part of railway staff, gives rise to claims. The causes for claims are broadly: misdespatching, improper and incorrect loading at forwarding and transshipment points, improper and insufficient action on the part of delivery staff at destination points, and irregularities on the part of yard and running staff while goods are in transit.

Every claim preferred by an individual against the railway, whether it be for fifty or ten thousand rupees, or more, requires detailed and thorough enquiry before it can be decided that the amount claimed by the claimant is just and equitable. When all enquiries are completed, and all evidence thoroughly sifted, then only can the decision be given; as claimants, being human, quite often claim for inflated amounts. If the amount to be refunded is less than that claimed, the claimant naturally is dissatisfied, and if negotiations between the railway administration and the party fail to satisfy either side,

the claimant will resort to law to try and get his way.

The Claims section is not only concerned with the settlement of claims, but must take action to prevent claims arising, and thus keep down the claims bill of the railway. This is done by educating the railway staff and the booking public in those points which usually give rise to claims. The importance of Claims work can be gauged by the fact a railway may deal with over fifty thousand claims cases in a year, and pay out an enormous amount in claims compensation. Thus, like ticketless travel, the reduction of the annual claims bill, is also another major problem of the Commercial department.

The Commercial department must also explore all possibilities to increase traffic, and this function is handled by the Research section. The public in a particular locality desire that the nearest railway station be opened for goods or coaching traffic. Research Inspectors are soon sent out to make detailed investigations on all such proposals to ascertain the traffic prospects, so that a financial justification can be prepared to see whether the proposition will mean additional revenue. Some areas not served by rail, may suddenly assume importance due to factories being built in the area and thus providing new industries. The Research section tackles these problems promptly to see whether new lines and new stations can be developed in the area and so provide the necessary facilities for transport.

The Operating department provides the means for moving the traffic—both goods and coaching—speedily, efficiently and safely; but it is the Commercial department that has to produce the traffic, with the revenue, to be transported. So, every member of the Commercial department, from the Chief and all the way down to the goods and parcel and booking clerk, must be a potential railway salesman, to sell as much traffic as he can get.



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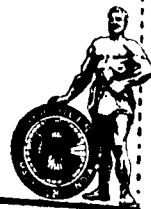
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ROAD—RAIL CONTROVERSY IN INDIA

K. SRINIVASAN

I. CASE OF ROAD TRANSPORT STATED:

"THE Planning Commission has had the problems of road transport development reviewed by a special study group. The Commission has recommended that the nationalisation of goods transport services should not be taken up during the Second Five-Year Plan and that private operators should be assisted in forming viable units. In regard to passenger transport services, the Commission has recommended that programmes for the expansion of nationalised services should be suitably phased and to the extent that State Governments do not themselves propose to operate road transport services, the terms on which permits are granted to private operators should be liberalised. Action is being taken on the recommendations made by the study group regarding the liberalisation of restrictive licensing policies and the avoidance of double taxation on vehicles operating on inter-state routes. The Central Government propose to take permissive powers to regulate inter-state motor transport. These measures should assist development of road transport during the Second Five-Year Plan."

The question to be considered is whether road services can afford any material relief to the railways in regard to the transportation needs of the Second Plan period so that a modification of the needs of rail transportation which have already been worked out may be contemplated with safety.

To begin with, the case for diverting a portion of railway traffic to roads and shipping is based not on earmarking particular commodities but on leaving the door open to them to choose the route best suited to them. At present there is no open door.

II. POINTS TO BE CLARIFIED:

The basic questions about which there are differences of opinion are:

- (i) the comparative initial capital requirements for the transport of a million tons of goods by railways and by road trucks; and
- (ii) the relative costs of transportation per ton mile by the two modes of transport.

What will be in the best interests of the country on the basis of the initial capital required, are the recurring operating costs, etc.; the drain on foreign exchange, and the speed with which the additional transportation capacity can be provided?

It is argued that Railways require far more steel than roads and in the present condition of our economy where steel is vital to our progress it is absolutely essential to cut down to the minimum its use when the same service can be had from other materials.

Mr. Vagh, Vice-President of Indian Roads and Transport Development, in his article on Indian Railways October 1956, argues the modern trend all over the world, is definitely in favour of extending road transport in preference to the railways. Experience in the U.S.A. has already been mentioned. The new appropriation of 101 million dollars for the development of roads in a period of 10 years in U.S.A. is a further indication. Mr. Vagh also questions Sri Mathur's figure of Rs. 11.6 crores as the total investment on trucks for carrying one million tons of goods by road. Instead, he computes the figure as Rs. 4.5 crores.

III. CIRCUMSTANCES ALTER CASES:

Sri Shah Nawaz Khan, Deputy Minister for Railways and Transport, said that the problems of road transport in this country were very much different from those in the western countries where there were long distances to travel and largely a rural population to serve. India's problems of traffic were different, the roads were not everywhere so well-developed, and therefore the system of operation and maintenance had to be different. "We must adjust our training of the operational and technical staff in conformity with these peculiar conditions," the Deputy Minister stated.

Moreover, road transport required the services of a large number of technicians. At present there were not enough of them in the country. The industry was largely in the hands of small and technically untrained operators, who could not organise their activities economically and scientifically. Their standard had to be raised and a large number of men

had to be trained to produce the necessary man-power for the *fast expanding industry*.

IV. EXPANSION OF ROAD TRANSPORT :

The Second Five-Year Plan takes into account 'the possibility of a larger proportion of passenger traffic being carried by road transport'. It is necessary to provide for the carriage by road of a larger proportion of goods traffic also. The objective in both cases is clearly and definitely 'to provide relief to the railways'. There is no doubt that road transport will deliver the goods, employing at present 100,000 vehicles carrying only 18 million tons. Besides, it could reasonably be expected that the next five years would bring an additional 60,000 or so vehicles on the road, and these could carry another 15 to 20 million tons. *Most of this capacity would, however, be utilized for carrying feeder traffic to the Railways. Road transport will act as a supplementary carrier.*

V. RELATIVE COSTS, CHARGES AND COMPETITION :

As for charges of transport by road or rail, "either the road haulier must be required to apply a classification of goods by value and make his charges on the same principle as the Railways do or the Railways must leave the value of goods out of account in fixing rates and follow the practice of road hauliers who make cost the bases of transport charges. The latter solution is the simpler to administer." It has the additional recommendation of being economically the more justifiable.

"That road will secure the greater number of industries and have the more rapid development of local traffic whose local rates are the lowest. In the Railway industry mobility of capital holds good, only over long periods. Over short periods capital is immobile.

For hauling articles low in value in proportion to weight and bulk, water transport is more economical than road transport. The superiority of air transport lies in the independence of the nature of the surface over which it operates, and its speed." *Gilbert Walker.*

VI. NO UNHEALTHY COMPETITION :

In this connection, it seems relevant to refer to the views of E. A. Nadirshah (of Indian

Road and Transport Development Association Ltd.). "It is not enough if we can manage to muster the goods and services required for the implementation of our plans and projects. The cardinal point is to make them available where and when needed. It will be verily a tragedy if the tools for our planned progress are all there but cannot be properly utilised for want of sufficient transport.

"It is believed there is going to be a gap between demand and supply of transport services during the present Plan period, particularly so because of the substantial shortfall in the allocation of funds for the railways, which cannot but affect their expansion programmes. The only agency which can fill the breach and ease the *crises* that is brewing in the transport sphere is road transport. Our country's resources being limited and our overall development requirements being what they are, it is quite on the cards that our exchequer may not be in a position always to spare such a *sizeable* portion of our outlay—it is as high as 25% in the Second Plan on the Railways."

The Railways need have no misgivings about their legitimate interests against the prospect of unhealthy competition from Road Transport. The question of road freights are to be resolved in such a manner as to rule out such unfair competition between the principal transport agencies. The equitable channelling of non-feeder traffic in high-rated commodities in proportion to the carrying capacity of road and rail at level rates should present no insuperable problem.

VII. READING BETWEEN THE LINES :

The difficulties of road transport as pointed by C. S. Nair, Secretary, Indian Road Development Association in Transport Annual, 1956. "Today a vehicle pays as much as two annas of tax for each ton of goods carried one mile, as against an average rail freight of less than an anna per ton-mile. What industry can flourish under the load of such a heavy dead-weight. Is it surprising in the face of these facts that while our industrial and agricultural production goes up, road transport, suffers from a slow consumption." *As it will take some years for Road Transport to make necessary preparations and bring down the cost of each ton of goods carried one mile, it is necessary for Railways to convey the additional traffic to be handled during Second Plan period.*

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The Normally Danger System :

1. Is similar to manual block.
2. Energy required only when the signal is to be taken 'off'.
3. Men working on line are warned of approaching trains.
4. In cold countries, sticking due to frost or snow will still retain the signal in its most restrictive aspect.

SEMI-AUTOMATIC SIGNALLING :

Power signalling is an installation in which points and signals are operated by power but controlled by signalmen or, in other words, they are virtually under manual control. Power installation denotes that points and signals are operated by power but through the agency of a signalman. Power signalling may be employed with Automatic Signalling but virtual control will rest with a signalman. Such a combination is called a Semi-Automatic System. Signalmen must be employed with either a Semi-Automatic Power System or controlled manual system.

A signal can be absolute as well as permissive. It will be permissive when the interlocked area is switched off and becomes absolute when the signalman assumes control again.

In automatic signalling territory, a driver works on "Stop and Proceed" indications which permit him to pass a danger signal after stopping and pull up ahead if he sees no obstruction. When a driver from an automatic signalling section comes on to an interlocked territory, the first signal he will encounter will be an absolute one. When the interlocked station is switched off, the signals become automatic and a marker light will come into operation. Then it is called a Semi-Automatic Signal.

I shall close this description of Automatic Signalling with a recapitulation of its principles :

1. The apparatus shall, as far as possible, be so installed and circuits so arranged that failure of any part of the system affecting the safety of train operation will cause all signals affected to give the most restrictive indications which conditions require.

2. Signal indications shall be given by positions, by coloured lights or by both. A single white light shall not be used for a Proceed indication.

3. Signals shall be automatically controlled by continuous track circuits on main track and on other track where medium speed is permitted.

4. Signals governing movements over points shall be so controlled that proper restrictive indications will be displayed when such switch is not in proper position.

5. On track signalled for movements in both directions, signals shall be so arranged and controlled that proper restrictive indications will be provided to protect both following and opposing movements.

DOUBLE WIRE SIGNALLING :

With double wire signalling, we can legislate at what angle we want the signal arm in the lowered position while it is next to impossible to do so with a single wire.

In single wire working, we require rodding for points and wire for signals. In double wire signalling, we can operate both points and signals by wire. One cabin only is necessary for a reasonable length of loop line.

Wherever there is the danger of stones, etc., getting wedged between the tongue rail and the stock rail, it is advisable to install clutch type levers. When we pull the lever, the clutch type slips when there is an obstruction.

