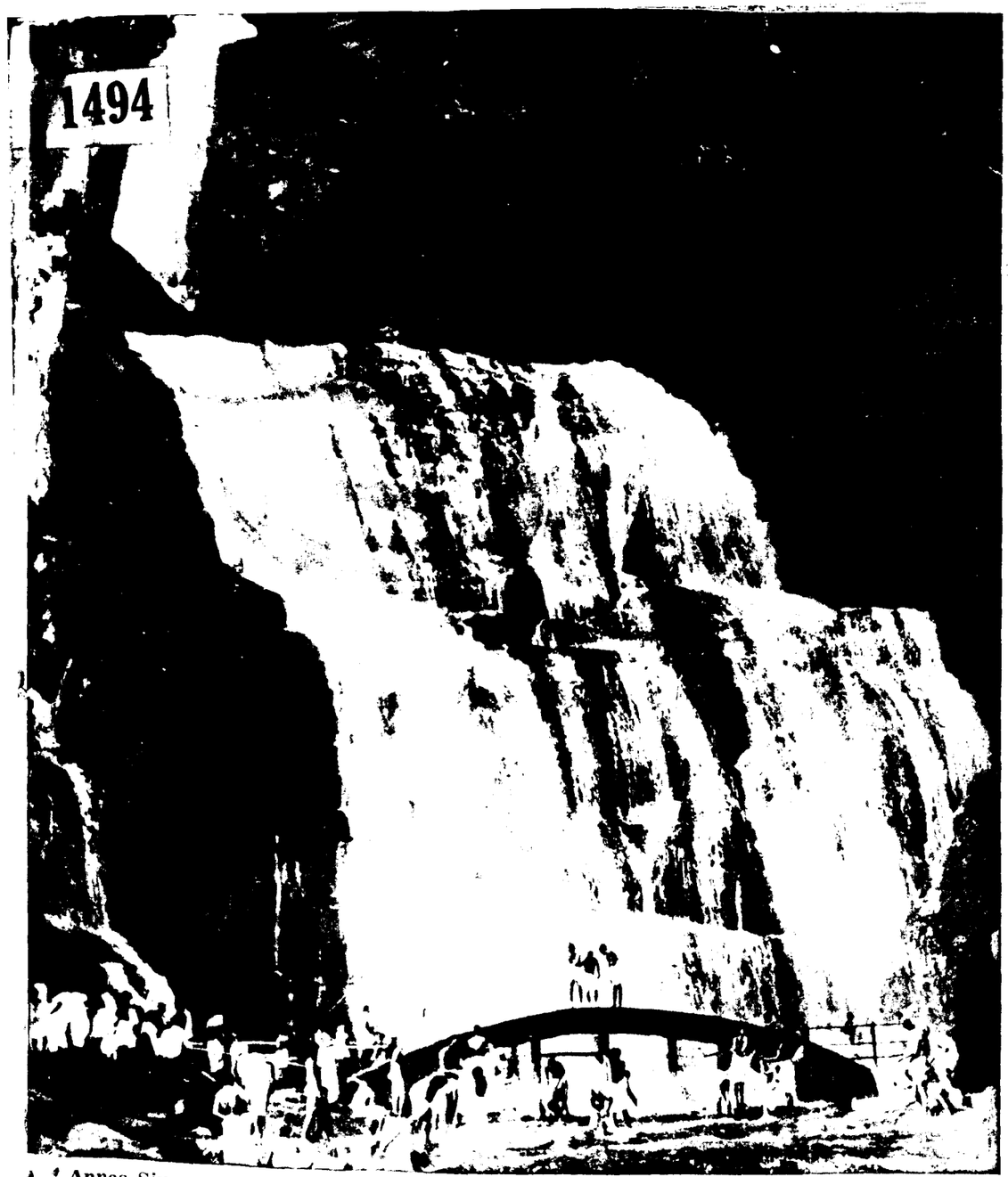
South rail news

July
Vol. III. 1956 No. 7



Annas Six

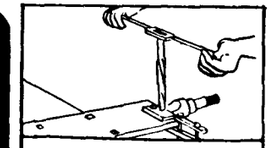
Southrailnews

PUBLISHED BY THE SOUTHERN RAILWAY

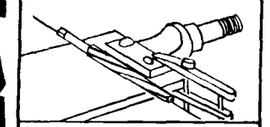
VOL. III JULY 1956 NO. 4

SEE

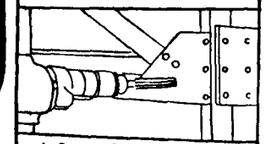
WHAT A BRIDGE REAMER CAN DO IN STRUCTURAL STEEL FABRICATION



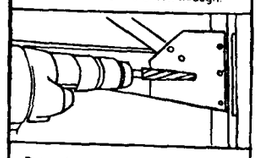
A Hand Bridge Reamer, reaming, overlapping holes in 2 plates, before their being riveted together.



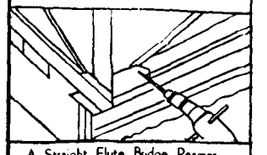
Holes reamed and made concentric.



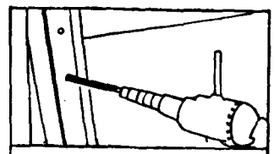
A Straight Flute Bridge Reamer, fitted to a Portable Electric Hand Drill, reaming, overlapping holes, in a gusset plate of a structure, for making them concentric, before a rivet or bolt can be driven through.



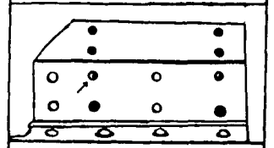
Doing the same job as above with a Spiral Fluted Reamer



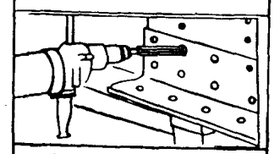
A Straight Flute Bridge Reamer fitted to a Portable Electric Hand Drill, reaming, overlapping holes in a channel (bolted to a structure), to make holes concentric for driving a rivet or a bolt through.



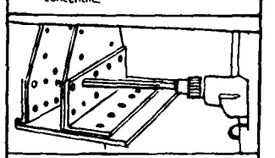
A Straight Flute Bridge Reamer, fitted to a Portable Electric Hand Drill, reaming, overlapping holes and making them concentric.



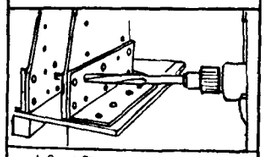
How the holes are overlapped before riveting.



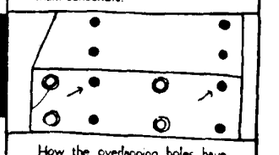
A Straight Flute Bridge Reamer, fitted to a Portable Electric Hand Drill, reaming, overlapping holes (Shown in A) and making them concentric.



The taper of the reamer removes a small quantity of material first and then gradually increasing it till both holes are reamed concentric.



A Spiral Fluted Reamer, fitted to a Portable Electric Hand Drill, reaming, overlapping holes to make them concentric.



How the overlapping holes have become concentric after being reamed with a Bridge Reamer.

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SOUTHRAILNEWS

(Official Organ of the Southern Railway)

EDITORIAL NOTICE

VOL. III No. 4

Editor :
K. SRINIVASAN

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

Manuscripts and photographs, not accepted for publication, will be returned only if the sender so requires and encloses the usual stamped, addressed envelope.

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

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THE EDITOR
Southrailnews
18A Mount Road Madras 2

INTEGRITY SHOULD BE PLACED ON A HIGH PEDESTAL

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

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

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

CONTENTS

JULY 1956

SOUTHRAILNEWS

VOL. III JULY 1956 No. 4

STOP ROUGH HANDLING DRIVE AND CLAIMS PREVENTION

ON each Zonal Railway, a Claims Prevention Organisation has been set up. The function of this organisation is to localise the bad spots for claim, and the commodities mostly susceptible to claim and the causes responsible therefor. The Claims Prevention Officers and Inspectors make regular periodical checks over packing, labelling and handling of consignments in the transit. These checks are of value in determining the course of preventive action.

Measures adopted to prevent claims included periodical observance of 'Stop Rough Handling' and 'PLM Check Up' weeks by arranging spot checks at stations, marshalling yards, goods sheds, transhipment sheds and parcel offices with a view to an increasing emphasis being laid on ensuring proper packing, labelling and marking of packages and to impress on all concerned the importance of precautions to be taken, improved method of loading, etc.

Rough handling of packages or consignments is a loss to the nation and this also causes waste of our commodity resources. It is imperative that everything possible is done to prevent losses on account of rough handling of consignments. It is the patriotic obligation of every Railwayman not only to move our traffic as fast as possible but also to deliver it at the destination without loss or damage. Rough handling of consignments and rough shunting of wagons must be eliminated at all costs. The period from 1st to 7th July is being observed as a 'Stop Rough Handling Week'. Even visual publicity will be done at important stations by showing the film 'Stop Rough Handling' to illustrate the evils of rough handling of packages and to indicate the loss to the nation on account of rough handling and for instructing all concerned to handle all the packages offered for conveyance by rail carefully.

Beggar and Hawker Nuisance

To eradicate the beggar nuisance and unauthorised hawking in running trains, the Railway Authorities arranged a campaign in running trains by means of appeal to the passengers to desist from giving alms to the beggars and not to purchase anything from the unauthorised vendors in the running trains and railway premises. The appeal was made through loud-speakers attached to all the carriages in the trains at frequent intervals and at halting stations. The announcements were made in English, Tamil, Telugu and Hindi. In the first instance, as an experimental measure, the campaign was arranged between Madras and Bezwada in the Grand Trunk Express which left Madras on the 25th June, 1956. This had a beneficial effect. Similar campaigns are proposed to be conducted on all sections where the beggar nuisance and unauthorised hawking are prevalent.

Acceleration of Grand Trunk Express Trains

From 1-7-1956, Nos. 15 and 16 Grand Trunk Expresses have been accelerated. No. 16 will leave Delhi at 17 hours and reach Madras at 13 hours on the third day—a reduction of 1 hour

43 minutes in the overall journey time. No. 15 will leave Madras at 12 hours and reach Delhi at 8-05 hours on the third day.

Daily Janata Express Train between Madras and Delhi

With the conversion of the Tri-weekly Madras-Delhi Janata into a daily Janata Express train, the travelling public, about 90 per cent of whom are third class passengers, will be gratified. The Weekly Vestibuled Janata Express trains between Madras and Howrah on nominated days is a welcome change. Between Madras and Delhi also, there will be a Vestibuled Janata train once in a week, leaving Madras on Tuesdays and leaving Delhi on Fridays.

The Madras-Bombay Janata Express running will be replaced by a Vestibuled Bi-weekly Janata Express train on Mondays and Fridays from Madras Central and Sundays and Wednesdays from Bombay. Though these changes will necessitate alteration in timings of Janata Expresses, the travelling public will presumably welcome them as beneficial.

Sri Kuttalanathaswami Temple, Courtallam

DIESELISATION OF INDIAN RAILWAYS

The Indian Railways are to introduce dieselisation on certain sections in order to deal with large traffic increases.

Initially, about 1,300 miles of railway are to be dieselised. Of this, over 1,000 miles will be on the broad gauge system.

The Railway Board is understood to have disfavoured the idea of any large scale dieselisation in the country in the absence of sufficient indigenous resources of oil within the country.

The sections to be dieselised are:—

		Miles
Eastern Railway		
Gomoh-Moghalsarai	...	232
South-Eastern Railway		
Asansol-Rajkharswan	...	97
Raikharswan-Jharsaguda	...	138
Rajkharswan-Barajamda	...	60
Central Railway		
Balharshah-Kazipet	...	146
Kazipet-Secunderabad	...	81
Southern Railway		
Bezwada-Madras	...	266
Poona-Miraj	...	158
Western Railway		
Ahmedabad-Abu Road	...	115
	...	1,293

TRAIN LIGHTING DYNAMOS

An Engineering firm in Calcutta is launching on a project to manufacture train lighting dynamos, an important item of railway equipment which has been imported for the past 100 years, it is understood.

The proposal was made sometime ago to the Railway Board, which recommended the firm for being granted the licence.

A similar project has already been launched by another Indian firm in Calcutta for the manufacture of train lighting dynamos.

The Railways require between 900 to 1,000 dynamos per year, and it is expected that these two firms will, when in full production, be able to meet about half the total demand.

The Railway Board has publicly announced its willingness to receive suggestions for manufacture of as many items of railway equipment as possible, in order to achieve the largest measure of self-sufficiency within the country.

RAIL CONCESSIONS FOR TWO MONTHS

Terms of Concession announced

As announced by the Railway Minister while presenting the Railway Budget for 1956-57, it has been decided that concessional return tickets at one and a half single journey fares should be issued on all the Railways from July 15 to September 15, 1956 for Classes I, II and III.

Return tickets will be issued only between stations which are situated at a minimum distance of over 300 miles from each other.

Break of journey on the return journey will not be permitted, but it will be allowed on the outward journey according to the normal rules applying in the case of single journey tickets.

Passengers must present the return halves of their tickets at the booking office of the station from which the return journey is commenced, and have these dated, indicating the date of commencement of the return journey. This is important, as passengers holding return halves which are not so dated will be treated as ticketless travellers.

For journeys between 301 and 500 miles the period of availability of the return tickets will be 20 days; between 501 and 750 miles it will be 25 days; and for journeys of 751 miles and over the period of availability will be 30 days.

However, the return tickets will not be valid for the completion of the return journey after the midnight of September 30, 1956. For example, a return ticket issued for a distance over 750 miles on September 15 will be available for completion of the return journey only upto September 30, 1956.

LOCKING OF WAGONS

Private parties booking full wagon load consignments on the railways are to be allowed to put their own locks on the wagons if they so desire, it is learnt.

The Estimates Committee of Parliament recently recommended that extensive use should be made of the practice of allowing private locks on full wagons booked by one party.

The hope is entertained in official circles that this practice might result in reducing the incidence of pilferage and consequent fall in claims made against the railways.

While permitting private parties to use their own locks, however, the railways would make it clear that the locks may have to be opened *en route* if, for instance, transhipment is involved.

345 NEW WAITING HALLS

The railways in India constructed 345 new waiting halls and waiting rooms for passengers during the last three years of the First Five-Year Plan, it is understood.

Nearly 72 per cent of all the waiting halls and waiting rooms constructed were for the exclusive use of third class passengers.

The largest number of waiting rooms were constructed on the North-Eastern Railway, the total being 88. The Western Railway was second, with 83 waiting halls and waiting rooms. The figures of other railways are: Northern Railway 54; Eastern 28; Southern 43; South-Eastern 27 and Central 22.

The annual programme for the construction of waiting rooms and waiting halls is drawn up each year by the railway concerned in consultation with the Railway Users' Amenities Committees.

ADDITIONAL PLANT FOR COACH FACTORY

Orders for the supply of additional plant and machinery for the Integral Coach Factory at Perambur, near Madras, are to be placed shortly.

Global tenders were invited on behalf of the Government of India earlier this year by Messrs. Swiss Car and Elevator Manufacturing Corporation Limited, Schlieren, Switzerland. The Government of India have an agreement with this firm for providing technical aid for the establishment of full production at the Integral Coach Factory.

To eliminate delays and expedite the supply of plant and machinery, the Government of India have decided to depute two railway officers to Schlieren, in Switzerland, to assist in scrutinising the tenders and placing contracts without back reference to New Delhi.

The two officers are Sri C. T. Venugopal, Director (Finance) Railway Board and Sri J. Mathan.

If necessary, Sri Mathan will also visit United Kingdom, France, West Germany, Austria, Czechoslovakia and Italy along with the experts of the Swiss Car and Elevator Manufacturing Corporation Limited, to inspect plant and machinery at the works of the various manufacturers who have submitted tenders.

SURVEY FOR NEW LINE TO SERVE SRIGANGA NAGAR

A reconnaissance engineering and traffic survey for a Broad Gauge railway line between Hindumalkot and Sriganga Nagar on the Northern Railway, a distance of about 19 miles, has been sanctioned by the Railway Board.

The object of the new line is to provide Broad Gauge rail facilities for the movement of foodgrains produced and the textiles and sugar manufactured in Sriganga Nagar. All goods imported and exported have to be transhipped at Bhatinda, especially the heavy machinery coming to Sriganga Nagar from Bombay and Calcutta. The provision of a Broad Gauge link will obviate the need of transhipment and speed up the through movement of commodities.

RAILWAY DELEGATION TO CHINA AND JAPAN

A three-member railway delegation left New Delhi last month for a month's study tour of the railway systems of China and Japan.

The members of the delegation are Sri J. Dayal, Financial Commissioner for Railways, Sri K. B. Mathur, Member (Transportation), Railway Board, and Sri H. D. Awasty, Joint Director (Planning), Railway Board.

The delegation is expected to tour important railway sections in these two countries and, in particular, make a detailed study of the working of important marshalling yards and control offices; regulation of movement of traffic; the working of the centralised traffic control system; the capacity of single line sections by diesel and by electric traction; operation of heavy mineral traffic like coal, iron ore, etc. and compilation of statistics.

The delegation will stay in each country for about a fortnight.

It may be recalled that a delegation of three Indian Railway Officers toured the railway systems of Soviet Russia and some European countries in 1954 and submitted a report to the Government of India on their return. Several suggestions made by the delegation have been implemented by the Railway Board.

THREE MARSHALLING YARDS TO BE REMODELLED

Railway yards at Guntakal on the Southern Railway, Phulera on the Western Railway, and Hirapur on the Eastern Railway are to be remodelled to enhance their capacity for dealing with the increased load of goods traffic during the Second Five-Year Plan period.

Guntakal forms an important hub in the metre gauge movement in the Mysore region, and has a five-way junction where considerable transhipment of passengers and goods traffic takes place daily. The Guntakal yard's capacity is for about 700 goods wagons daily, whereas even at present about thousand wagons have to be handled, resulting in heavy detentions. To cope with the present and expected increase in traffic in the future, a remodelling scheme which is estimated to cost Rs. 23·74 lakhs has been sanctioned.

Phulera is an important metre gauge Junction on the main line in the Ajmer region of the Western Railway. A scheme estimated to cost Rs. 50·88 lakhs has been sanctioned for complete remodelling of the railway-yard here.

The Railway Board has also sanctioned an estimated expenditure of Rs. 26·83 lakhs for the provision of additional reception, marshalling and departure lines at the Hirapur exchange yard, which will serve the increased requirements of the Indian Iron and Steel Company.

NEW RAILWAY MARSHALLING YARDS FOR STEEL PLANTS

Two new marshalling yards are to be built on the South-Eastern Railway to cater to goods traffic in connection with the new steel plants at Bhilai and Rourkela.

The Railway Board had ordered surveys to be undertaken immediately by the South-Eastern Railway in connection with the layout of these yards.

The yard at Bhilai is needed for handling 13 goods trains daily carrying raw materials for the plant and three trains daily carrying finished products from the steel plant. This yard will also deal with the anticipated increase of traffic to the tune of ten goods trains daily due to heavier movement from the Central India coalfields.

The yard at Rourkela will handle more than 13 trains of raw materials and two trains of finished products daily for the steel plant and also for general traffic on the main line.

CENTRAL RAILWAY SECTION TO BE DIESELISED

Asansol-Rourkela Electrification Envisaged

The Igatpuri-Bhusaval section of the Central Railway is to dieselise as a short-term measure, pending the availability of electric power for running electric locomotives.

The Railway Board, which has taken this decision, has also requested the South-Eastern Railway to prepare a project report for the electrification of the Asansol-Rourkela section of that Railway.

PASSENGER GUIDES TO ASSIST PASSENGERS—DUTIES PRESCRIBED

The Railway Board has re-defined the duties of passenger guides at Railway Stations to increase their usefulness to the travelling public, particularly Class III passengers.

A list of 27 duties has been prescribed as illustrative of the work they are expected to do, and the railways have been asked to enlarge this list if they so desire, in accordance with local needs.

The railways have also been requested that female passenger guides should be provided in adequate strength on important stations, particularly at pilgrim centres, where they could be of great use to women.

The passenger guides would be asked to encourage the queue habit among passengers in front of booking offices and elsewhere, assist illiterate passengers in obtaining tickets for correct destinations, direct passengers to the right platforms, assist them in finding accommodation in trains and help even out overcrowding, educate the travelling public in making proper use of sitting accommodation by orderly arrangement of luggage, etc.

Some of the other duties of passenger guides are: to promote healthy Sanitary habits among passengers, to see that adequate drinking water arrangements are made, furnish correct and authentic information to passengers regarding dharmasalas, hotels, etc., to report deficiencies in carriage fittings particularly in regard to watering, sanitary arrangements and safety devices.

STEEL FOUNDRY AT CHITTARANJAN

The Government of India have decided to set up a steel foundry at the Chittaranjan Locomotive Works for the production of locomotive steel castings, which are at present imported. The capacity of the proposed foundry will be 7,000 long tons of finished steel castings annually. The foundry will be so designed as to permit of convenient expansion of its capacity to 10,000 long tons per annum.

The Government of India have invited proposals from a number of American firms of consulting engineers for setting up the foundry. The U.S. Technical Co-operation Administration will finance the dollar expenditure incurred on the services of consulting engineers.

Proposals from the firms are due to be received in the beginning of July 1956. Two railway officers, Sri Karnail Singh, General Manager, Chittaranjan Locomotive Works and Sri P. C. Kapoor, Joint Director, Mechanical Engineering (Production), Railway Board, have been deputed to visit the United States to select the most suitable firm for this purpose.

HOSPITAL ON WHEELS FOR RAIL ACCIDENT VICTIMS

Medical relief in case of accidents on Central Railway's Broad Gauge line is now provided from an Accident Relief Medical Car, a miniature hospital-on-wheels fitted with modern hospital equipment.