Two wires can be made to do the work of two levers by coupling the levers. The same transmission is used, once for one lever and then for the other. Coupled levers can be of two types :

1. Pull-pull type - like Outer and Warner.
2. Push-pull type - like Starters.

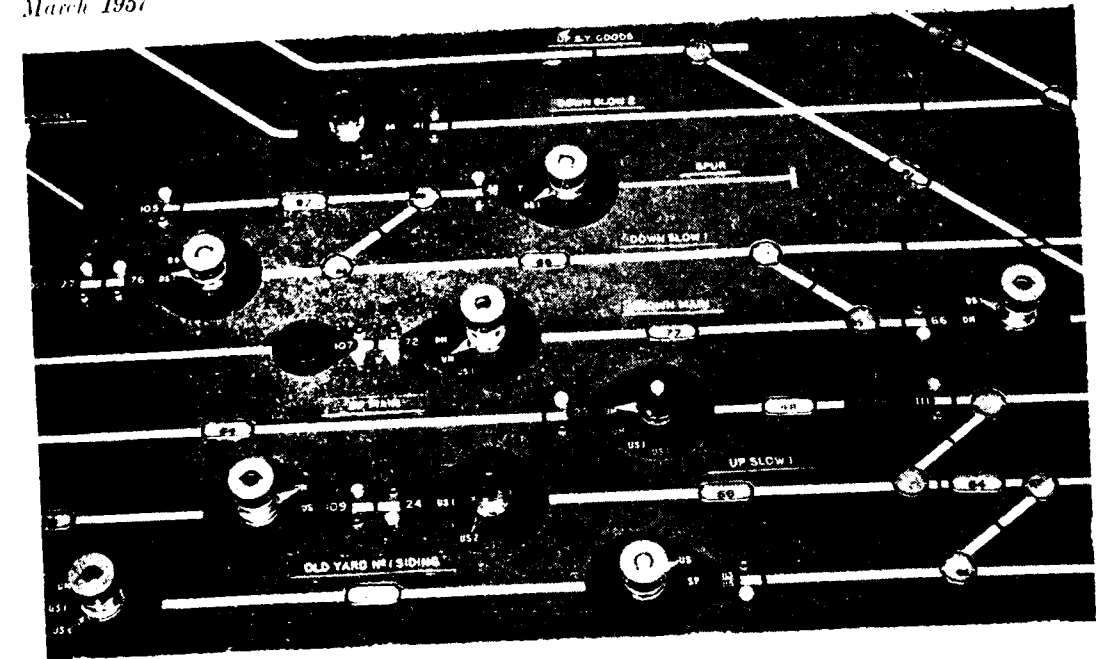
MECHANICAL AND POWER SYSTEMS COMPARED :

In a mechanical system, power is applied at the lever. In a power frame, power is applied at the location of function to be operated.

Power generally applied for the devised movement - purpose is to operate either an air valve or an electric contact, according to the system in force.

In a manual system, we can find out whether the function has operated by the mere feel.

In an electrical system, there is absence of feel in the lever or slide. To ensure correspondence between the two, check locking is provided.



Relay interlocking control panel

Power systems are of two types :

1. Unit type.
2. Route type.

A route lever maintains the integrity of locking, i.e., sets, locks, detects and lowers signals. This system minimises the number of levers. Track approach locking must be provided in a power system. Once a signal has been accepted by a train, the route will be held by the train.

DISADVANTAGES OF A MECHANICAL FRAME :

The following are the disadvantages of a mechanical frame :

1. Strain on the signalman.
2. Limited capacity of the plant.
3. Time taken for operation is considerable.

In a power frame :

1. The distance of operation is limited.

1. We can combine a number of mechanical cabins and concentrate them in a power frame.

2. We need not have one lever for each point or signal as in a mechanical frame, and

3. There is physical connection between the lever and the function operated in a mechanical frame while there is no such connection in a power frame.

The basic difference between mechanical locking and electrical locking is that in the former you move tappets to effect locking. Electrical locking levers are not free and all levers are basically locked.

Check locking was later done away with as points etc. are proved in power signalling. Finally all locking between levers was abolished and even levers themselves were done away with and replaced by switchers and push buttons.

RELAY INTERLOCKING :

Relay interlocking, which is now extensively used on Railways, can be of different types.

The console type - operation of units separated from illuminated diagram. It is both an operating and illuminating unit.

Switches act as levers in a power frame. Interlocking is provided by a series of relays which are interconnected and operated on the same principle as mechanical interlocking.

Illuminated diagram consists of panels of insulating material. The basic principle is that it should give us all facts in an unmistakable form.

Signal switches are capable of moving 90° along with the indication they give. On clearing the signal, the red pea lamp is extinguished and we get a green pea lamp for either G or Y indication. Track circuit indications are also given by pea lamps. The lamps light up when tracks are occupied. Point switches are situated near the model points on the diagram. These have two positions, normal to the left and R to the right. Point indications are also accomplished by two pea lamps on the point location of the panel.

The operator of the signal switch merely clears the signal provided the relevant points in the route are set and locked correctly.

ADVANTAGES OF RELAY INTERLOCKING :

- (a) Increased speed.
- (b) Flexibility of manipulation and operation.
- (c) Facilities for automatic route cancellations if required.
- (d) Fewer operations for large layouts.
- (e) Lower operating and maintenance costs because mechanical fittings are dispensed with.
- (f) Smaller machines, hence smaller signal boxes, with resultant lower installation, operating and maintenance costs.
- (g) Future changes can be made with greater ease than old methods of interlocking. Easy display of indications giving operating information such as lights, white or coloured, and movable point indicators.

(To be continued)

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RAILWAYS AND THE BANK

TOUCHSTONE

A TEAM of experts on railway construction and operation, sent by the World Bank to assess and report on the expansion projects prepared by the Railway Board under the Second Five-Year Plan, has just arrived in this country. They will spend the next three weeks studying the railway system and its needs in terms of the effort needed of it by the prospective demands of traffic resulting from the nation's industrialisation and other economic development programmes.

The report of this team to the World Bank will provide the basis for the Bank's loan assistance to the Indian Railways. The programme for the increase of transport capacity which the Planning Commission has approved of calls for a total expenditure of Rs. 1,125 crores. This is not a generous figure; it is an austere one. The Railways themselves estimated their requirements at Rs. 1,350 crores, but as a result of a general rationing of investment, they have to be content with a somewhat reduced allocation.

Essential Imports

Out of these Rs. 1,125 crores of total investment for the Railways, about Rs. 425 crores have to be in the form of foreign exchange, for a portion of the steel required for the projects and also much of the equipment have to be imported. The estimate of foreign exchange needs, again, is a strictly disciplined figure. The Railways are taking steps to utilise existing indigenous capacity and sources of supply to the utmost in the procurement of the materials they need. They have also embarked on a conscious policy of stimulating and building up additional domestic capacity as the Second Plan goes along. A conspicuous illustration of this approach is the striking expansion that is being achieved in wagon-building capacity. The foreign exchange which the Railways require are, therefore, for the purchase of materials and equipment which are not only not available within the country but are also such as cannot be locally manufactured at present or in the immediate future.

The availability of this external finance of Rs. 425 crores, consequently, is a vital matter for the Railway plan. It stands for the key materials and equipment which this country must have from abroad if the expansion

of transport facilities (which again is basic to the success of the Second Five-Year Plan as a whole) is to take place on the scale demanded and within the time permitted by the industrialisation and other development programmes.

The Government of India and this country expect that as much as possible of the Railways' need of foreign exchange will be met by the World Bank. It is not necessary here to mention any definite figure for the size of the Railway loans which are being negotiated. To some extent, the amount will be determined by the technical appraisal of the schemes and projects by the World Bank's consultants, who are now here. But it is clearly necessary that the World Bank's assistance should be very substantial, consistent not only with the Railways' specific requirements, but also with the magnitude of the Second Plan, which demands an aggregate investment of Rs. 6,200 crores, of which roughly a fourth will be needed in foreign exchange.

Clearing the Air

Discussion of a general kind has already taken place to some extent, both within the World Bank and outside, with regard to the suitability of the Indian Railway system as a candidate for external assistance. There had been in this context some criticism of the operational efficiency of the system. Comparisons with other railway systems of the world have been drawn to the disadvantage of the Indian Railways. These discussions have not always been well-informed and a delegation of Railway officials who went to the World Bank recently were charged with, among other tasks, the job of putting across a correct picture of the performance of Indian Railways. It is believed that the delegation succeeded in this assignment.

In any case the relative efficiency of the railway system of this country need not be a matter of vague generalizations; the statistics are there and they do not stammer, but speak clearly. They establish, for instance, that the density of traffic is much greater on the railway system of this country than on the railroads in most part of the world. In the case of goods traffic, only the U.S.A. can show a higher density. If both goods and passenger traffic are considered, the Indian record is

superior. The following figures, which relate to the broad gauge, over which 80 per cent of goods traffic move in this country, are relevant in this connection:

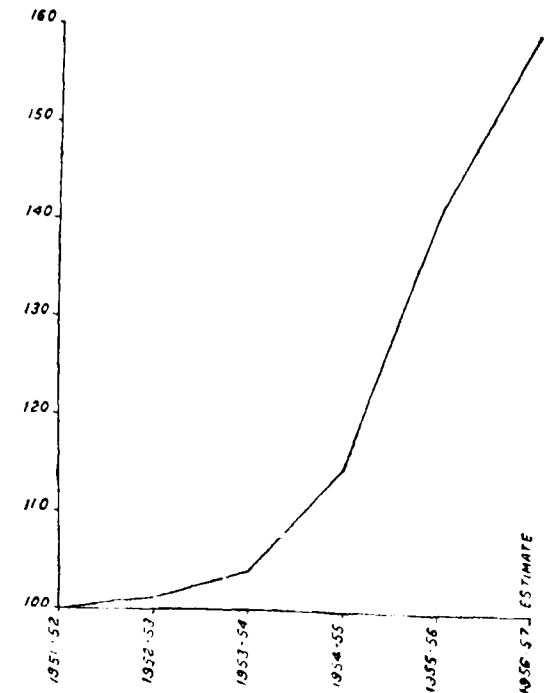
	Net Ton Miles per Track Mile	Train Miles per Route Mile
India ..	1,152,480	8,321
U.S.A. ..	1,331,717	3,444
W. Germany ..	665,200	..
S. Africa ..	978,075	..

Our tracks, clearly, are heavily overloaded in comparison with railroads elsewhere. In spite of this, our net ton mile per wagon day on broad gauge is 541 as against the U.S. figure of 330, the Canadian Pacific's 438, or the German Federal's 282. Wagon-miles per wagon day, again, are 48.49 in our case and 48.1 in the United States.

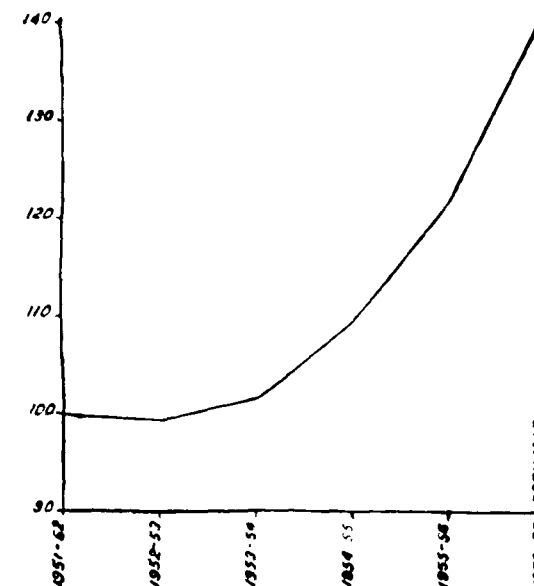
Task Ahead

Statistics are often controversial for the experts; for the common man they are always confusing. But it must surely be admitted that there cannot be much question of the working vigour and efficiency of the Indian

INDEX NUMBERS OF
TON MILES - ALL COMMODITIES
OTHER THAN COAL



INDEX NUMBERS OF
TONS ORIGINATING - ALL COMMODITIES
OTHER THAN COAL, STEEL AND CEMENT



Railway system in a general sense when the plain fact is that it has been able to cope in recent years with traffic rising— as the graphs here show— at something like 10 per cent from year to year. Operational efficiency, however, is a factor which at no time can be assumed to be at its maximum and in this country, especially, there can be no question of the paramount importance of continually stepping up the efficiency of the Railways. This is because, as was noted earlier, the investment in the expansion of railway facilities has had to be restricted to a figure lower to what the Railway Board is clearly convinced to be necessary for the job which the Railways will have to do in terms of the Second Plan. The reduced investment means that the traffic may develop to an extent in excess of the capacity of the Railways. The additional demand for rail transport is estimated at 75 million tons at the end of the Second Plan whereas the investment allowed will be sufficient only for developing an additional capacity



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of 47 million tons. Even the figure of 75 million tons is an under-estimate, since the increase in general goods traffic (excluding steel, coal and cement) has been taken at an annual average rate of 5 per cent during the Second Plan period, whereas even in the course of the First Plan, general goods traffic has started to grow, as the graphs show, by about 10 per cent from year to year.

It is obvious that the Railways will come under a tremendous pressure to move as much of the traffic that offers as possible and this they cannot do if, besides, constructing additional capacity by fresh investment, they do not also simultaneously take steps to improve their operating efficiency steadily. Thus there is no contradiction between additional investment and improvement in operational efficiency; both are needed and the latter cannot be in any sense a substitute for the former to any extent.

At Full Steam

The spotlight on the issue of operational efficiency, however, has certainly done good. The Railway Board seems to have become more efficiency-conscious. Twelve specific measures have been taken in recent times to improve performance all round. It is not necessary to list these measures here, but it is interesting to note the improvements seen lately in several

operational indices. From April to December 1956, the average loading on the broad gauge went up by 6.4 per cent, while the tonnage cleared was nearly 11 per cent over the corresponding period of last year. By the beginning of the busy season (i.e., end of October), practically all the traffic offered for dispatch had been moved and outstanding registrations were practically current. Detentions to wagons at yards and terminals had been reduced and the wagon-miles per wagon day increased from 46.3 in 1955-56 to 49.7 in August 1956, while maintaining an average of 47.3 during the first half of the year. Similarly, the net ton miles per wagon day on broad gauge has increased to 595 from 541 reached during 1955-56.

India's Railway system, therefore, can offer itself proudly and hopefully to any expert inspection. It has nothing to hide or be apologetic about. Like all human institutions everywhere it is certainly capable of improvement. It is also in the special position of being under an urgent and overwhelming necessity to improve to its utmost, for it is only by doing so that it can continue to serve the emerging needs of industrializing India. To help it to do so will be to assist India's economy to build itself and India's people to fight poverty.

LEISURE AND HOBBIES

V. S. SHANTHALAKSHMI

IF I speak of leisure and hobbies to a busy housewife, she may just jeer at me. "Leisure! Well, there is no such word in my dictionary. What between attending to the children, doing the house-chores of washing and cleaning and cooking and mending, besides seeing to all the comforts of 'My Man', how do you expect me to even think of leisure and least of all hobbies!" Well, in a way she is correct. A busy housewife doesn't have much time to spend outside her home and family except when shopping and calling on friends.

Of course, it is all right for her now. But once she attains middle-age and sees her work well done—I mean her daughters grown up and married and independent, sons well-settled with families of their own—she begins to look with questioning eyes towards a new world in which her assistance is not that much solicited, in which all conceivable values have been changing radically while she was busy baking cakes and sewing curtains. She sees her sisters who have sacrificed motherhood and home-making for the thrill of various kinds of outside activities (like social-work, politics, etc.), advanced to positions of esteem and prestige, and she feels quite miserable and behind-times, and left-out of this side of the drama of life. She has misgivings, and fear that she would soon fall out into disuse at home too. Time hangs heavy on her hands with her husband too retired and settled at home, and she is bored to death with nothing much to do. She sees herself a discarded grandmother, a surplus both to her son's and daughter's families in spite of the many useful things she can still do for them and in one last frantic attempt to win back for herself the applause and adulation that were hers during the days of her youth, she develops that most useless of all hobbies the neurotic profession of being ill!

The same is the case with career women. When they retire, after a life of hectic rush to the office daily and doing this work or the other, find it absolutely difficult to adjust themselves to a life of lassitude and relaxed routine. To such a woman who is dependent entirely on her external environment, who has got her

sole joy from the artificial pleasures of a mad and neurotic civilisation, the prospect of middle age induces a veritable panic.

Hence the woman of today, whether she is a housewife, mother, business woman or professional woman, comes to the middle decades with a heritage of leisure which is beyond the most extravagant expectations of her grandmother. It is not enough for the middle-aged lady to play endless sessions of bridge or chess; it is not enough if she only resorts madly to dramas and theatres and music performances; it is not enough if she spends her time reading trashy novels and cheap thrillers; it is not enough if she spends her time in chatter and gossip or if she burns up her energy running from one shop to another on endless fatuous shopping expeditions. They will soon get tired of all these and helplessly discover that time is killing them still. So we see that a lady who wishes her middle-age to be interesting and her last years of life to be serene, must develop some avocations and hobbies to keep her from being bored to death in her leisure time.

The joys of hobbies are many. There are hobbies which are social, hobbies which are individual. The woman who has had an active business career will do well to cultivate a hobby which enables her to get along with herself in her lonely and leisure moments. The study of a language, the collection of curios, or participation in any one of the creative arts, will make a good hobby for her. And a woman who has lived in her home for the most part will do well to cultivate a hobby which throws her into constant contact with the world outside her home. The woman who has been delicate should choose a hobby which would benefit her health, a sport, travel or some outside interest such as gardening, animal breeding or the like.

All women have a deep biological urge to create. The woman who has been denied the joy of motherhood will do well to recognise her need and satisfy this creative urge either in some tangible artistic creativeness or in the

(Continued on page 40)

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ON a Winter morning as I was seated in my Department studying an interesting X-ray film on my illuminator, a pleasant mannered lady walked in for a medical consultation. At the end, she said, "Well, Doctor, What is your advice for reducing my weight? I am very much worried about it". Her size represented a fortress-like defence in a hostile environment.

Obesity, as you may know, is a condition characterised by an excessive amount of body fat. To the experienced physician the determination of the presence or absence of obesity is a matter of intuitive judgment. In my opinion, the height and weight charts are unsatisfactory guides. Obesity is the most frequent medical defect for which standard risk insurance is refused.

Causes of Obesity.—Because most normal individuals regulate their food intake to their metabolic needs unconsciously, the failure of the obese individuals to do this represents the prime disorder. The intake of food is prompted by the sensations of hunger and appetite. Emotional, cultural and social factors are more important determinants of food intake. The utilisation of digested food is different from obese to non-obese individuals. Obesity may also be due to an hereditary defect in the fat cell of the body by which excessive fat is accumulated. The aetiological importance of the endocrine glands in causing obesity is recognised. Under-function of the thyroid gland and Pituitary gland cause obesity. Adrenal-cortex gland also produces obesity by hyperfunction.

Great care should be taken to correlate the cause and course of obesity with significant events in patient's life. Severe obesity in childhood is very suggestive of significant emotional disturbances whereas obesity in individuals of middle age more frequently indicates the persistence of eating patterns established at a more active period of life. Obesity beginning at the time of puberty, marriage, child-bearing or menopause should suggest a more thorough investigation of life situation at these times. The familial incidence of obesity is high although the

explanation for this has not been established. Consideration should be given to the significance of obesity to the patient. Many well-adjusted individuals have an ineffective appetite-regulating mechanism and become obese through ignorance and carelessness. When these individuals recognise obesity as a troublesome handicap, they will seek advice and respond well to treatment. Obesity in other patients may have sexual significance as a type of substitute pregnancy. For individuals with feelings of inferiority, obesity may provide an easy excuse for failure in social or business activities. In many cultural groups obesity is considered desirable and indicative of affluence and substantial social position. To others, obesity is looked upon as a sign of happiness or a good disposition.

In the examination of an obese patient, an accurate dietary history should be obtained. The possibility of diabetes, arteriosclerosis, hypertension and osteo-arthritis should be evaluated because of the increased frequency in obesity. Detailed neurological examination should be done.

Treatment.—Prevention is better than cure. Normal weight is much more easily maintained than excess weight reduced. The popular belief that obesity is a glandular disturbance should go. I advise all the obese to avoid excessive calorie intake. I shall go a further step and say "starve completely or at least miss a meal daily." If obesity is the cause of Endocrine or neurologic disease, it can be corrected by consulting a doctor. Cautious and understanding supervision is necessary by the doctor. With proper dietary education and the establishment of a close Doctor-Patient relationship satisfactory treatment may be achieved.

Successful weight reduction depends on the voluntary restriction of calories. A calorie intake of from 800 to 1,200 daily will fit the needs of most patients. In presenting a diet to an obese individual it should be emphasised that a permanent change in food habits is necessary. To a considerable degree the obese patient needs blinders when dining and not to compare his or her colleague eating.

Protein foods are the back-bone of dietary therapy. Vegetable and fruits can be included in the low calorie menu. The fat and the high carbo-hydrate types of food should be avoided or at least restricted. It is a valuable experience for patients to write down everything they eat for at least one week and calculate its calorie cost from simple tables. The most widely used drugs in the treatment of obesity are substituted aminopropanes. The hazards are many in the use of this drug. Habituation, serious emotional disturbances and Psychopathic tendency limit the use of the drug. Increased physical activity should be encouraged, in inactive flabby patients. Certain laxatives are advertised as being "Slimming", the idea being, presumably, that if a patient has perpetual diarrhoea she will never put on fat, and an enterprising foreigner is alleged to have sold tablets containing tapeworm eggs until the practice was stopped by law. To sum up in the words of Ogden Nash:

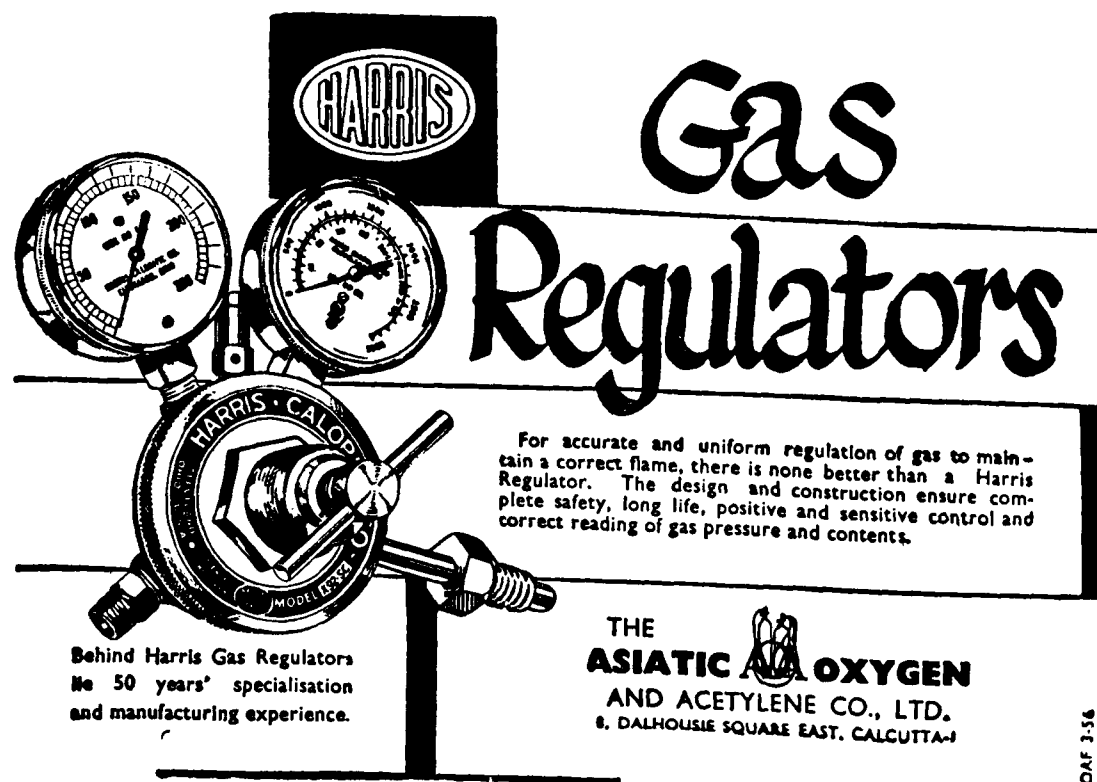
"Though human flesh can be controlled,
We're told, by this and that
you cannot win
The thin stay thin,
The fat continue fat."