Designed by the Mechanical and Medical Departments of the Central Railway and built by the Carriage and Wagon Workshops at Matunga, Bombay, this Medical Car is the first of its kind in India. It has its own operation theatre equipped to deal with major emergency surgery. The mechanical design of the operation room equipment embodies the latest devices, as used in battleships, to withstand vibration and shocks while the train is in motion.

The Medical Car has its own sterilizing equipment, a kitchen, hot and cold flowing water and a refrigerator. It also has a special compartment for the medical staff. A feature of importance is the provision of an entrance at one end which can be used in a tunnel or cutting. The members of the Railway's St. John Ambulance Brigade, who will accompany the Medical Car, in addition to the normal complement of medical and nursing staff, are all potential blood donors. Their blood grouping is predetermined and recorded in advance. In case of need, they will come forward to help save a life with their own blood.

Provision for 18 Lying Cases

The Medical Car has a ward compartment for patients, 28 feet long, painted in plain mild light green colour, containing 12 berths furnished with pliafoam cushions with an arrangement for fixing 6 folding stretchers on the top of the lower berths in an emergency. Suitable leather straps for the safety of occupying patients have been provided. Two lavatories positioned at the end of the ward compartment cater for the needs of the patients.

By the side of the ward compartment is the small well-equipped operation theatre. All the modern accessories have been snugly fitted with adjustable overhead electric lights throwing a clear beam on an adjustable operation table. The theatre room has been painted with clear white enamel and has adequate number of electric lights and fans with an electric exhauster fan. Adjacent to the operation theatre there is the little sterilising room, a coupe with two berths for use as the medical officer's rest room, a servant's room and kitchen.

The entire medical equipment is stored in two steel cupboards, built-in cupboards in the panel and in box-seats. The equipment includes a refrigerator, sterilising equipment, operation table, stools for anaesthetists, oxygen cylinders special shallowless operation lamp, provision for hot and cold water, washbasins fitted with elbow-operated faucet, knee action waste, etc.

How Idea Originated

In 1948, the Sub-Committee (Medical Section) of the Indian Railways Conference Association submitted its recommendations on the revision of the accident relief medical equipment which had been originally laid down by the Railway Board in 1929. It was decided to appoint an *ad hoc* committee of the Chief Medical Officers of the then G.I.P. and E.I. Railways to scrutinize the recommendations of the I.R.C.A. sub-committee. The Chief

Medical Officer, Western Railway, was also subsequently included as a member of the *ad hoc* committee. The committee in submitting its report recommended the provision of a new type of standard mobile hospital car. The layout of this car was duly examined and approved by the Railway Board.

The committee's recommendations regarding the details of the internal fittings of the special medical vehicle were accepted by the Railway Board which decided that before any large scale construction of such cars could be undertaken, the Central Railway should construct a broad gauge prototype van. Profiting by the result of the experience, the other Railways should be advised of the detailed plans for construction of similar vans.

Shenbagadevi Falls, Courtallam

Passengers' motor car entering specially-fitted van for conveyance on the "Car-Sleeper Limited"

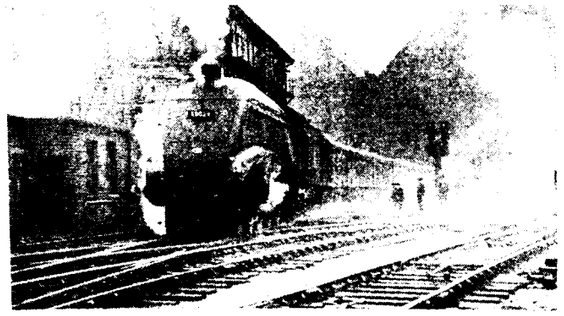
WORLD OF RAILWAYS

ARTHUR L. STEAD

Our London Correspondent

THEY call it the "Car-Sleeper Limited". A truly novel train, this latest passenger service of British Railways steams northwards out of King's Cross Station, London, every weekday night except Fridays, heading for "Bonnie Scotland". Catering specially for the touring motorist, the "Car-Sleeper Limited" secures to rails valuable business hitherto passing by road, and is a new development of great interest to the whole world of Railways.

The Scottish Highlands—which almost every visitor to Britain seeks to include in his or her itinerary—attract large numbers of summer motorists from London and the south of England. To reach Perth (centre for the Highlands), these vacationists previously had to make the 440-mile journey from London over congested roads and through industrial areas. Today, the knowing motorist travels speedily and in comfort by rail, along with his car, on the London-Perth through "Car-Sleeper Limited" of the Eastern Region of British Railways, cutting out entirely this relatively uninteresting preliminary run.



The London-Perth "Car-Sleeper Limited" leaving King's Cross Station, London headed by powerful "Pacific" Steam Locomotive

Leaving King's Cross Station, Londan, at 7-45 p.m., the "Car-Sleeper Limited" reaches Perth at 5-33 a.m. next day. The train is composed of modern passenger carriages with the usual seats, and also sleeping-berths in four-berth sections (two upper and two lower); and specially-fitted covered vans to accommodate patrons' motor cars.

Seating accommodation on the "Car-Sleeper Limited" includes tables at which passengers can enjoy refreshments either brought by themselves, or purchased at King's Cross terminus. By prior arrangement, a packed supper is provided at King's Cross before departure, and breakfast served at Perth on arrival, with similar arrangements in the reverse direction from Perth to London.

Supper consists of cold meats, mixed salad, potatoes and potato salad with mayonnaise, a sweet, roll and butter, and a flask of coffee, the whole supplied in a compact meal-box fitted with cutlery, condiments, etc. Breakfast is of porridge, fish or bacon and egg, toast and marmalade, and tea or coffee.

Cars are accepted for conveyance by the "Car-Sleeper Limited" with sufficient petrol in the tank to drive for a distance of about 50 miles. Petrol in separate containers is not permitted.

Cars are loaded at King's Cross and Perth Stations commencing at 4-30 p.m., and at intervals of a few minutes up to 6-30 p.m. A Railway representative drives the cars into and out of the covered Railway vans at each end, if desired.

Passengers booking seats on the "Car-Sleeper Limited" are advised of their loading times and provided with a key label to attach to their car and ignition keys, which are handed to a Railway representative at time of loading. The unloading of cars is commenced immediately on arrival at destination, but patrons may remain in their berths up to about 8-0 a.m., if they so wish.

Introduced as an experiment, on a two trains a week basis in 1955, the "Car-Sleeper Limited" now is one of the most popular services of British Railways. Every evening, the train is loaded to capacity and until withdrawal at the end of summer this steady business will continue.

The "Car-Sleeper Limited" is one of many fast rail services operating between London and Scotland, these Anglo-Scottish runs forming the backbone of the British time-tables. Actually, there are three distinct routes between London and Scotland, opened up and developed years ago by the various privately-owned Railway companies eventually embraced within the nationalised network. Competition for Anglo-Scottish passenger traffic was always keen, and this reached its peak in 1888 and 1895, when there occurred the famous "Railway Races" between London and Edinburgh and Aberdeen respectively, which form so colourful a chapter in the British Railway story.

One route to Scotland is the "East Coast Route" followed by the "Car-Sleeper Limited" out of King's Cross Station, London; another is that based on Euston Station, London; and the third that based on St. Pancras Station, London. Route number one is worked jointly by the Eastern, North-Eastern and Scottish Regions of British Railways; while routes two and three are operated by the London Midland and the Scottish Regions.

Fastest of all Anglo-Scottish trains is the daylight service known as "The Elizabethan", leaving King's Cross at 9-30 a.m., and reaching Edinburgh at 4-0 p.m. (393 miles, non-stop). The famous "Flying Scotsman"—which for 94 years, in peace and war, has maintained its London-Edinburgh service daily—leaves King's Cross at 10-0 a.m., arriving in the Scottish capital at 5-0 p.m.

Non-stop running over the 393 miles between King's Cross and Edinburgh is possible through the employment of powerful steam locomotives equipped with corridor tenders. The corridor runs the full length of the tender at one side, and enables locomotive crews to be changed *en route* without stopping. The relief crew travel in the leading coach of the train, and at the exchange point—roughly midway between London and Edinburgh—they make their way on to the engine footplate along the tender corridor, the crew which is being relieved then passing back by this means into the leading coach and finishing their journey as passengers.

Corridor tenders were introduced in the Anglo-Scottish services in 1928, their designer being Sir Nigel Gresley, Chief Mechanical Engineer of the London and North-Eastern Railway Company. Strangely enough, in view of its great advantages in long-distance operation, the corridor tender has not been adopted by any other railway in the world, nor by any of the other Regions of British Railways, except for a corridor tender introduced by the London Midland Region for use in connection with its locomotive mobile testing units.

The route of the "Car-Sleeper Limited" and its sister trains out of King's Cross Station, London, covers the whole of Eastern England, through Peterborough, Doncaster, York, Darlington, Newcastle-on-Tyne and Berwick-on-Tweed. King's Cross Station itself is one of the world's outstanding termini, with 16 platforms under cover, and a rebuilt roof after heavy bomb damage during World War II.

Packed supper service is a feature popular with patrons of the "Car-Sleeper Limited"

Fast services to and from Euston Station, London, include the famous "Royal Scot" (London depart 10 a.m., Glasgow arrive 5-15 p.m.); and the "Mid-day Scot" (London depart 1-30 p.m., Glasgow arrive 9-15 p.m.) The "Royal Scot" gained world fame in 1933, when a 4-6-0 express passenger locomotive bearing this name, along with a complete train, made an 11,194-miles tour over the United States and Canadian Railways in connection with the Chicago World's Fair.

The Euston-Glasgow route is a somewhat more difficult one than that between King's Cross and Edinburgh, involving the crossing of the Pennine Mountains between Leeds and Carlisle. Often known as the "West Coast Route", this main-line passes through Rugby, Crewe (with its huge locomotive works), Preston and Lancaster. Between Lancaster and Carlisle, the route skirts the beautiful English "Lake District" around Windermere.

From St. Pancras Station, London, the most popular northgoing train is perhaps the "Thames-Clyde Express" (London depart 10-0 a.m., Glasgow arrive 7-41 p.m.). The St. Pancras-Glasgow trunk route was formerly the property of the go-ahead Midland Railway Company, and it runs roughly through the middle of England, via Leicester, Sheffield, Leeds and Hellifield, to join the Euston-Glasgow route at Carlisle, on the Scottish border.

When the car-sleeper service was first proposed as a new link between London and Scotland, the "East Coast

Route" out of King's Cross Station, London, was selected as most suitable because this affords the shortest and quickest route between the metropolis and the Scottish Highlands, with convenient facilities for handling motor cars at each end.

This car-sleeper service promises to become an expanding feature in Britain, especially in the summer tourist season. British Railways recognise that it is no use kicking against the motor car, and they are wisely working with the motorist, instead of foolishly endeavouring to compete with the private car. The London-Perth car-sleeper service was the pioneer, but already the facility has been introduced on another important route—that between the Lancashire cotton centre of Manchester and the Channel seaport of Dover, over the London Midland Region and Southern Region of British Railways.

The Manchester-Dover car-sleeper train connects at Dover with motor car ocean-carrier services across the English Channel to Boulogne, in France, and the service is a great convenience for motorists touring Europe in their own cars. Another car-sleeper link which may shortly be introduced will connect Britain with Holland and Belgium, through the English seaport of Harwich. This would provide a fine connection for motorists from England making the tour of Northern Europe, and continental motorists in the reverse direction.

Already, there are several train-ferries linking Britain with the continental mainland and cutting out annoying changes from Railway to steamship and *vice versa*, and by extending these ferries by the introduction of the car-sleeper trains British Railways are tapping valuable new sources of revenue.

A great boon for the motorist—now an increasingly important person to be considered in the world of travel—and a great business-bringer for the Railways, small wonder the car-sleeper train has hit the headlines!

Sravana Belagola tank with the hill in the background

THE PICTURESQUE SRAVANA BELAGOLA

S. VEDANTAM
C. C. S.'s Office

THERE in the pleasant stretch of country in between the two beautiful hills Vindhyagiri and Chandragiri with a pleasant calm and dignified surrounding at a height of 3,347 feet above sea level—which is something thrilling to contemplate—is situated the Sravana Belagola, the very centre and home of the glory of South Indian sculpture.

At a short distance of 50 miles from Mysore and 30 miles from Hassan on the Mysore-Hassan section of the Southern Railway, is located this centre of sculpture and headquarters of a religious sect—Jainism.

India the donor of philosophers and guides, has here a monument for one of her great sons who, in his own way, tried to solve the riddle of life. He is Gomatesvara the much respected Seer of Jainish.

The colossal statue of Gomatesvara—the Lord of Vindyagiri at Sravana Belagola is of great majesty and impressive grandeur. Sravana Belagola is so named with reference to the statue of Gomatesvara and its prefix Sravana also serves to distinguish it from two other Belagolas with the prefixes of Hale and Kod which are in the neighbourhood. The very word

Steps leading to the top of the hill where the statue of Gomatesvara is situated

Belagola is a derivation from the two Kanarese words, Bel and Hola, meaning white and pond respectively.

The colossus of Gomatesvara topping the rocky hill of Vindhyagiri is a lasting monument of the originality, skill and patience of ancient South Indian sculpture. It is said that this magnificent colossus was carved out of a single boulder 58 feet in height. The head is 11 feet 3½ inches in height, the hand is 8 feet 8 inches, the length of the eye is 1 foot 10 inches and the ear alone is more than 5 feet long. The nude image stands erect facing north. There is the serene expression in the face; the hair is curled in short spiral ringlets all over the head while the ears are long and large. The waist is small. From the knee downwards the legs are somewhat dwarfed, and the figure lacks support over the thighs. It is represented as supported by ant hills from which emerge serpants and a climbing plant twining itself round both the legs and arms terminating at the upper part of the arm in clusters of berries and flowers. Jains believe that the plant is Madhavi (Gaertnera racemosa) a large creeper with fragrant white flowers which is called Kadugulagunji in Kanarese.

The feet are placed in a lotus 3 feet 4 inches in diameter. Part of a finger on the left hand is conspicuously missing. The statute on the whole depicts the figure of a Yogi immersed in meditation motionless and inspired.

If we look at the gift of art, we have nohing but wonder and admirations to offer. The statue is exposed to everything under the sun. This is a visible scenery even from a distance of many miles.

There it stands majestically defying age, time and moods. Carved out of a fine granite of pleasing colour, this statue seems to reflect the spiritual lights of the nation through the granite. Standing near the gigantic statue one feels the great force, the force that has made the prince a Yogi act on his ownself. Impressed by the get up, the visitor feels obsessed with the great teachings of the man in idol. He is taken back to that antiquity and thrilling streams of faith and realisation flow through his soul.

At the sides of the entrance to the enclosure are two dwarapalakas about six feet in height. Opposite to Gomata, outside the enclosure, is a Brahmadeva pillar with a pavilion at the top enshrining the seated figures of Brahmadeva. Below that stands the figure of Gullakayyaji about 5 feet in height facing Gomata.

History has it that King Chandra Gupta Maurya after renouncing the worldly pleasures lived here in a rock worshipping this deity. Many have been the tributes paid to Gomata.

Standing in the centre of the country of ours, Gomata spreads his messages of love, and tolerance and peace through admirers, sculptors and artists who have visited him. Common men have marvelled at his size, and to the tourist his tour will not be complete without a visit to Sravana Belagola.

Erected in faith, telling a story of renunciation and speaking a language of peace this Indian saint has indirectly caused for a permanent sculptural exhibition built to stand as a monument for the bygone age and the now forgotten art.

To the Indian, it is a key to the doors of the past, an inducement to realise his own, an encouragement for the present and guarantee for the future in his pursuit of knowledge of Art and mainly the truth of life. Sravana Belagola does not exist calmly but it calls our attention.

"KEEPING LOCOMOTIVES FIT"

OPRAIL

WE hear the sound of a deep rumble in the far distance. This rumble rises to a steady roar; then comes the hissing jets of steam, if we are close enough, and finally we feel the dusty slipstream of wind as the locomotive hauling a load of ten to twelve passenger coaches flashes past. Day in and day out the locomotives of a Railway system, be they for hauling mail, express or goods trains, are rolling with their heavy loads, swiftly and efficiently. The question we may now ask is : what is a locomotive's daily output of work, reckoned in miles run ?

Each day, round the clock, a locomotive will be covering from two to three hundred miles, at speeds up to almost sixty miles an hour. As time passes, the mileage run mounts up. Working at this pressure the locomotive has been the victim of considerable stresses and strains, thus causing wear and tear on most of the component parts that help to keep it moving on the track.

A time comes when, even with running conditions being normal and the loco having had its fair share of running repairs, with occasional renewal of parts here and there, that this loco must be given a thorough check-up and overhaul. When the loco's running score has shot up above the two hundred thousand mile mark, or has been in service hauling trains for two and a half to three years, she is taken off the active job of hauling trains, and sent for a short of rest-cure to the Railway locomotive workshops. Now, let us follow one of these locomotives as she goes through the process of overhaul and rest-cure in the workshops.

The engine may be sent in from its home shed either in 'steam' or 'dead' (the latter term meaning that all fire and steam have been removed from the engine). Now, this loco is received in what is known as the 'steaming' shed as soon as she rolls into the Shops. Here, if the engine is in steam, she is soon cooled off, the tender disconnected, all coal removed from the tender, firebox, etc.

The loco, without its tender, is next moved into the erecting section. Here it is stripped, and then along comes an enormous and powerful electric crane which lifts the boiler and the frame from off the wheels underneath. The boiler and frame are then placed on a trestle over a pit. The wheels, axles and journals are sent for examination, attention and repairs to the special section, known as the 'wheel' shop.

All the motion components, like cranks, pistons, connecting and side rods, slide valves, etc., are collected and sent to the cleaning boss. Here, under high-pressure steam jets and with strong solutions of caustic soda, all the oil and dust-grimed motion parts are thoroughly cleaned, so that the inspecting staff can get down to their jobs of examining each part carefully and meticulously, as all wear and tear, fatigue in metals, cracks and fissures, must be noted, and accurate measurements taken of the extent of damage. After this process has been completed, these motion components are sent to the respective shops or sections, where the experts and their staff get going on overhauling and doing all the repairs required on each part.

The boiler of the locomotive also gets its own special attention. After all the boiler components have been stripped, the boiler is detached from the frame and sent to the boiler shop for attention. Here the boiler is first washed thoroughly with high-powered water jets as the first process in cleaning. The element and boiler tubes are then removed, examined and cleaned, and those requiring repair

or replacement are attended to. The entire inner surface of the boiler is then de-scaled by various processes. When all this has been done, the boiler, including the firebox, is examined for defects and cracks. When the boiler inspecting staff have done their examinations for defects and repairs or replacements, the boiler shop men get down to their jobs of completely overhauling that boiler. When the overhaul is completed, and the boiler re-assembled, it is put through hydraulic and steam tests. The boiler, after being passed fit and complete, is then sent back to the erecting shop.

Moving through the various shops where a locomotive and all its components are being given an overhaul, what will we see? Here is the giant electric crane whirring overhead, lifting up the boiler from the wheels as if it were a toy. There, we will find a gang of workmen, looking like fantastic creatures from another planet in their huge goggles and metal shields, doing a welding job with flaring and hissing blow-lamps. In another place we see brawny men wielding sledge-hammers, with the sweat gleaming on their bodies. In the boiler shop, men like huge insects have crawled into the belly of the boilers to do their scraping and cleaning tasks. In the machine shops, the machinists bending over their whirring machines, are turning out various components, trimming and truing others, and so on; each item, from common bolts and nuts to the more intricate parts, being given what they need in overhaul.

When the locomotive came into the erecting section, she was taken apart, both outside and inside. Now comes the process of putting the loco together again. Back to the erecting section, after all repairs and renewals have been done, come the various parts of the loco, from the boiler down to the wheels and cotters. The erecting fitter and his men now re-assemble the whole loco until she is ready to be taken once again to the steaming shed.

The loco is now back in the steaming shed, looking spick and span after its overhaul. Coal is loaded on to the tender, the firebox is fed with this coal and the fire is lit. Soon there is a swiftly rising stream pressure on the gauge, and the loco is being got ready to roll over the tracks again. But before the engine is passed, a few tests and adjustments have to be made. The loco has to be weighed to check that the weight on each spring and bogie box is exactly as it should be. If there is a list to one side, or the weight on one box is more than it should be, well, that loco will soon be limping into an engine shed with a nasty 'hot' box, and a failure chalked up against her.

After the loco has passed all tests, she is sent out for a trial run on the tracks. While on this run a Trial Inspector also rides in the cab. Both Inspector and Driver carefully observe the behaviour of the engine on the run. Anything untoward or abnormal is noted and gets prompt attention after the trial run.

The locomotive has now passed all tests, including the trial run. She is then returned to the parent locomotive running shed to be put back into whatever service she is assigned, which may be on the fast mail and express links, the passenger or goods train links.

Once again, the overhauled locomotive is fit for another two hundred thousand odd miles of fast, heavy and strenuous service. Barring accidents, or occurrences of an unforeseen nature, the overhauled locomotive will remain in good, faithful and efficient service, merely getting its routine 'running-repair' attention in the loco sheds, until she has completed another two hundred thousand miles service. And this process is repeated, until, after 25 to 30 years of service in traffic, the loco is given her final 'unfit to run' label, and sent to the scrap yard.

THE FOND PARENTS

RAMA SRINIVASAN

"WE must call on the Ramachandrans today. Long time since I saw Sushila and her kid," I pronounced in the form of an ultimatum.

"Must we?" he groaned.