WOMEN'S PAGE

(Continued from page 37)

creation of political, social or cultural institutions. The woman who has been selfish and self-centred, will do well to cultivate a hobby dealing with social service lest she spend her old age in unhappy isolation.

The best hobbies are those which are never finished. I refer especially to the hobbies which have to do with the creative arts. The ideal solution of the leisure problem is to have one avocation which you can follow in complete solitude and another one which requires the social co-operation of other human beings. The collection of hobbies is in itself an interesting hobby. If you do not know what hobby to develop, it is an indication of the fact that you have been estranged from life and so your first duty is to learn about hobbies and avocations from those who have been closer to the main channels of living. Do not put off the joys of your hobby until tomorrow, for tomorrow you may be so lonely that you will only find time to be sorry for yourself!



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CHILDREN'S CORNER

"The Story of the Magic Pool."

IN ancient times there lived a king who had three grown-up sons. One day the king took to his bed feeling very ill. He called in his palace doctors, who tried all the medicines they had, but they could not make the king well again. In fact, as the days passed, he got worse and worse. Each time the doctors came to see him, they would shake their heads and say that there was nothing more that could be done, and it seemed that the king could only wait for the time to die.

All the people in the country had heard about their king's illness and they were most sad about it, as he was a king who was good and king and loved by all. Then one day, an old woman came to the palace gates and asked if she could see the king for a few minutes. The sentries refused to let her pass the gates, but she was determined and stood there.

She waited at the gates for nearly an hour, until it was time for the gates to be opened for some people riding out on beautiful horses. When they were about to pass the old woman, she shouted, "Please, sire, let me see my beloved king. I know he is very ill, and I want to tell him how he can get cured."

One of the men riding out happened to be the king's chief minister. When he heard what the old woman had to say he stopped and said: "What is this cure, grandma?" The old woman replied: "Take me to the king and I shall tell him."

Now the chief minister also loved his king, and he too was hoping that somewhere, someone would be able to help the king get well again. So he turned his horse and rode back into the palace grounds, telling the old woman to follow after him.

Within a few minutes the old woman was taken before the king, who was lying in his sick-room looking so thin, so pale and so weak. When the old woman saw him tears came into her eyes. In the room were also two of the best doctors and the king's three sons. The chief minister told the king why the old woman had come, and the king in a weak, but gentle voice gave her permission to speak.

"My sire and master," she said, "there is only one way you can get well, and that is

if you drink of the water of the Magic Pool. This little pool is high up in the mountains and it is not easy to find it; but there is an old man who lives in the mountains, who is the only person who can lead anybody to this Magic Pool. If anyone tries to find the pool by himself he will surely get lost in the mountains and never be heard of again."

The first son, when he heard this, said, "We will command this old man to come here and lead us to the Pool of the Magic Water..."

The old woman smiled and shook her head. "No, he will never come, and it is hard to find him."

All the three sons then replied, "We will find the old man if we have to spend the rest of our lives doing so."

The king shook his head sadly and said, "No, my sons. I am getting old and must die some day, but none of you must risk your lives for the water of the Magic Pool."

But all the three sons were more determined. "Father, this is the last chance of having you get cured and well again, and one of us must find the pool and bring you some of the Magic Water."

The king was too ill and weak to say any more. So the eldest son called for his horse and within the half-hour was on his way to the mountains. It was nearly evening by the time he got high up, and as he rode he looked among the trees and rocks for a sign of the old man. Both he and his horse were now tired after so much riding and climbing. He was about to dismount for a short rest when he heard a wheezy voice say, "Where be you going, young sir?" The Prince turned and saw an ugly, twisted old man, and at once felt that he was the old man who could lead him to the Magic Pool. The Prince then spoke in a loud and harsh tone. "I am looking for the Magic Pool. I am the king's son and I command you to lead me at once to the pool, and if you do not obey I shall have your head cut off."

The old man felt angry at the way he had been spoken to, so he replied, "Yes, I shall show you the way proud Prince, just you follow me." Then, surprisingly agile, the old man hopped from rock to rock like a frisky goat, the Prince following carefully on his

horse. After about a half-hour the old man stopped, and pointed the way along a narrow mountain path, and told the Prince to go that way. The Prince rode on, leaving the old man. But as he went deeper into the mountain, it got darker and darker, until he could hardly see. He got off his horse and had to walk because the path was so narrow. He had gone too far to turn back, so just walked on blindly till suddenly he seemed to step on air. In a few seconds he went hurtling down one side of the mountain and that was the end of him.

When the eldest son did not return, the second next rode out. He too met the old man and was asked the same question. He replied proudly: "Show me the way to the Magic Pool you dirty, ugly beast, or I'll have your head knocked off." Once again the old man was angry and told the second Prince to follow. This Prince, like his elder brother, went the same way and before long, he too went hurtling down the mountain side to his death.

It was now the turn of the youngest Prince. When he reached the mountains and heard the old man asking where he was going, he looked up and felt sorry that such an old man should be living all alone in this wild place. In a kind and gentle voice he asked, "Kind sir, could you please show me the way to the Magic Pool? My father is dying and needs some magic water to save his life. Won't you please help me?"

The old man's heart softened. This young man was not only very kind, but very sad too. So the old man said, "Son, follow me and I shall show you the Magic Pool." The youngest Prince followed him and it wasn't long before the old man led him to the Pool. "Here you are, son. Take your pitcher and fill it up. When your father drinks of this Magic Water he will rise from his bed a new and strong man. And go with my blessings for him and you."

The youngest Prince filled his pitcher and thanked the old man. But before they parted he asked him if he needed anything, as whatever he wanted would be granted. The old man shook his head. "Son, I don't need money or what money can buy. All I wanted is a little kindness, the greatest gift one man can give another, and that you have given to me. Thank you, son. And now, be on your way quick, and by this time tomorrow, your father will be well again."

The Prince rode back to the palace as fast as he could, and rushing up to the king's sick-room, poured out a cupful of the water from the Magic Pool, which he gave to his father to drink. The next morning the king was on his feet again, well and strong as the old man of the mountain had said.

UNCLE TELLATALE.

FOREMOST FOR BHAKTI CULT—PANDARI KSHETRA

P. S. VEDHACHALAM

Publicity Inspector

TUKARAM

Come to me, Vithal, come!
For thee I wait.
Oh, wherefore hast thou me
Left desolate.
Many oppress me sore
With cruel might;
My very enemies
Are day and night.
Ah, come and take thy place
At my heart's core;
Then shall the net of ill
Snare me no more.

PANDHARPUR is rich in traditions regarding devotees who have been enshrined in the history of Hindu sages and saints whose praises have not only been sung in all the languages of the country, but have also formed the theme of many religious books. To mention a few, who is not familiar with the names of Pundlik, Jana Bai, Nam Dev, Tukaram, Khana Patra, Choka Mela, Jnaneswar and Ekanath? These are 'bhaktas' who have dedicated their lives to Sri Vittoba and whose association with the shrine at Pandharpur has made it a place of pilgrimage, held in great veneration for ages.

Tradition has it that long, long ago, in the beginning of time, Devi Rakhumai retired to this place, which was then known as DINDIR-VANA and sat still in this forest meditating on her Lord Krishna to win his sole affections for her.

A legend is also current that Mallika-Arjuna, a holy son born to King Chandra through the latter's devotion to God Vishnu, slew an Asura King by name Dindira and so gave relief to the sages that inhabited this forest, which came to be known as Loka-Thanda, since Mallika-Arjuna slew him with a weapon of that name. The Victor revealed himself to the dying Asura King and asked him to name any boons he desired. The Asura King prayed that a river might flow along the spot where he died and the weapon by which he was slain might be installed there and that it might become an abode of devotees who would bathe in that river and worship the Loka-Thanda.



The sacred shrine of Sri Vittoba at Pandharpur

EKANATH

While Bhima's waters flow with faith and love
And over all shines Pandurang the fair.
And mercy, patience, peace are Bhima's sand,
Where, rank on rank the Vaisnav pilgrims stand.
Ah, listen how the music sweetly sounds,
Joy, worship, truth and hearts that understand.
My senses form a single company
Of festal worshippers; and lo, I see,
I, Ekanath, the pilgrim,—everywhere,
In crowds, in solitude, my Pandhari.

To the Hindu, pilgrimage to holy shrines is a sacred duty enjoined by religion, and no Hindu, who has any regard for traditions or the holy scriptures ever fails to visit Pandharpur once in his lifetime and offer his prayers to Sri Vittoba.

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In course of time, a succession of devotees became established at this place. The most celebrated of them was Pundlik (14th Century) who as it were, originated the worship of Vittoba at Pandharpur. He was born of a pious Brahmin by name Janu Dev and his wife Satya. The son is stated to have vexed his parents but, reformed later as a result of his contact with sage Kukkut in the course of a pilgrimage to Benares. He learnt from this sage to worship his parents first and foremost which he did faithfully. Moved by this devotion Lord Krishna blessed him with a visit, while he was washing his father's feet, which he continued to do even in the presence of the Lord. Pundlik, still intent on serving his father, placed a brick and requested the Lord to stand on it. Sri Vittoba, it is believed, still stands on that brick to give Darshan to his devotees. Vit means brick and the deity standing on the brick is named 'VITTOBA'. The Idol of Vittoba being made of sand, the God is also known as PANDU-RANGA. (Pandura—sand and Anga—body).

JANA BAI

To Holy Pundlik give
The highest place.

Sages and saints he saved—
Saved by his grace.

Thou, standing on the brick,
That grace give me,

Who, Pundlik clasp thy feet,
So lowly.—

JNANESWAR

To the dwelling of the saints
Take thy way :

There the Lord himself shall not
Say thee nay.

Who speak this nante the soul of all,
O happy they !

Plain for their fathers' feet they make
The heavenward way.—

Nam Dev (14th Century) another reputed devotee of Sri Panduranga, was an inhabitant of Gopalpur a mile distant from Pandharpur. His devotion was so very remarkable that, it is said, God Vittoba partook of the food offered by him. He is stated to have rendered many services to the devotee in his domestic life, which are sung with great religious fervour throughout India and in the Marathi country

in particular. It is believed that Nam Dev's mortal remains were at his request laid beneath the steps leading to the entrance of the shrine in order that sadhus and sages might consecrate them by treading on them. The Samadhi of this venerable saint indicated by an idol at the entrance is held in great sanctity. Pilgrims pay their worship first to this saint before they enter *Sanctum Sanctorum*.

NAM DEV

Gone, are the saints, passed to the heavenly sphere;
Only their fame carries behind them here.

O Mother Pandurang, I cry,
Drive thou me not away !

At Hari's feet, I, Name, lie ;
He will not say me nay.

Whether I live or perish, yet,
On Pandurang my faith is set.

One thing I of my Lord entreat,
That I may ever serve his feet.

That I in Pandhari abide,
Always his holy saints beside.

Or high or low my birth may be ;
Still, Hari, I would worship thee.

Lord of Kamala, Nama prays,
O grant me this through all my days.

Just opposite the spot, where Nam Dev's mortal remains were laid is seen an idol of a saint Choka Mela, an outcast, who is stated to have dedicated his life to Sri Panduranga. This memorial is also held in great veneration.

NAM DEV

Long may that happy household live
Who service to my Hari give.

May no temptation bring distress
But all their lives be blessedness :

No wind of self e'er cause them scathe,
My loved ones Visnu's men of faith.

Blessings be theirs whose lips have sung
The name of Nama's Pandurang.

TUKARAM

Who will our heart's desire impart
And clasp us to his loving heart ?

What other master shall we own ?
What helper else but thee alone ?

Prostrate before thy feet I fall.