"We must," I said emphatically.

"Oh, what a bore! They will start off about how clever that kid of theirs is." He shuddered.

"I know," said I sadly. "But a social call is a Social Obligation. The ordeal must be undergone."

* * * * * *

Young parents find the subject of their babies an unfailing topic of conversation. The trouble is that they do not know when to stop. This is a theme that has launched a thousand boring monologues. If there is a lull in the conversation, the proud parent looks around and says brightly, "We have been wanting to go around and call on people for ever so long. But you know how it is, with a baby in the house. Something or other keeps cropping up."

Sure enough some other parent is likely to come up with, "I know. It was like that with us also, till Patch grew up." Within bounds, such conversation is not intolerable. But the unpleasantness begins when the parents do not rise above the level of their children, their clothes, their feeds, their ailments and their pranks.

Take for instance the new father. Next to himself, he loves talking about his offspring and eagerly supplements his wife's tales. "You know what Cockey did today?", starts the wife. At this stage one must not commit the mistake of asking why the child is called Cockey, or it will provoke a long discourse regaling you with the story of how the baby gave a cock-eyed look at his mother's aunt who is a regular she-devil . . . .

And the nicknames and the short forms of names these parents choose! It makes one shudder—'Patch' short for Parthasarathy, 'Buddy' for Badrinarayanan. 'Chin-chin' (long, not short) for Ram and 'Pappu' for Jayasri! Why give a decent name and then call the poor child by an atrocious 'petname'? The subject warrants a volume for itself . . . . . .

* * * * * *

He got up to dress in a resigned manner. He suddenly cried triumphantly, "I know what!"

"What?" I enquired.

"We shall regale them with some stories about Terry." He said. "Terry? Surely you don't propose to boast about your dog?" I enquired doubtfully.

"Why not? Terry is a thousand times more smart than that Buddy of theirs. Why, Terry has learnt in three months what that kid of theirs will take five years to learn."

Although I had inward qualms, still for the first time in the past one year, we set off eagerly to Ramachandran's prepared to hear their tales of Buddy's escapades.

Buddy was jumping on their sofa, not paying any heed to the admonishments of his parents. Soon after our arrival he got even more excited and started pulling table cloths and throwing things about. "Oh, he is so mischievous! I am not able to manage him" sighed Sushila proudly.

Buddy looked at her triumphantly and then glanced at his father expectantly as if he knew what was coming next. "You know what he did today? Sushi was busy in the kitchen and he poured water into the flour tin." He looked at his son as if he had been very smart.

Now was the time. I looked towards my husband to see what he was going to say. "Children are so mischievous these days, aren't they? But let me tell you, dogs are much worse—far, far worse. You know what our Terry did just before we came here today?" He imitated Ramachandran's voice with a sly twinkle in his eyes, "He brought a dead mouse from somewhere and hid it in my wife's shoe. Boy! Did she jump and scream when she tried to put on the shoe to come here! You should have seen her face! I don't think I ever laughed so much in my life." He looked at me triumphantly. "So that is your game, is it?" I thought, "Trying to get two birds with one stone."

Then Sushila came in with her contribution. "How many things can one keep locked up, or out of reach? The other day while I was busy cooking, Buddy emptied the salt jar into the milk."

Before my husband could produce another of his dog stories, ridiculing me in the bargain, I broke in with, "Terry played the cutest little practical joke a week back. Late one night while snooping round, he somehow got entangled in a white sheet and came rushing into the bedroom. Startled out of his sleep, my husband was just horror-stricken and after a moment of panic dived into his bedclothes howling 'Ghost! Ghost!' I don't think I have ever seen a man so scared before. Mind you, all the time Terry never gave even a teeny-weeny bark. I am sure he must have been planning to expose this big bully of a master who struts about the house like a hero in a stage play." I concluded in a quick rush, covertly watching my husband all the time. A look of alarm spread over his face when I began, which gradually melted into an imploring "whipped-dog" look at me when I ended. I took pity on him and with an understanding smile we joined forces and turned on the Ramachandrans.

Ramachandran who had been waiting impatiently for me to finish, started his tale, "Buddy upset an ink bottle over his mother's sari three days back. Was she in a rage that day! Of course it is I who will be the ultimate loser. I'll have to buy her another sari—so she says," he concluded primly.

"I hope it was washable Royal Blue ink," said my husband. He then turned to me and said, "Remember when Terry raided the servants' quarters. You know," he continued, turning to Ramachandran, "He hid behind a basket and jumped out suddenly at the milkman barking his head off. The milking was halfway through . . . . . ."

I interrupted, "The cow kicked viciously and the milkman all but threw a fit. But all the milk was spilt and Terry was happily licking away. I am sure he must have done it deliberately. He is so clever, you know."

We were more than a match for the poor Ramachandrans. They did not get half a chance to start on Buddy's pranks. We treated them to a blast of monotonous duologue on the imaginary exploits of Terry.

Sometime later, Ramachandran looked surreptitiously at the clock. "Excuse me while I put Buddy to bed, will you?" said Sushila and left the room with Buddy. That broke up the party.

It had turned to be better than we had hoped. We returned home in high spirits, after spending a very pleasant evening, especially for me for I had once more put my husband in his place.

* * * * * *

But I am not sure who had the last laugh for I heard from one of my talebearing friends that Sushila, after that evening, was going about saying, "Eight years of married life and no children! Poor couple! No wonder they go about talking endlessly about their dog all the time."

"ASPIRE"

N. NAGARAJAN

Personnel Branch, GM's Office, Madras

THE world is my book ;
Her vast region, pages ;
Her histories and ups and downs,
The chapters, lessons and exercises.

Her rivers are my songs ;
Her hills are my guards ;
Her deserts are my weeps,
And the oasis my aid,
To keep me in relief from the sandy sweep.

I am not educated in College ;
I am not master or sage or a seer,
And only I dwell, day in and out,
In reading and knowing, watching world life.

I require money, not to money myself,
But to mind the many,
Manoeuvring with me,
In moneylessness and knowledge.

I need the need of knowledge,
Not for a faming scholar or principal or head,
But remaining a humble teacher-learner of life,
To lead me along and all surrounded,
In need of knowing and be with the taste too.

The crust of my zeal is simpleness one,
In safety, less seduce and scorn ;
I wish I help and aid myself too,
And ever remain in noble and enchanted deed.

HOW THE DIFFICULTIES FACING THE RAILWAYS ARE TACKLED

K. SRINIVASAN

Operating

Every time a Railway Administration has to accept the transport of a large and heavy oversized consignment from one station to another over a system, the operating officers of the headquarters have to study the problem and arrange for the special type 'Well' wagons and special train by which the machinery such as cylinder, etc., will move, in consultation with the civil and mechanical engineering departments and the entire route over which the package or load will move has to be planned. Diagrams and drawings of the track, station yards, overhead structures, bridges, tunnels, cuttings, etc., have to be carefully scrutinized. The whole movement has to be dovetailed with accuracy. A special path has to be arranged for the special train to move from one point to the other. This requires meticulous planning in order to avoid interfering with the other goods trains and passenger trains. When such loadings are accepted the Assistant Executive Engineer, Mechanical Engineer, Train Examiner, PWI, a Transportation and Rolling Stock Inspector each with a special gang of staff will have to go in the passenger coaches attached to this special train.

The speed of the train will be limited to 15 miles and is restricted to five miles when crossing station yards, taking curves and cuttings. Dead slow speed will also be observed when the train passes over signal posts or water column. As for overhead structures the train stops dead and then passes after the Train Examiner has ascertained that the prescribed clearance has been given at the top of the load and the lowest point of the overhead structure. The safety of every building, every structure and the large number of passenger trains that have to be passed have to be ensured. Disregard of special instructions issued may lead to disastrous consequences.

It would be interesting to note that in the recent years altogether 113 oversized consignments have been transported by Railways for Damodar Valley Corporation alone. Amongst the marvels of such transport has been the movement in 1951, of a 105-ton Generating Stator from Calcutta Docks to Konarbandh for Damodar Valley Corporation, and a Glazing Cylinder Machine 13'—9½" in diameter and 15'—9" long from Calcutta Docks to Dalmianagar. The weight of the Stator did not permit its transport in any of the rolling stock then available. The railways had to import a special 'Well' type truck costing over four lakhs. As it was not safe to allow the travel during night the special train took three days to complete a journey of 222 miles. For the movement of the Glazing Cylinder, the entire track from Calcutta Docks to Dalmianagar had to be checked and the distance from the track and all fixed structures measured in order to determine the places where special precaution was needed. At certain places, some of the structures on the side of the track such as water columns, etc., had to be temporarily shifted.

Commercial

There are certain considerations governing catering on railways which are different from those affecting catering in other establishments. On the Railways, catering has to be done to a very wide variety of tastes and habits—rich, poor, vegetarian, and non-vegetarian, orthodox and cosmopolitan. In the case of a town, the various sorts of people will satisfy their peculiar needs and patronise particular establishments according to their taste. Secondly, the demands for catering

services on railway premises are not evenly spread out. For instance, at Cuddapah station on the Southern Railway, about 200 meals have to be served to passengers passing through in two trains, for each of which the halt is for 20 minutes at about midday. During the rest of the day, there is little or no business. Adequate staff are to be maintained to ensure efficient service without detention to trains, though during a major portion of the day, the staff will have little or no work. It will be appreciated if criticism of catering arrangements on railways is tempered by understanding of unusual features of railway catering. Catering is prevalent in various forms, such as dining and restaurant cars, refreshment rooms,—vegetarian and non-vegetarian and restaurants at stations, vending stalls, etc. Catering on Railways has been for a long time in the hands of Catering Contractors appointed under a system of licensing, though on the Southern and South-Eastern Railways, a number of establishments have been run departmentally.

The expenditure on catering exceeded the income from departmental catering on the Southern Railway during 1952-53, 1953-54 and 1954-55. The margin of difference had, however, steadily declined from Rs. 6,56,689 in 1952-53 to Rs. 3,17,457 two years later. Steps are being taken to minimise catering losses. The work of cleaning utensils which was being done by cleaners on the basis of salary plus allowances and free food has been entrusted to contractors.

As catering came in for criticism in Parliament and in the National Railway Users' Consultative Council, the Minister for Railways appointed a Committee to go into all aspects of the problems, having due regard to the criticisms made in Parliament and in National Railway Users' Consultative Council, to device proper measure for an all-round improvement in catering on the Railways.

The Committee submitted its report in November 1954. It invited attention to innumerable complaints against contract catering and suggested that Railways with no departmental catering should make an experimental beginning. The Committee also made recommendations in regard to standardisation of menus. The Committee emphasised that it would like to see efficient contract catering running side by side with departmental catering and both types of catering should play a complementary role in each other.

The Railway Corruption Enquiry Committee also devoted some attention to catering, which has no hesitation in recommending that the system of giving refreshment and vending contracts to big contractors should be abolished. Consistently with the recommendations of the Catering Committee and the Railway Corruption Enquiry Committee departmental catering has been introduced at such important stations like Delhi, Pathankot and Gorakhpur. It was scheduled to be extended from April 1, 1956 to Nagpur, Jhansi, Wardha, Bhusaval, Cuttack, Bilaspur, Tatanagar, Asansol, Gaya, Patna and Moghalsarai and then to Bombay V.T., Poona, Bombay Central, Ajmer, Raipur, Howrah, Sealdah, Kanpur, Moradabad, Lucknow, Allahabad, Gauhati, Kathihar, etc.

The staff and vendors of the contractors are being taken over, provided they are suitable when departmental catering is extended. The loss sustained by departmental catering establishments on the Southern and South-Eastern Railways may not be used as a clinching argument against departmental catering.

Both in the United Kingdom and in the United States of America, deficits in Railway catering are faced as a common feature. They consider the catering losses are an investment in goodwill.

The plan for the future includes more extensive sale of well-prepared

food packets at cheap prices all over the country, provision of restaurants or dining cars on all important express and long-distance trains, modernising catering equipment and premises, so as to promote hygiene and smartness.

The Indian Railways have a long way to go before they can call their catering establishments 'an investment in goodwill'. But the fact remains they have made a big start. The Southern Railway has taken over departmental catering in the Grand Trunk Express between Bezwada and Delhi, from the 23rd April 1956. It is hoped they will bring their catering on the Grand Trunk Express so as to ensure the same quality catering as at Madras and south of Madras.

Special Drive for Prevention of Claims

The net amount paid by the Railways on account of goods lost or damaged during 1954-55 was Rs. 2,55,45,116 as against Rs. 2,89,22,804 paid in 1953-54. The prevention of claims continued to receive the sustained attention of Railways. The report of Sri B. N. Mullik, Director, Intelligence Bureau, Ministry of Home Affairs, on claims prevention was forwarded to the Railways for implementation of the recommendations.

Measures adopted to prevent claims included periodical observance of 'Stop Rough Handling' and 'P. L. M. CHECK UP' weeks by arranging spot checks at stations, marshalling yards, goods sheds, transhipment sheds and parcel offices with a view to an increasing emphasis being laid on ensuring proper packing, labelling and marking of packages and to impress on all concerned the importance of precautions to be taken; improved method of loading foodgrains; more extensive use of Ellis patent locks on wagons containing valuable commodities between selected points on all Broad Gauge Railways; strengthening the Railway Security Force; keeping close liaison between Railway Security Force Government Railway Police and State Civil Police and intensification of the drive to connect consignments in wagon loads and in smalls lying unconnected at stations and Lost Property Offices.

On each railway a Claims Prevention Organisation has been set up. The function of this organisation is to localise the bad spots for claim, and the commodities mostly susceptible to claim and the causes responsible therefor. The Claims Prevention Officers and Inspectors make regular periodical checks over packing, labelling and handling of consignments in the transit. These checks are of value in determining the course of preventive action. A system of locking wagons with Ellis Patent Lock has been introduced at all important stations where valuable consignments are booked. The E.P. locks cannot be opened without the use of the special implement known as E.P. Key. It is proposed to extend the system of E.P. locks to more stations.

INCREASING LINE CAPACITY BY PROVISION OF CENTRALISED TRAFFIC CONTROL

W. C. LIEBENHALS
Chief Signal & Telecommunication Engineer, Southern Railway

THE term C.T.C. (Centralised Traffic Control) originated in America, but is now generally accepted everywhere. It is defined by the Association of American Railroads as "a term applied to a system of railroad operation by means of which the movement of trains over routes and through blocks on a designated section of track or tracks is directed by signals controlled from a designated point without requiring the use of train orders and without the superiority of trains."

The important features of C.T.C., as defined above, are :—

(1) The actual operation of points and signals at all stations on the section covered by C.T.C. is controlled from a Central Office where any changes in the normal routing of traffic are made, so that quick and direct action can be taken to give effect to them. Better results can thus be achieved by controlling the traffic from a central point than by the existing telephone control system by which orders have to be passed to the Station Masters by the Traffic Controllers.

(2) The whole section covered by C.T.C. is track-circuited to provide continuous protection and to indicate train positions.

(3) Token working which militates against increase in line capacity is dispensed with, as train movements are regulated entirely by signal indications.

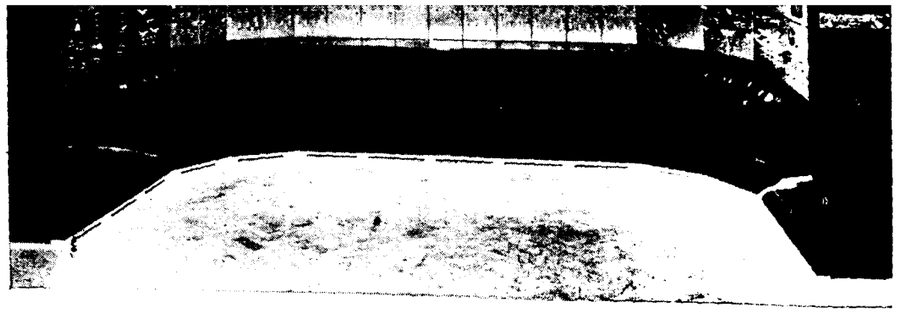
The advantages of C.T.C. from a point of view of increasing line capacity will be best appreciated by comparing the conditions on a section where C.T.C. does not exist. Block working is normally carried out by means of Single Line Block Token Instruments, the result being that the time taken in obtaining and delivering the tokens must always remain a limiting factor in increasing the

capacity of a section. The delivery time is further prolonged in the case of sections where long train loads are running. Another factor which takes up some time is the procedure to be followed for ensuring complete arrival of trains. The operation of points and signals at each station is under the control of the Station Master. Since the train movements of an entire section is controlled by a Train Controller through a Telephone Control System, Station Masters must report the arrival and departure of each train and must contact the Train Controller for instructions, such as crossings in the event of delays, etc. On receipt of the Station Master's message and from the charts and other information at his disposal, the Train Controller must assess the situation and decide what action is to be taken. He communicates his decisions to the Station Masters at the stations involved who put them into effect by arranging for the operation of points and signals for the trains to be received on the roads concerned.

The procedure described above may result in serious traffic delays. A Station Master may be unable to get through to the Train Controller due to the fact that he is attending to other work at the crucial moment—the Station Master at wayside stations has other work to attend to including selling tickets apart from his train passing duties—or the Train Controller may be engaged on another call. While the Train Controller is deciding what action to take, the situation may have changed to such an extent that his decision is in fact not the best one. Even when the Train Controller has arrived at a decision, he may have difficulty in getting into contact with the Station Masters. The Station Master must then contact the station on either side by means of the Block Telephone and make his own decisions. Thus, even if there are no misunderstandings and no wrong action is taken, much time may be lost by this procedure.

Under Centralised Traffic Control, the C.T.C. office receives complete, immediate and continuous information regarding positions and categories of trains and the state of points and signals. The Train Controller, whose place is taken to be in the C.T.C. office, is thus constantly in touch with up-to-the-minute traffic situation and can plan the necessary action in good time. Crossings can be arranged without causing undue delay to trains. All train movements are governed by fixed signals, the aspects of which are controlled from the C.T.C. office, which also has the facility of operating or locking all essential point layouts. One operator alone can control all traffic movements within the C.T.C. territory. The C.T.C. Controller's decisions can be carried into immediate effect without being passed through the station staff. Apart from the direct saving of time in receipt of information and carrying out orders, C.T.C. enables the Controller to make better decisions, resulting in additional saving of time. The time taken for obtaining and delivering the token is entirely eliminated as also the procedure for ensuring complete arrival of trains as the section is completely track-circuited.

The time saving afforded by C.T.C. implies fewer and shorter stops for trains and consequently, greater average speeds, furthermore a greater traffic capacity on existing tracks. Thus when the track capacity is rather low, the installation of C.T.C. may avoid the considerable cost of laying an additional track. In certain countries, especially in America and France, quadruple and double tracks are being reduced to double and single tracks by the provision of C.T.C. which has been found to meet not only the existing capacity of the traffic carried by the former amount of tracks, but also the increased traffic requirements. The cost of maintenance and upkeep of the extra tracks is considerable and their removal affords a very great saving. The fact that



General View of Control Machine
[By kind courtesy of Messrs. Siemens and General Electric Rly. Signal Co., Ltd.]

with C.T.C., the Controller obtains continuous information and can therefore make rapid decisions regarding the movement of traffic, leads to greater flexibility—for instance Mail and Express trains can be given priority in the assurance that they will run to time without needing to delay other trains to any great extent.

C.T.C. is also employed for increasing the capacity of double lines. At present, double lines are worked directionally, trains in one direction taking one line and trains in the opposite direction taking the other line. In the case of double lines in the vicinity of big cities, traffic is usually directional, i.e. more trains will be coming towards the City in the morning and going away from the City in the evening. During these periods, one of the lines will be used to capacity while the other will remain comparatively idle. More trains can be run if this idle capacity of the other line is also utilised, i.e. by running trains both ways on both lines. This can be achieved efficiently by providing C.T.C.

C.T.C. Equipment.

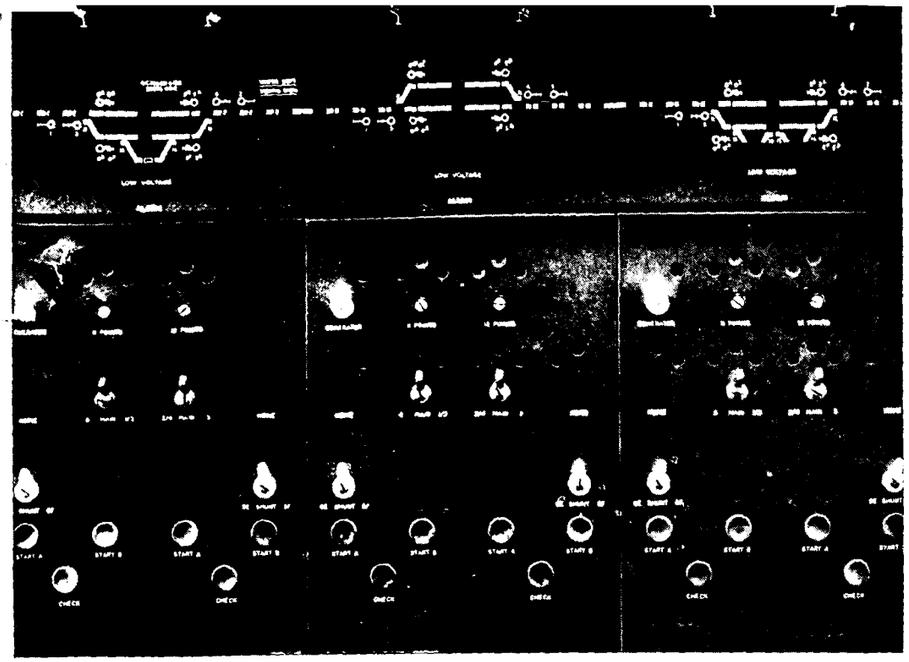
C.T.C. Equipment consists of a Control machine which is located in the Central Office and a Field unit located at every station on the section covered by C.T.C. Only one pair of line wires is necessary throughout the section over which all operational requirements and indications are transmitted in the form of selective coded impulses. Continuous track circuits must be provided throughout the C.T.C. territory to provide continuous protection and to indicate the position of trains. All stations are fully interlocked, points and signals being worked by power, to give self-contained and independent protection. The interlocking system at each station is linked with the C.T.C. by the Field unit provided at each station.