Within the precincts of the shrine at Pandharpur, stands a "Tarti" tree the tradition



Chandra Bagha river, which is held sacred
by all pilgrims



Another view of the Chandra Bagha river, on
the banks of which are numerous small shrines

of which is interesting. A pious woman in Mangal-Veda, a suburb of Pandharpur, belonged to a caste the members of which lived by prostitution. She remained childless and prayed to God Panduranga for an offspring. As a result of her prayers, a daughter was born. The daughter was lovely beyond compare and as wise and religious-minded as she was lovely. Since she was of incomparable beauty and charm, the local monarch sought her hand. But she discarded him since her heart was all for Sri Vittoba to whom she fled and prayed for deliverance. A strange thing, it is said, happened. God Vittoba took unto Himself her soul and converted her body into a "Tarti" tree, which is still seen fresh and green.

A unique feature of the shrine at Pandharpur is that pilgrims touch and embrace the idol and make their offering to the deity personally without any hindrance whatsoever, unlike in other Hindu temples.

Another remarkable fact is that irrespective of caste, creed and sex, saints like the Brahmin Pundlik, the outcast Chokamela, the Mohamadan Kabir and Khana Patra, the dancing girl, have by consecration of their lives to God Vittoba, rendered the shrine holy and cosmopolitan in spirit.

TUKARAM

Now, Pandurang I've chosen for my part
None, none but his to be.

In all my thoughts he dwells, dwells in my heart,
Sleeping and waking he.

Yea, all my being's powers before him bow :
None other faith is aught.

It is believed that God Vittoba is highly responsive to the prayers of devotees and this accounts for the unceasing stream of pilgrims that visit Pandari Kshetra and move on to make way for the thousands that follow. Eternally the river Chandra Bagha flows, giving salvation to those who wash away their sins in its waters under the ever watchful and benign eye of Panduranga.

TUKARAM

Dying and yet thou buildst
As for eternity !

Nay, haste to Pandurang !
'Tis Tuka says it ; flee.

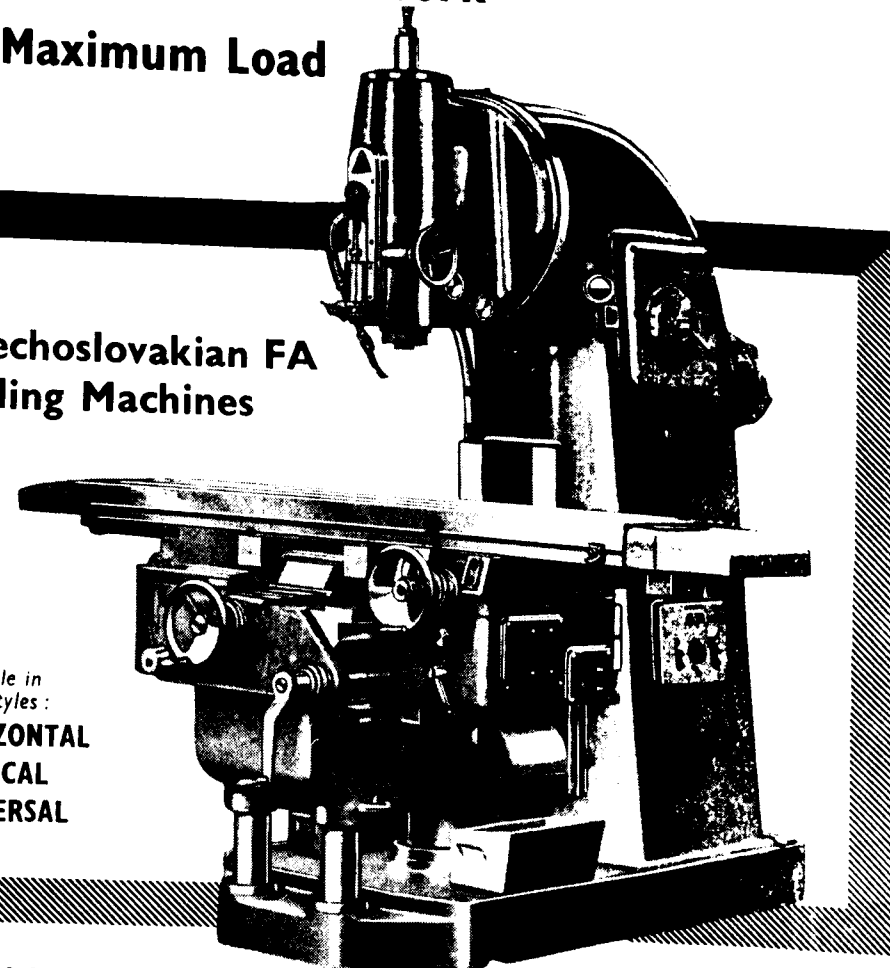
ACKNOWLEDGEMENT

The verses introduced into the text of this article were extracted from Nicol Macnicol's "Psalms of Marathi Saints," published by the Y.M.C.A. Publishing House, 5, Russell Street, Calcutta.

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The Goddess KANIASHI, while taken in procession in Silver Car, at Kancheepuram, on 14-2-1957

(Photo by P. S. Vedhachalam)

March 1957

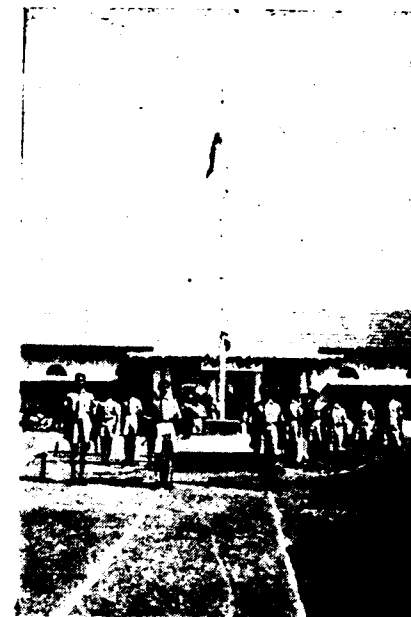


A view of our Headquarters Offices illuminated on Republic Day. The Bharath Mitha map was drawn by Sri V. Ganesan, Highly-skilled Sign Writer of our Carriage Works at Perambur

March 1957

S. R. NEWS

51



Film music and fancy dress competitions were arranged amongst employees' children below 14 years.



Rao, Works Manager, accompanied by Sri Thippanna Rao, Assistant Security Officer, then inspected the parade.

The members of the Dramatic and Arts Branch of the Railway Institute, Mysore South, entertained the employees, their families and children with orchestral music and staged a social drama "Maduveya Marughalige" in the evening in the Canteen premises. The function was well attended. The Works Manager and the Assistant Personnel Officer

Madras Central Station illuminated and decorated on Republic Day 44122



Sri G. Krishnamurthy were both present with their wives.

GUNTAKAL

The function commenced with the hoisting of the National Flag by Dr. V. T. Naidu, Chief Medical Officer, Southern Railway. In his speech on the occasion, Dr. Naidu emphasized the need for each of the Railwaymen doing his portion of the work in the interests of the country and the Administration, so that the Nation can march onward and complete the targets assigned under the Second Five-Year Plan. With the singing of the National Anthem by the girls of the Indian Railway School and distribution of sweets to the children, the function came to a close.

Sports and Athletic Meets were arranged in the evening for the staff and the Officers. A good number of Officers, ladies and staff took part in the events. There was a Tug-of-War in the end between the Officers and the staff. The Entertainment Programme was begun at 6-30 p.m. and continued till 9-15 p.m. Sri V. P. Ribeiro, Divisional Superintendent, Guntakal, presided over the functions in the evening. In the course of his speech, he called upon the Railwaymen to rededicate themselves to their allotted tasks, and to work as a team in order to achieve better operating results for the Division.



Dr. V. T. Naidu addressing the gathering

The high-lights of the Entertainments were Dances by children, a Fancy Dress Competition and a Telugu Drama entitled "Poorvarangam". At the end of the function, Srimathi Ribeiro distributed the prizes. Sri Chandriah, Secretary of the Institute, proposed a vote of thanks.

the winners in the Children's sports and the Fancy Dress Competition.

NEGAPATAM

The Seventh Republic Day was celebrated with the usual pomp and splendour at Negapatam. Railway officers, staff quarters, station buildings and the Robinson Railway Institute premises were gaily decorated with flags and festoons and brilliantly illuminated in multi-coloured lights. The celebrations started with the hoisting of the National Flag in the Robinson Railway Institute.

There were fire works at about 7-30 p.m. which was appreciated by the huge gathering.

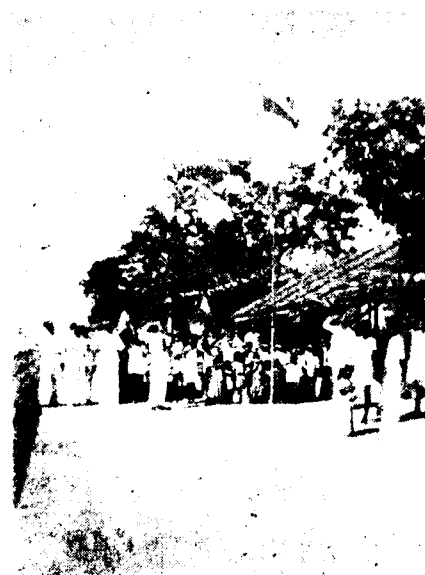
With the singing of the National Anthem, the celebrations came to a close.

NETHAJI ROVER CREW, TRICHINOPOLY

At 9-30 a.m. Sri D. B. Patel, Divisional Superintendent, hoisted the National Flag with a brief message to the Staff. There was a smart March Past by the Railway Protection Force at which Sri D. B. Patel took the salute. Prizes were distributed to

The Southern Railway Bharat Scouts and Guides Nethaji Rover Crew, Trichinopoly, celebrated the Republic Day by camping at

Republic Day, Tiruvelangadu Station



Dr. C. A. K. Acharva, Member, Regional Rly. Users' Consultative Committee, Madras Region, garlanding Sri T. A. Joseph, G.M., when he inspected Ongole Station on 18-2-57



Uttamarkoil from the eve of that National Day. The National Flag was hoisted by Sri G. Ganesan, Head Clerk, Statistical Branch, Trichinopoly and the whole Crew sang the National Anthem 'JANA GANA MANA'. In the presence of Sri S. Raghavan, Assistant Statistical Officer, the Investiture ceremony for 15 Rovers of the Crew was held. Sri Raghavan explained the principles of Scouting and advised the Rovers to adhere to the Scout Law and Motto in every walk of life and to do service to others without detriment to the Official work.

The campers spent the night on the 25th instant in their own improvised tents. Some of the important items of the Camp were Camp fire, Tent pitching, Gadgets making, Cooking, March Past, Games, Tracking and Hiking, Songs, etc.

SOUTHERN RAILWAY INSTITUTE, TINNEVELLY JUNCTION

ANNUAL CELEBRATIONS, 1957

The Annual Day of the Railway Institute, Tinnevelly Jn., was celebrated with great eclat on the Republic Day, January 26, 1957 in the Railway Colony.

The day's function began with hoisting of National Flag at the Institute ground by Sri P. S. Sivasubramania Nadar, M.L.C.

There was a march past by the Railway Protection Force commanded by Sub-Inspector, Sri Sukumar in salutation when the officer took the salute.

The Flag hoisting ceremony concluded with the singing of 'Jana Gana Mana'.

Sweets were then distributed to the children who had gathered in hundreds to take part in the celebrations.

The gathering next adjourned to the sports ground adjoining the Railway Institute and the sports events for the day commenced. Sports for children were held in the forenoon and for adults in the afternoon. About 300 children participated in these sports. The children were divided into convenient age groups. Separate events were held for boys and girls.

Sri A. K. Madhavan, Assistant Engineer, Tinnevelly (Chairman of the Institute), presided on the occasion and Kumari Sugamini (Daughter of Sri A. K. Madhavan) distributed the prizes.

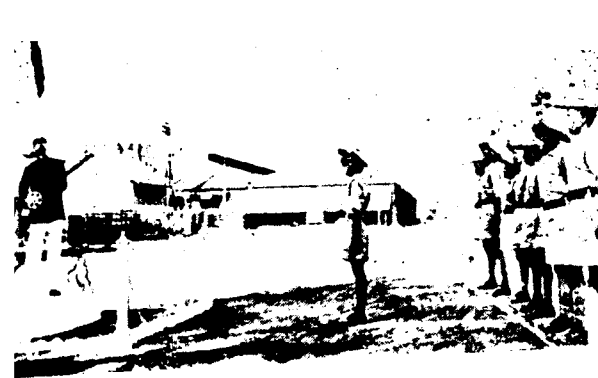


The President explained the significance of the Annual Day of the Institute and the Republic Day and said that such activities enabled the staff of all categories to complete in the spirit of healthy rivalry, forgetting their official class distinction, besides promoting unity and physical culture.

The Secretary Dr. R. Gopalan, Assistant Surgeon, Tinnevelly, welcomed the gathering and paid warm tributes to the members for their excellent co-operation in the function. The function came to a close with a vote of thanks proposed by the Secretary.

CARRIAGE WORKS, PERAMBUR

Republic Day was celebrated by the staff of the Carriage Works with joy and jubilation on 26th January 1957. Sri K. P. Jayaram, C. W. M., presided over the function and hoisted the National Flag at 8 a.m. amidst the singing of the National Anthem by T. R. Sampath. Large number of Railway employees and their children attended the function. A ceremonial parade by the R. P. F. Staff was arranged on the occasion and all the Railwaymen who gathered there watched the proceedings with great enthusiasm. Sweets were distributed to a large number of children.



The President in his address exhorted the employees to have firm faith in democracy, strengthen the unity and strive to build up our nation by their whole-hearted co-operation.

In the evening, variety entertainments organised under the joint auspices of the Carriage and Loco Works, were held in the



Railway Colony, Ayanavaram. Srimathi Janaki Swaminathan gave a vocal music performance accompanied by Srimathi Pudukottai Hamsaveni (Violin), Sri T. Satchidanandam (Mridangam), and Sri S. E. Govinda Rajulu (Ganjeera). The dance recital by the school children and the Magic performance were very entertaining.

The staff of the Statistical Branch at M. dras organised for the first time a sports meet, open to the members of the staff at M. dras, on Republic Day.

The function was presided over by Sri M. K. Krishnamachari, Statistical Officer, Southern Railway, who is also the president of the Association.

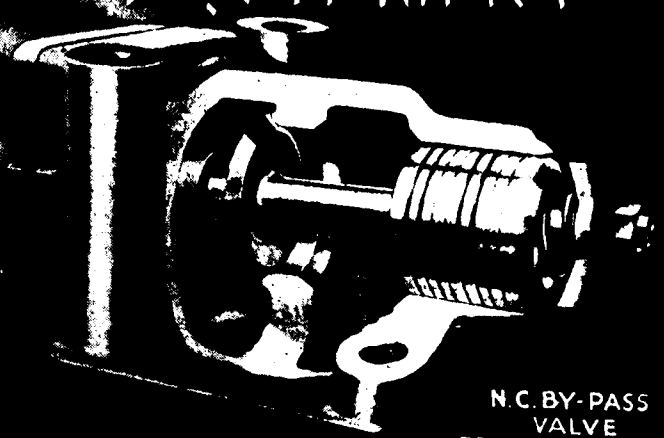


Photo shows the tug-of-war in progress

Sri M. K. Krishnamachari inaugurating the sports



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OBITUARY



SRI A. M. KANNABIRAN
Died in November 1956

Sri A. M. Kannabiran was Motor Foreman at Cocanada Port at the time of retirement from the Southern Railway. He joined the Railway as an apprentice and by dint of merit and honest work, rose to the position of a Foreman. He was specially chosen for the Diesel Rail Car service which was introduced in 1935 and which proved a great success under his Foremanship. On retirement from Railway service, he joined the Government Electricity Department on a contract for two years as Diesel Erection Engineer and on completion of the contract, he was taken on in the Integral Coach Factory, Perambur, as General Foreman Plant Park, where he served till March 1956. In April 1956, he was appointed as Tool Room Engineer in Messrs. India Pistons (Simpsons Group). He was an excellent organiser. He was very kind and sympathetic towards all who came in contact with him.



Press party inside the train



Sri S. K. Mukerji, CCS, Sri Ratan Lal, COPS and Sri T. A. Joseph, GM, in the Dining Car of the train

MADRAS-DELHI DE LUXE EXPRESS

The air-conditioned, vestibuled De Luxe Express train (bi-weekly, running between Madras and Delhi) started on its maiden run from Delhi on 9th February and arrived Madras at 10 a.m. on the 11th covering 1,361 miles in 41 hours.

The train left for Delhi the same day. Sri T. A. Joseph, G.M., S. Railways, Sri S. K. Mukerji, CCS and other Officers of the Railway were present on the platform when the train pulled out. The train comprised three air-conditioned Third class coaches with a seating capacity of 240 passengers; one upper class coach accommodating 20 passengers; one restaurant-car, with modern equipment and two non-airconditioned luggage and brake vans

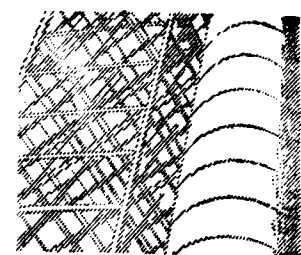
with generators. Seats in the third class coaches are cushioned and of the reclining type. Air-conditioned heating makes travel by this train pleasant even in cold-weather. The restaurant car serves both vegetarian and non-vegetarian dishes. Modern toilet and bathrooms are among the other amenities.

Passengers are allowed to take only essential luggage with them in the passenger coaches; heavy luggage will have to be booked and put in the luggage van.

The Third Class Fare for this service is about the same as the Second Class Fare on the G. T. Express and the First Class passengers will have to pay about double the G. T. Fare for First Class.

Members of the National Railway Users' Consultative Committee at Tirupati





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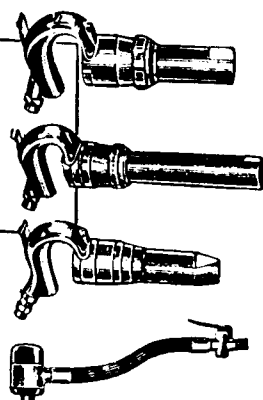
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Sri S. K. Mukerji, CCS and Sri B. Venkataramani, DCS (Catering), inspecting the arrangements made in the Dining Car at Madras Central, on 1st February 1957, at the time of the extension of the Dining Car service between Madras and Bezwada on the G. T. Express Trains. The service was formerly functioning only between Bezwada and New Delhi, on G. T. Express trains
(Photo by P. S. Vedhachalam)

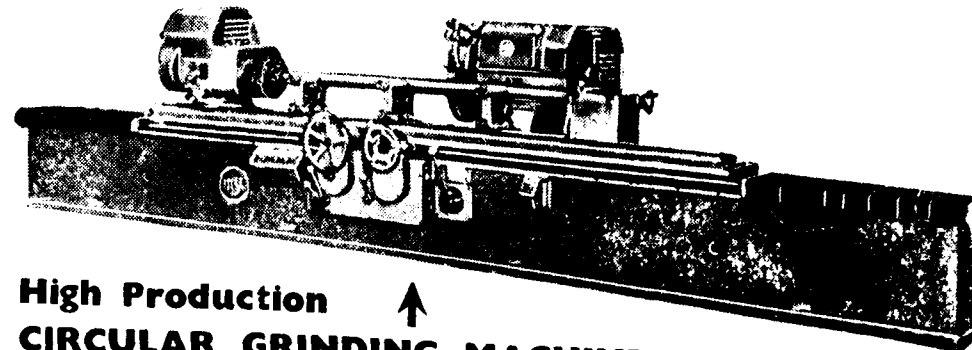
Sri S. K. Mukerji, CCS, Sri R. Gopalakrishnan, DS/Madras and Sri B. Venkataramani, DCS (Catering) on the Platform, at Madras Central, when the G. T. Express started with the Dining Car on 1-2-1957

(Photo by P. S. Vedhachalam)



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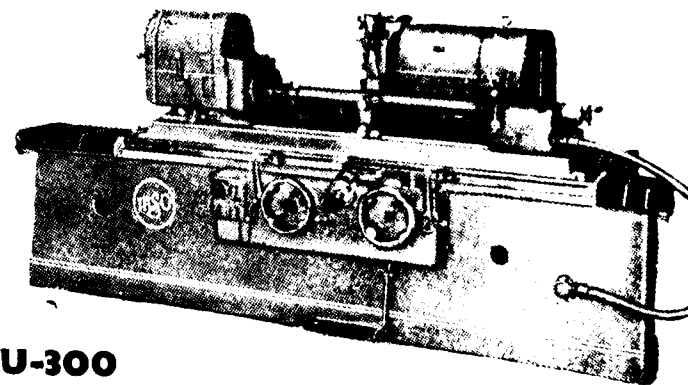
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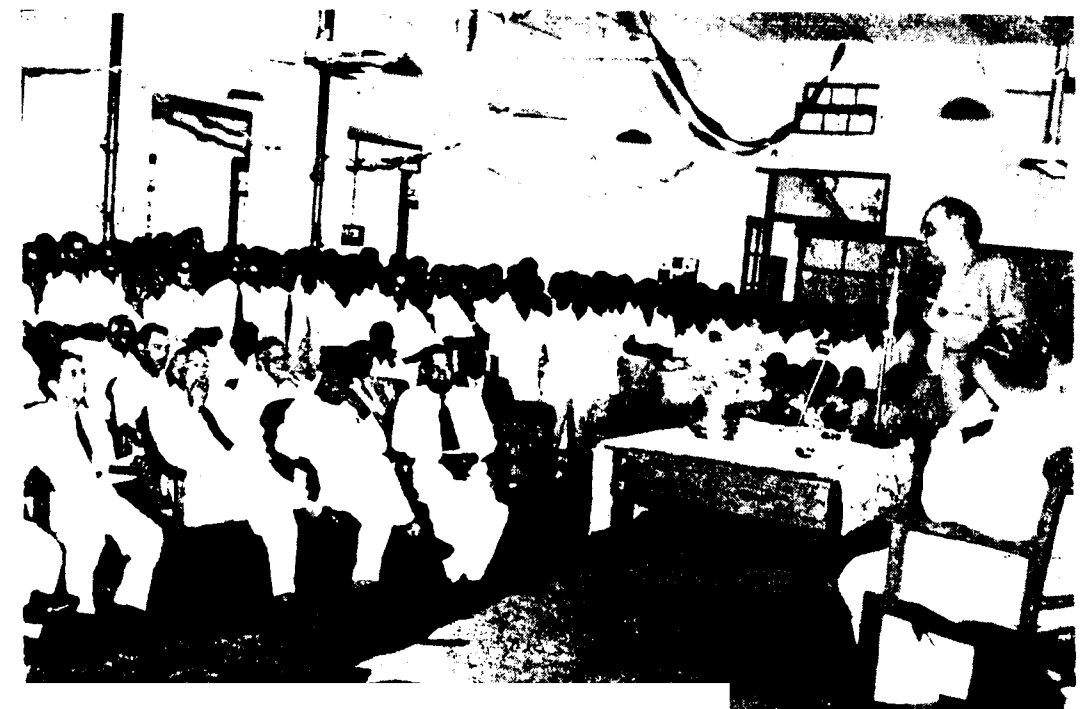
The opening ceremony of a new block of building adjacent to the annexe to the Joint Offices in Perambur for accommodating the additional Staff of the Stores Department appointed during the past year, mostly in connection with the Second Five-Year Plan, was performed by the General Manager, Sri T. A. Joseph, at 10 hours on the 1st of February 1957. The function was well-attended by all the officers of the Stores Department and some of the Mechanical, and staff numbering approximately 400.