Control Machine

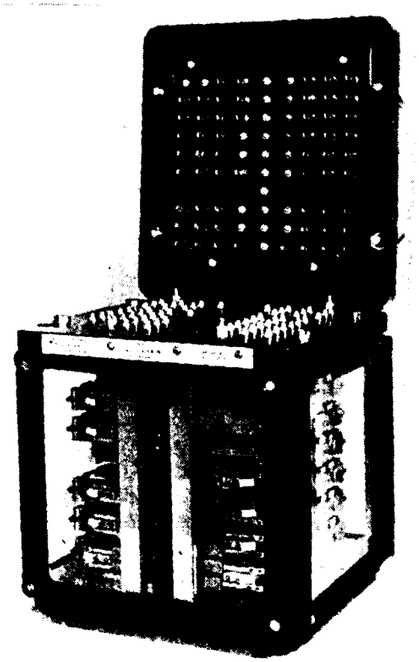
The Control machine consists of a panel on which a miniature diagram of the track, including the layout at each station, together with points and signals, is provided along the top of the panel. Individual lamps indications are provided for each track circuit. Keys to operate points and signals are normally mounted directly below their positions on the diagram. Indications of signal aspects and point positions are associated with their respective operating keys. The Controller can therefore see at a glance from the indications provided on the panel the indication of the tracks, points and signals. Operation is effected by the Controller by just setting the keys of a group to the required position and then pressing a start button at the foot of the panel to get the code impulses in motion.

Field Station Unit

The Field Unit, located at each station, is operated by means of an electrical impulse code transmitted from the Control machine in the Central Office and sends back to the Control Office, in a similar way, information of all changes that take place at that station.



SECTION OF CONTROL MACHINE
[By kind courtesy of Messrs. Siemens and General Electric Railway Signal Co., Ltd.]



FIELD STATION UNIT
(With Detachable Top Lifted)
[By kind courtesy of Messrs. Siemens and General Electric Railway Signal Co., Ltd.]

On receipt of a control code, the field unit puts it into action by operating or releasing the appropriate local point and signal relays and when the required operation is completed, it sends back an indication code to the Central Office after the points and signals, etc. have responded to the positions required. If a track circuit in the vicinity becomes occupied, or having been occupied becomes unoccupied, the field unit also sends back this information to the Controller.

Signal and Interlocking at Stations

Power operation of Points and Signals, i.e. electric point machines and colour light signals are essential to increase the safety factor and to bring about a substantial saving in train operating time since a route is set up in a much shorter period by power operation than by hand operation. The normal complement of signals, Starters, Homes and Distant are provided at each station. If however the distance between stations are long and the density of traffic sufficiently close it may be desirable to employ absolute permissive working in which case signals will be provided for one or more intermediate automatic block sections.

The interlocking between points and signals is effected locally over the same type of signalling relays as used in ordinary power signalling schemes.

Extent of increase in Track Capacity by provision of C.T.C.

The increase in capacity claimed by the various authorities ranges from 50 per cent to 85 per cent depending on local conditions obtaining. An extract from the report by the Economic Commission for Asia and the Far East Inland Transport Committee—Railway Working Party—Note No. E/CN. 11 Trans./Sub. 1/8, page 17, reads as under :—

"*Para* 31 * * * *

The following are some of the advantages claimed by C.T.C. :

(i) * * * * *

(ii) * * * * *

(iii) It increases track capacity by greater utilization of existing facilities. The increased capacity will vary with local conditions between 50 to 85 per cent. Several projects have handled 60—75 trains per day on single track and one Railway reported 93 trains handled in one day.

Para 33

The advantages claimed for C.T.C. are quite considerable. . . . . A questionnaire was accordingly drawn up by the Secretariat and circulated to manufacturers. The following is a summary of their comments to the specific question put to them :

Question No. 1:

To what extent does installation of C.T.C. and Automatic Block do away with the doubling of track and what is the optimum train capacity that can be achieved under these systems ?

Answer:

It is considered that capacity would be raised to the extent of 50—70 per cent of the existing capacity depending on the type of traffic (i.e., through or local) speeds of trains, distance between stations and terminal facilities at either end of the section concerned. Several projects in the United States, it is reported, have handled 60—70 trains per day on single track."

Since local conditions, such as types and speeds of trains, distance between stations, gradients, etc. will vary for different sections, no definite figure giving the extent of increase in capacity by provision of C.T.C. can be stated, as each section will depend on the local conditions obtaining, but if long block sections are split up into shorter sections by the provision of additional crossing stations, a 50 per cent increase in capacity can be safely assumed.

DO YOU KNOW?

M. K. KRISHNAMACHARI

Statistical Officer

DO you know how big our country is and how great the work that is being done by the Indian Railways? That in fact the Indian Railways are among the first half a dozen of the biggest Railways on earth? I am not going to repeat here the reels of figures of ton miles or passenger miles carried on Indian Railways as compared with those of other Railways, which are regularly printed every month by the United Nations Statistical bulletins, and copies of which are available in any decent library. I would rather like to take you now a bit behind the scenes and give you a more intimate glimpse of what the Indian Railways do.

Recently certain special statistics covering on a sample basis the goods traffic carried on the Indian Railways was compiled. These did reveal certain interesting facts.

The maximum distance to which a wagon load of goods was booked ran up to as high a figure as 2,896 miles. This booking was one of mineral oil from Digboi to Cochin Harbour. The booking was via Kanpur and Bezwada. If this traffic had been booked to Mangalore instead of Cochin Harbour, the lead would have totalled up to just over 3,000 miles, and would have probably represented the longest lead of goods traffic movable in this country by rail. And mind you, traffic is normally booked by the shortest available route, though for administrative convenience it may be carried by longer routes. It is very doubtful if any country other than the U.S., the U.S.S.R. or Canada could boast of longer leads than this.

But you may say that this is only an odd instance which proves nothing. While doubtless it is true that leads of over 3,000 miles are definitely the exception rather than the rule, leads of a thousand miles are indeed common. The *average* lead of all "grams and pulse" traffic unloaded on the Southern Railway is as high as 969 miles. And this is no minor commodity. In fact 10 per cent of the earnings of all goods traffic terminating on this Railway is from this group. This traffic moves very considerably from the Punjab, Pepsu, Rajasthan and the Uttar Pradesh to States on the Southern Railway. The longest wagon load consignment represented bookings from Gajsingpur in Bikaner of the State of Rajasthan to Mangalore, a distance of 2,293 miles.

But then, do not Indian Railways also cater to short distance traffic? Certainly they do and to a very considerable extent. And if they do not do this, many a vital commodity would be immovably grounded, owing to inability of the consignment to pay charges by alternate means, or result in woeful increase in the prices of essential commodities. To cite instances let us take sugarcane or limestone. Sugarcane is an important commodity booking nearly a thousand wagons monthly on the Southern Railway. But the booking of this commodity to distances beyond even 25 miles is indeed very rare. The average lead actually for sugarcane works out to barely 11 miles. This emphasises the need for extreme proximity between the sugarcane field and its factory. In the case of limestone the booking happens to be primarily between the quarry and the cement factory which is very closely sited.

But what about bookings of even shorter leads than 25 miles, where are they and are there many? Such cases are indeed too many for enumeration with any degree of completeness. There is for instance quite a bit of

(Continued on page 57)

SOUTHERN RAILWAY

TENDER NOTICE

The Regional Engineer, Southern Railway, Mysore invites SEPARATE SEALED LUMP SUM-CUM-PERCENTAGE SCHEDULE TENDER for Item No. 1 and PERCENTAGE SCHEDULE TENDERS in respect of items Nos. 2 and 3 to reach him not later than 16 hours on Monday the 30th July 1956 :—

Serial No.	District	Name of Work	Total approximate value of the Contract	Earnest money to be paid
			Rs.	Rs.
1	GUNTAKAL	GUNTAKAL—Construction of 54 units Type I Quarters (12 blocks of 4 units and 2 blocks of 3 units each) ..	87,230	4,360
2	BELLARY	MADANAPALLE ROAD — Proposed covering over Platform, Refreshment Room, Upper Class Waiting Room and flushout arrangements, etc. ..	50,700	2,535
3	BELLARY	KADIRI — Proposed extension to III Class Waiting Hall, Upper Class Waiting Room, Platform latrine with flushout arrangements and covering over platform	28,700	1,435

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

3. Tender forms will be issued up to 15 hours on Wednesday the 25th July 1956 only.

4. In the case of Item 1 (Construction of Quarters) the tenderer shall submit a lump-sum quotation for the construction of the quarters separately in the main schedule attached to the tender form. He will also submit a quotation as a percentage above or below the rates shown in the printed schedule of rates for Guntakal District, Mysore Region 1955 for the detailed schedule and the supplementary schedule of items and rates annexed thereto.

5. The earnest money shown above should be paid in advance to the Regional Accounts Officer, Southern Railway, Mysore or the Divisional Accounts Officer, Trichinopoly or Chief Cashier, Madras not later than 15 hours on Thursday, the 26th July, 1956 and the receipt submitted along with the tender. No demand draft or cheque, etc., should be attached to the tender.

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

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

8. The tenders will be opened at 12 hours on Tuesday, the 31st July 1956 at the Office of the Regional Engineer, Mysore.

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

TONSILITIS

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

TONSILS are lympatic structures of almond shape situated in the fauces of the pharynx. They are composed of lymph-follicles about 10 to 18 in each tonsil and enveloped in mucous membrane. An inflammation of the tonsils due to their invation by micro organism of infective type, the more common of which are streptococci and stephylococci, is the condition called Tonsilitis.

Tonsilitis are recurrent infections of the throat and are common in childhood particularly at ages of 5 to 8 when there is exposure to prevailing infections by contact with others of the same age and activities. Sometimes, there may appear to be a hereditary predisposition but factors of climate, hygiene, environment, and nutrition are often more important in the causation of the disease. There are certain specific fevers which tend to affect the tonsils. They are, for example, scarlet fever which is an acute contageous disease accompanied by pyrexia, measles, and diphtheria. Tonsilitis is often associated with acute rheumatism. There is a view that the tonsils are the portals through which the streptococci causing rheumatism gain access to the body. Sometimes an attack of tonsilitis follows an exposure to sewer gas.