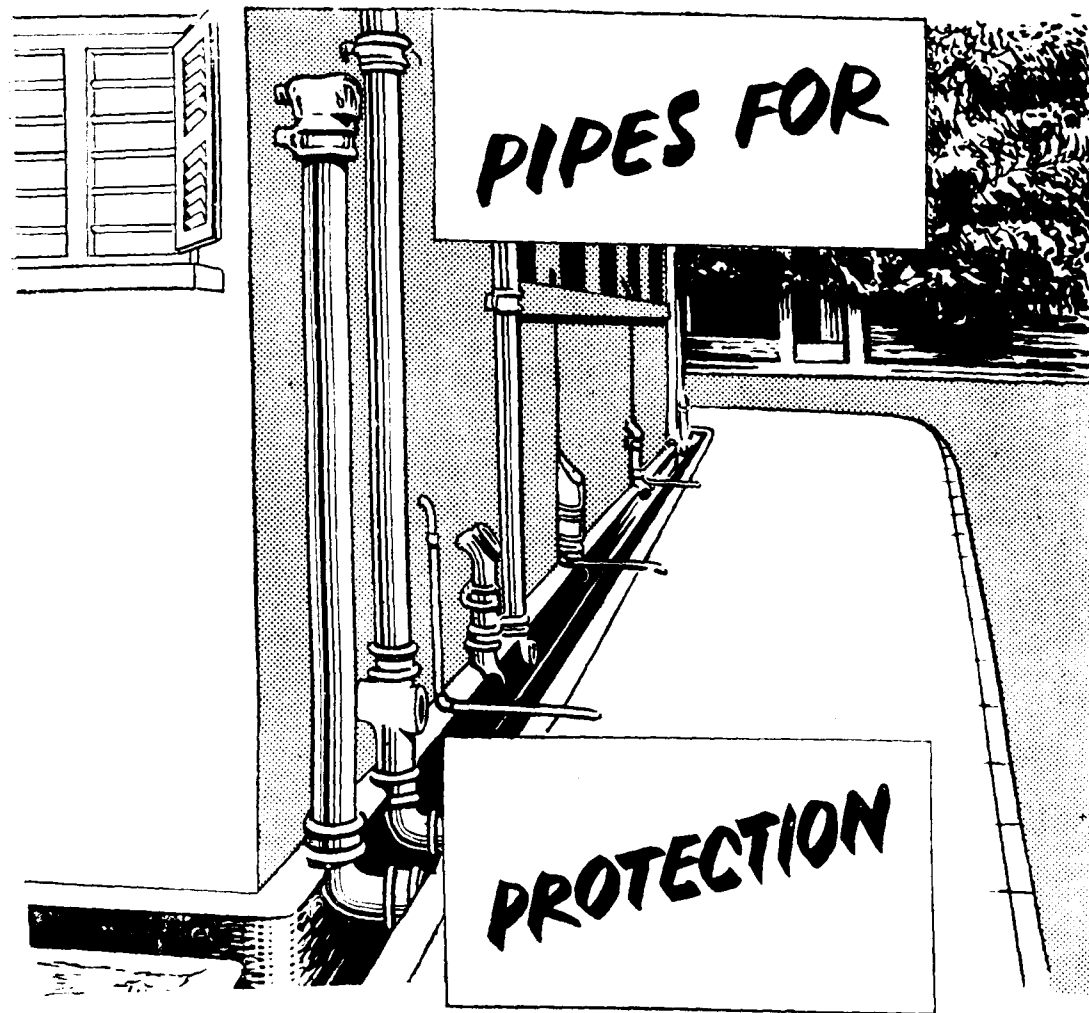
Sri P. N. Talati, Controller of Stores, welcomed the General Manager on behalf of the officers and staff of the Stores Department, and stated that opportunities for meeting him personally were rare and hence the Stores staff were pleased that he had accepted this invitation. The Controller of Stores referred to the cogent necessity for having this additional accommodation, in view of the rapid expansion of the Department. He indicated that, before integration, the total Class III Stores staff numbered 69, whereas today it had gone up to nearly 400, at the Headquarters Office. Similarly the number of officers had gone up from 3 to 9. He further stated that this

increase in officers and staff was necessary, as the value of purchase orders placed had increased from Rs. 4.19 crores in 1951-52 to Rs. 13.66 crores in 1955-56. Although it had taken more than two years to get the scheme sanctioned, he was glad to say that after the sanction was received in July 1956, the building had been completed in about 8 months' time, for which he congratulated the Engineering Department. The General Manager was then requested to address the staff.

The General Manager in his speech stated that he was pleased to hear that the building had been constructed with such promptness, and he facetiously added that the best of material had gone into the construction of this building, which was natural since the building was required for the Stores Department. He also referred to the rapid expansion of the Stores Department and humorously hinted to the Chief Mechanical Engineer who was present, that soon he may have to vacate the Joint Offices and make room for the Stores Department. The General Manager also impressed upon the officers and staff present that the success of the various schemes included in the Second Five-Year Plan depended largely

Sri T. A. Joseph, GM, speaking on the occasion





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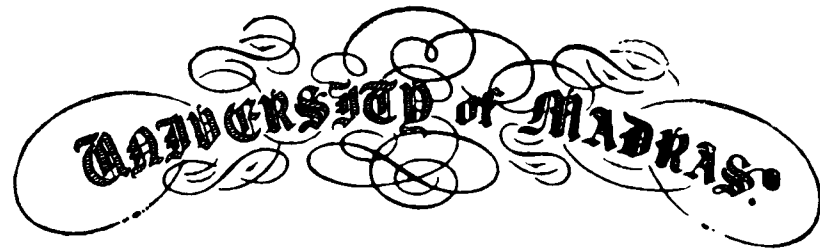
Sri P. N. Talati, Controller of Stores, taking GM round the new building

on the Stores Department, whose job it was to procure the best materials in the most economical way and by the time stipulated, and hoped that the staff would put in their best efforts to ensure this.

With a vote of thanks to the General Manager by Sri A. Vasudevan, Deputy Controller of Stores, and the singing of 'JANA GANA MANA' by a mixed choir of the Stores staff, the function came to a close.

A section of the gathering





Centenary Celebrations
CENTENARY EXHIBITION, GUINDY.

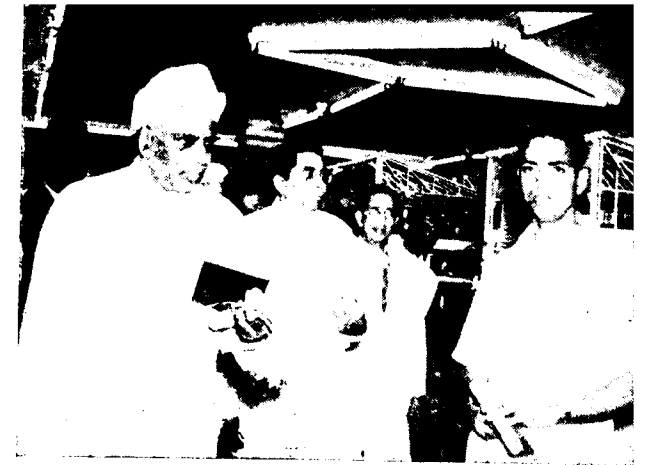
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A. S. Muralidhar
Vice-Chancellor,
University of Madras
Madras 17-2-1957

P. V. Rajamannar
President,
Centenary Celebrations Committee.



Our stall at the Exhibition at Guindy



Sri A. Lakshmanaswamy Murali, Vice-Chancellor, University of Madras and Sri P. V. Rajamannar, Chief Justice of Madras and President of the Centenary Celebrations Committee in our stall.

CENTENARY EXHIBITION, GUINDY, MADRAS (28-1-57 to 17-2-57)

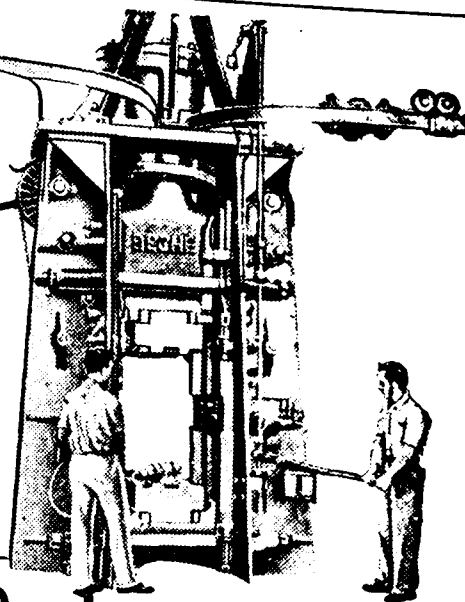
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Tender form will not be issued after 7-3-1957.

P. N. TALATI,
Controller of Stores.



Delegates who attended the All-India Exide Sales and Service Conference held in Calcutta last month. Mr. H. R. Grayson, Director & General Manager, Chloride & Exide Batteries (Eastern) Private Ltd., is seated in the centre. In 1953, this firm manufactured sufficient Train Lighting cells and spars to equip 2,000 Railway Coaches, which means a saving of about Rs. 70 lakhs in foreign exchange.

SOUTHERN RAILWAY **TENDER NOTICE**

Tender No. S/236 I/GB1C/198.

Sealed tenders are invited for the supply of 50 tons of Sodium Bicarbonate Refined to Indian Standard Specification No. 292 of 1954 (Tentative).

Tenders will be received by the Controller of Stores, Southern Railway, Ayanavaram P.O., Madras-23, before 12-00 hours on 15-3-1957.

The prescribed form is obtainable on payment of Rs. 5 per copy in cash or by Money Order. Remittance by any other means will NOT be accepted.

Tender form will not be issued after 3 p.m. on 8-3-1957.

P. N. TALATI,
Controller of Stores.

SOUTHERN RAILWAY

TENDER NOTICE

The Divisional Superintendent, Southern Railway, Guntakal, invites Separate Sealed Percentage Schedule Tenders for the following work to reach him not later than 12 Noon on Friday, the 15th March 1957.

S. No.	Division	Name of work	Total approximate value of contract	Earnest Money to be paid
1	Guntakal	Guntakal—Construction of Staff Quarters—Type IV-A Special 6 units in connection with Divisionalisation	Rs. 96,560	Rs. 4,825

2. Tenders should be submitted in the prescribed forms, obtainable from the Office of the Divisional Superintendent, Southern Railway, Guntakal, on production of a receipt for the sum of Rs. 10 (Rupees Ten only) paid to the Chief Cashier, Southern Railway, Madras or Divisional Accounts Officer, Guntakal at Mysore or to any Station Master on the Southern Railway towards the cost of each form. Extra copies can be had, if available, on payment of Rs. 2 (Rupees Two only) each. In no circumstances will the cost of the tender forms be refunded. The tender form is not transferable.

3. Tender forms will be issued upto 15 Hours on Thursday, the 14th March 1957.

4. Earnest Money as above should be paid in advance to the Chief Cashier, Madras or the Divisional Accounts Officer, Guntakal at Mysore, not later than 12 Hours on Tuesday, the 12th March 1957 and the receipt submitted along with the tender. No Cheque or Demand Draft, etc., should be attached to the tender.

5. Tenderers are required to submit Income-tax Clearance Certificate along with the tenders.

6. Earnest Money is fixed at 5% of the value of the contract and the successful Tenderer will be required to furnish 10% of the value as per his accepted tender towards the Security Deposit.

7. The tenders will be opened at 14 Hours on Saturday, the 16th March 1957, at the Office of the Divisional Superintendent, Southern Railway, Guntakal.

8. The Divisional Superintendent 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 tender or part thereof.

SOUTHERN RAILWAY

TENDER NOTICE

The DIVISIONAL SUPERINTENDENT, Southern Railway, GUNTAKAL, invites SEPARATE SEALED PERCENTAGE SCHEDULE TENDERS for the following work to reach him not later than 12 NOON on SATURDAY, THE 9th MARCH, 1957.

Serial No.	Division	Name of the work	Total approximate value of contract	Earnest Money to be paid
1	GUNTAKAL	GUNTAKAL—Construction of the proposed building for the additional accommodation for the Railway Hospital.	Rs. 40,755	Rs. 2,038

2. Tenders should be submitted in the prescribed forms, obtainable from the Office of the DIVISIONAL SUPERINTENDENT, Southern Railway, GUNTAKAL, on production of a receipt for the sum of Rs. 10 (Rupees Ten only) paid to the CHIEF CASHIER, Southern Railway, Madras or DIVISIONAL ACCOUNTS OFFICER, GUNTAKAL at MYSORE or to any STATION MASTER on the SOUTHERN RAILWAY towards the cost of each form. Extra copies can be had, if available, on payment of Rs. 2 (RUPEES TWO ONLY) each. In no circumstances will the cost of tender forms be refunded. The tender form is not transferable.

3. Tender forms will be issued upto 15 HOURS on FRIDAY, THE 8th MARCH, 1957.

4. Earnest Money as above should be paid in advance to the CHIEF CASHIER, Madras or the DIVISIONAL ACCOUNTS OFFICER, GUNTAKAL at MYSORE, NOT LATER THAN 12 HOURS on WEDNESDAY, THE 6th MARCH, 1957 and the receipt submitted along with the tender. No Cheque or Demand Draft, etc., should be attached to the tender.

5. Tenderers are required to submit INCOME TAX CLEARANCE CERTIFICATE along with the tenders.

6. Earnest Money is fixed at 5% of the value of the contract and the successful TENDERER will be required to furnish 10% of the value as per his accepted tender towards the SECURITY Deposit.

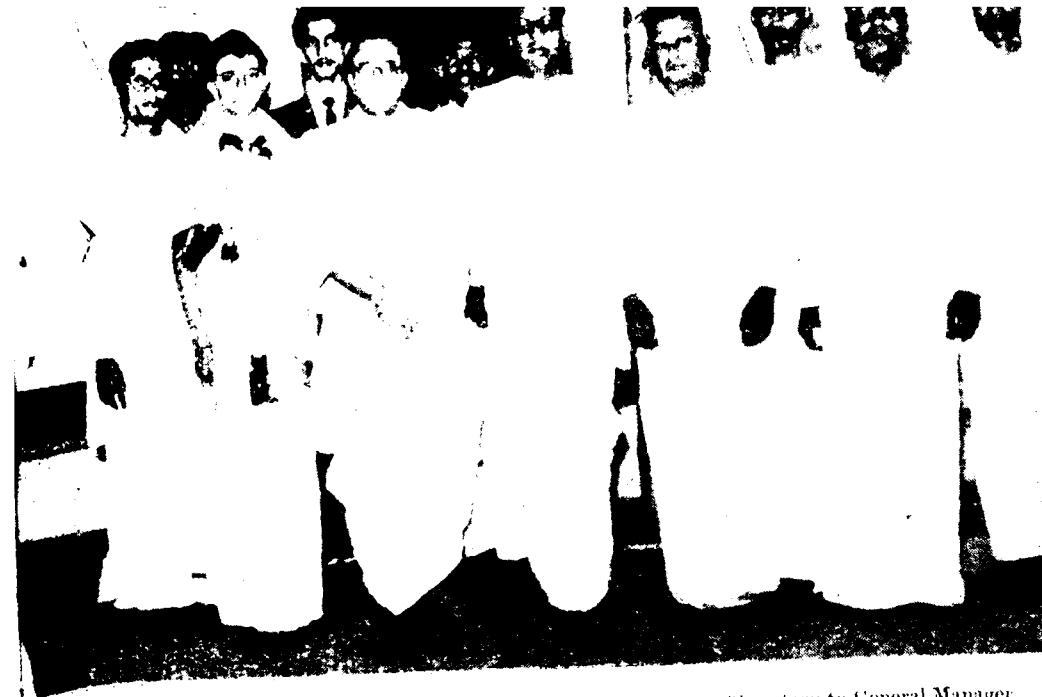
7. The tenders will be opened at 14 HOURS on MONDAY, THE 11th MARCH, 1957 at the Office of the DIVISIONAL SUPERINTENDENT, Southern Railway, GUNTAKAL.

8. The Divisional Superintendent 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 tender or part thereof.



Sri K. N. Krishnan (Secretary to General Manager, Southern Railway) celebrated the Upanayanam of his son Chiranjeevi Lakshminarasimhan on 17-2-57

(Photo by P. S. Vadhachalam)



Staff of the Southern Railway seen along with Sri K. N. Krishnan (Secretary to General Manager, Southern Railway) on the occasion of the celebration of the Upanayanam of his son

(Photo by P. S. Vadhachalam.)

SOUTHERN RAILWAY

TRICHINOPOLY DIVISION

TENDER NOTICE

Tenders are invited for the purchase of engine ashes and cinders, **exclusive of half inch size and over** on sections I, II, III & IV (Revised) of the Trichinopoly Division, Southern Railway, accumulating during the nine months from 1-4-1957 to 31-12-1957.

Tender forms with Conditions of Contract, etc., can be had from 1-3-57 on payment of Rs. 3 per set (not refundable under any circumstances) from the Divisional Superintendent (Mechanical), Southern Railway, Trichinopoly. Money Orders for Tender forms will not be received after 8-3-1957 by the Divisional Superintendent (Mechanical), Trichinopoly.

Earnest money deposit of Rs. 1,000 for each section will be received from the Tenderers by the Divisional Accounts Officer, Southern Railway, Trichinopoly, upto 3 p.m. on 13-3-1957.

Tenders are to be submitted to the Divisional Superintendent (Mechanical), Southern Railway, Trichinopoly, before 3 p.m. on 14-3-1957 in sealed cover.

Tenderers should submit Income-tax Clearance Certificates in original along with Tenders.

Divisional Superintendent.



Another view of the function

Sri T. A. Joseph, G.M., Sri D. B. Patel, S.D. G.M., and other Officers present at the function, in the morning, on 17-2-57



SOUTHERN RAILWAY TENDER NOTICE

Tender No. S/236/LGB5/91/PWP/1A.

Sealed tenders are invited for the supply of 10,000 gallons Ready mixed paint Brushing finishing oil gloss for general purposes, Black to Specification IS 128 and will be received by Controller of Stores, Southern Railway, Ayanavaram P.O., Madras-23, before 12-00 hours on 20-3-1957.

The prescribed form is obtainable on payment of Rs. 5 per copy in cash or by M. O. Remittance by any other means will not be accepted.

Tender forms will not be issued after 12-00 hours on 18-3-1957.

P. N. TALATI,
Controller of Stores.

SOUTHERN RAILWAY TENDER NOTICE

The Chief Engineer, Southern Railway, Madras-3 invites sealed percentage tenders for Collection and training out of stone ballast on 90 lbs. B.H. track for the double line from mile 41.12 to mile 27.18 from Arkonam towards Madras (13-3/4 miles)—Madras division, to reach him not later than 12-00 hours on Thursday the 14th March, 1957.

2. The tender should be submitted in the prescribed form obtainable from the Chief Engineer's Office on production of a receipt for the amount of Rs. 10 (Rupees Ten only) paid to the Chief Cashier, Southern Railway, Madras-3 or the Divisional Accounts Officer, Southern Railway, Trichinopoly or Mysore, or to any Station Master on the Southern Railway towards the cost of the tender form. In no circumstances, will the amount paid for the tender form be refunded.

3. The tender form is not transferable.

4. The tenderer should submit along with the tender the Income-tax Clearance Certificate in original or an authorised copy or if he has no taxable income, a sworn affidavit duly countersigned by the Income-tax Officer to that effect.

5. The tender forms will not be issued after 15-00 hours on Tuesday the 5th March, 1957.

6. The total approximate value of this contract is Rs. 2,59,900.

7. The earnest money of Rs. 13,000 (Rupees thirteen thousand only) should be paid in advance to the Chief Cashier, Southern Railway, Madras-3 or Divisional Accounts Officer, Trichinopoly or Mysore, and the receipt issued by him should be attached to the tender.

8. The earnest money will not be accepted after 15-00 hours on Wednesday the 6th March, 1957.

9. The tenders will be opened at 12-00 hours on Friday the 15th March, 1957 in the Chief Engineer's Office at Madras.

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

LORD BADEN POWELL BIRTHDAY CENTENARY CELEBRATIONS



PRESIDENT (G.M.) WHO OPENED THE HOBBY & HANDICRAFT CENTRE ADMIRING THE EXHIBITS.



STATE CHIEF COMMISSIONER (C.C.S.) & THE PRESIDENT OF THE DAY (CAO-ICF) TAKING SALUTE OF THE MARCH PAST.



STATE CHIEF COMMISSIONER ADDRESSING THE GATHERING.



STATE CHIEF COMMISSIONER RECEIVING MR. MEYNARDS SHIELD OF THE INTER RAILWAY ROVERS COMPETITION.



Pictures :

Dinner Party at Dasaprakash, on 21-2-57, to Sri M. Sundararajan, D.G.M. (P.) and Sri R. K. Varma, Dy. C.C.S. (R. & D.), on the eve of their retirement

(Photos : P. S. Vadhachalam)



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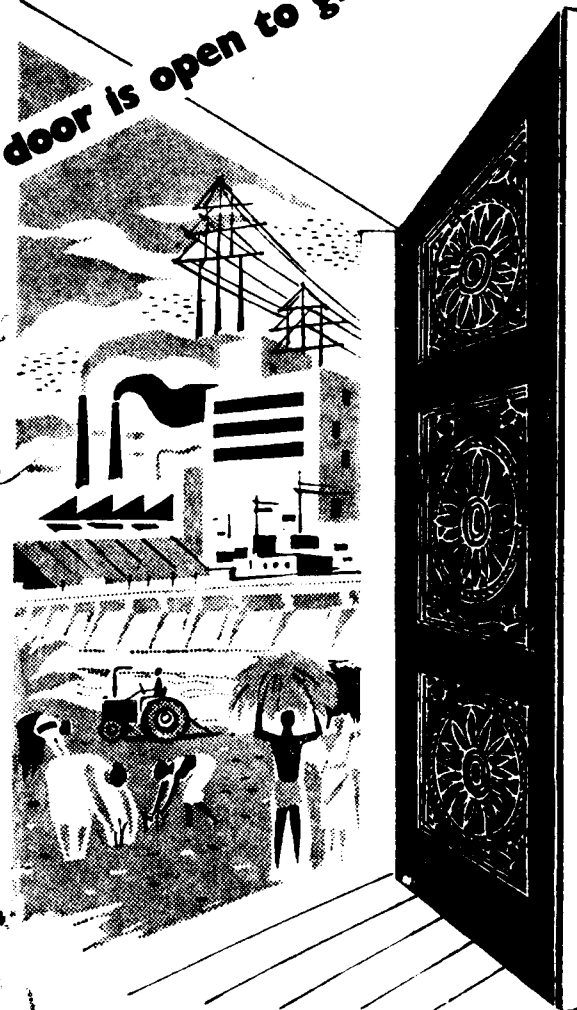
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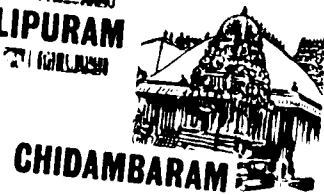
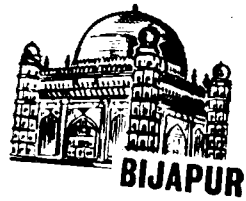
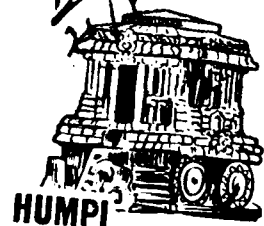
National Bank of India Buildings,
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Phone: 3226 - 55129

Tel.: LIMPET

Bangalore Office: Shaikat Buildings, Silver Jubilee Park Road, Bangalore-2.

WJ2304



Visit

ON SOUTHERN RAILWAY



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