In the tonsils there are something like pits on the surface of the mucous membrane which are termed as crypts. The crypts are the natural breeding houses for germs, as they provide almost a protected place for the growth of the germs. The crypts also furnish the proper amount of food substances, moisture and heat to encourage the growth of the germs. This is the condition that usually obtains in the normal tonsils. In unfavourable circumstances like those stated earlier, the inflammation is resulted. Acute tonsilitis may lead to the formation of an abscess with pus. This condition is called as Quinsy. An attack of tonsilitis may commence with a feeling of chilliness or shivering and malaise. Then there is swelling in the throat with pain, tenderness and struggling in swallowing. The pain in the throat spreads to the ears and jaw; the glands in the neck also tend to swell. There is an increase in the temperature—102 to 104—with corresponding increase in the rate of pulse. The breath is offensive in odour and the tongue gets thickly coated. Yellow spots of inspissated mucous, i.e., mucous gone dry by the evaporation of easily vaporisable substances, appear in the tonsillar crypts. These are different from the membraneous patch of diphtheria and there it should be differentiated correctly by the aid of laboratory tests. On no account should a case of diphtheria be missed either by the patient or by the oversight of a doctor and only a laboratory test of a swab taken from the throat will settle the diagnosis in doubtful cases. The reason why I am emphasising this is because fatal cases have occurred by not diagnosing diphtheria in the early stages.

Acute tonsilitis lasts usually from three to eight days. Aspirin is useful to relieve the pain and mixture containing sodium salicylate is also given. At the beginning of the illness, a purge is also usually prescribed. As the casual organism is the streptococcus pyogenes, it has become a custom to prescribe sulphanilamide. For local application a throat paint is prescribed

and a resorcinol or glycerine acid tonic is found to be soothing to the irritated area. Of course, penicillin is prescribed for more severe cases. If the disease is recurring often, it must be ascertained whether there is dental sepsis or other external source of infection. If there is none of these, the tonsils should be removed after an interval of atleast six to seven weeks.

Chronic tonsilitis occurs in children and it is associated with adenoids. It leads to the enlargement of the tonsils which may meet even across the middle line of the throat. The lymphoid tissue of which the tonsil is composed is one of the body's first line of defence against attack by micro organisms capable of infection. But these enlarged tonsils are so abnormal in structure and function that they fail to serve as defensive agents and they also interfere seriously with the general health of the patient, particularly the growth. Therefore it becomes necessary to remove them surgically. A word of caution must be mentioned that indiscriminate recourse to surgical treatment will only mean a loss of a defensive mechanism in the system. Only when drug therapy and local applications fail and when the attacks are persistent, operative methods must be considered and anything must be done only under competent medical advice. I would like to inform the readers that children must first be taken to a doctor and His advice sought for in all cases. The operation of tonsil has become a simple procedure and it is being done in the Railway hospital, particularly at Perambur and Hubli.

HUMP CLASSIFICATION YARDS

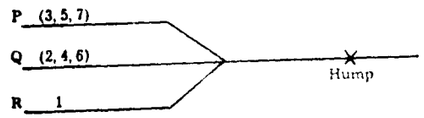
II

T. S. PARTHASARATHY

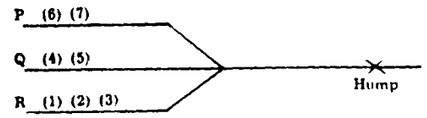
Methods of Operating Hump Yards

IF single work trains have to be formed on the minimum number of tracks with loads in station order, the Belgian method, which is described below is the best.

A number of loads for 7 destinations requiring to be marshalled on 3 tracks, viz., P, Q and R can be finished in two humpings as indicated below. First humping



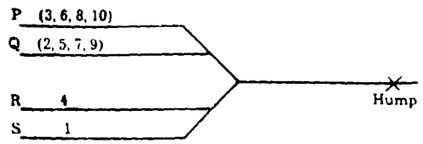
The wagons on track P are then drawn out and placed against the wagons on track Q and then the whole lead is drawn out and humped again according to the following scheme:



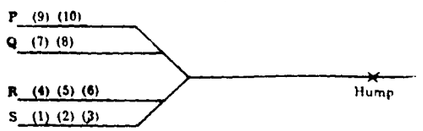
After combining the parts on track R, the train is ready.

Trains with loads for 10 different destinations can be formed on 4 tracks P, Q, R and S according to the following scheme:

After first humping



After second humping



Trains with loads for 13 different destinations can also be formed on 4 tracks. In general, on 'N' tracks one can marshal loads for 1 N (N-1) destinations.

If enough tracks are not available, more humpings will have to be done. A train with 8 destinations can be formed on 2 tracks after 3 humpings and for 10 destinations after 4 humpings. The Belgian method is useful for forming single trains on a limited number of tracks.

Simultaneous Marshalling of more than one train

This method was originally invented in France and is now being followed in France, Holland and Switzerland. Larger marshalling yards will have to form more than one local goods train or work train with loads in station order and forming them one by one will mean a waste of time and tracks. The French method of simultaneous marshalling of many trains is based on what is called the "Progressive arithmetic series" which is reproduced below for 9 tracks. The series can be extended *ad libitum*.

1st track	(1)	3	5	8	12	17	23	30	38
2nd track		(2)	6	9	13	18	24	31	39
3rd track			(4)	10	14	19	25	32	40
4th track				(7)	15	20	26	33	41
5th track					(11)	21	27	34	42
6th track						(16)	28	35	43
7th track							(22)	36	44
8th track								(29)	45
9th track									(37)

1, 2, 4, 7, 11, 16, 22, 29, 37 (all bracketed) form the progressive arithmetic series, the differences between destination numbers being:

1, 2, 3, 4, 5, 6, 7 and 8

Also the destination numbers on all tracks form similar series except for the first number which has, therefore, been indicated with a bracket.

Formula: The number of destinations which can be handled on 'N' tracks is

$$\frac{N}{2} \times (N \times 1)$$

Practical Example

Suppose shunting and road goods trains A, B and C have to be formed each with loads for 10 destinations in station order. The destinations will be marked on the wagons as A 1—A 10, B 1—B 10 and C 1—C 10. Four tracks will be required for humping for 10 destinations and 2 more tracks for forming trains B and C. The situation on each of the 6 tracks after each humping is given below:—

Total 5 humpings.

Track No.	1st	2nd	3rd	4th	5th
1.	(1,3,5,8)	A 1	A 1-3	A 1-6	A 1-10
2.	(2,6,9)	(2,6,9)(3)	Empty	Empty	Empty
3.	(4,10)	(4,10)(5)	(4,10)(5)(6)	Empty	Empty
4.	(7)	(7)(8)	(7)(8)(9)	(7)(8)(9)(10)	Empty
5.	Empty	B 1	B 1-3	B 1-6	B 1-10
6.	Empty	C 1	C 1-3	C 1-6	C 1-10

It is generally considered that more than 50 per cent of the time formerly required can be saved by this method. The brakevans of the different trains can also be marshalled in their respective places by being given a destination number. The greater the number of destinations, the greater the advantage.

Introducing New Methods:

In both the Belgian and French methods, an intelligent way of marking the wagons before they are humped is essential and, as a matter of fact, is the secret behind the success of the scheme. In every yard, hump or flat, shunters have a rough method of marking the wagons with chalk which they erase later. To adopt the improved methods, clear and systematic marking will be necessary and a few intelligent men can always be trained suitably in each yard.

When new methods are introduced, there is bound to be a certain amount of opposition from yard staff who are used to a certain method throughout their lives. In flat yards, the problem should be approached carefully and interest in the new methods aroused in staff before they are introduced. Campaigns should reach the higher grades first who can then be trained to teach the staff below gradually. The problem is not so difficult in hump yards where fewer men are to be instructed and fairly high-paid staff are in charge of humping.

Some Well-known Marshalling Yards:

In the light of the general description of marshalling yards given in this article, the important features and the working of some well-known marshalling yards of the world will be examined below:—

United States of America

(a) The Markham Yard of the Illinois Central Railroad, extending between Harvey and Homewood (a distance of 3½ miles is the main terminal yard of the Railway in its Chicago territory and one of the largest goods classification yards in operation in the world. It contains about 120 miles of track with an aggregate capacity of 9,000 bogie wagons. (American railroads have no four-wheeled goods stock.) It is located 20 miles south of South Water Street Freight House Terminal in Chicago and is the northern terminus of through goods train operations. The construction of this yard was started in 1917 but it was not opened for operation until 1926. It was completely modernized in 1952. Among its important features are:

(i) Electric car retarders and push button control of switches in each classification yard.

(ii) Flood light illumination by means of batteries of electric lights on high towers.

(iii) Plate fulcrum scales on each hump with automatic recording devices.

(iv) Pneumatic tubes for handling way-bills to and from General Yard Office.

(v) Teletype machines for writing cutting lists in the various switch towers and Hump Yard Master's Office.

(vi) Loud-speaker inter-communication system between Yard Master's Office and towermen in the classification yard.

(vii) Colour light signals for controlling the movement of pushing engines while humping.

(viii) Automatic telephones.

(ix) Mechanical terminal for housing locomotives.

(x) Repair yard.

(xi) Radio telephone service on hump.

The yard consists of two major units —one for north-bound traffic and the other for south-bound traffic. Each unit consists of a receiving yard, a hump classification yard and a departure yard.

Retarders

Wagon retarders have been installed on each lead between the crest of the humps and the classification tracks to control the speed of wagons and permit them to enter the classification tracks at the proper speed. The grades of the classification tracks are such that under normal weather conditions, the wagons will maintain the speed at which they enter the track. The retarders consist of a series of brake-shoes placed along each side of each rail which grip both sides of the wheels as they pass through.

The installation on the north-bound hump is electro-pneumatic while that on the south-bound is entirely electric. On the electro-pneumatic there are four different pressures and the

A general view of the Whitemoor Marshalling Yard in England described in this article

operator uses whichever pressure in his judgment is necessary to reduce the speed of the wagon. On the south-bound hump this bearing pressure is obtained by means of position; that is, the distance between the faces of the shoes is the least when the operator desires to get the greatest retardation.

There are two towermen controlling the retarders and one the routing of wagons in the north-bound yard and one towerman controlling the retarders and one the routing of wagons in the south-bound yard. Each of these towermen has a cutting list showing the destination of the wagons. The speed of the wagons can be controlled so accurately by experienced operators that they can be delivered uniformly to the proper classification tracks with sufficient speed to couple up with the next wagon in line without undue shock to wagons or their contents.

Illumination

Markham Yard is designed to operate twenty-four hours a day and this makes it necessary to have adequate lighting. Powerful batteries of electric projectors at the top of steel towers 90 to 100 feet high at proper locations in the yard provide the necessary illumination for night operation. Forty-five projectors are used in illuminating intensively an area of approximately 1,200,000 square metres. So powerful are these lights that comparatively small type can be read at a distance of 2,000 feet away from a tower battery when the weather is reasonably clear and the illumination is sufficient for the efficient operation of the yard at night even in foggy and stormy weather.

Scales

Just over the apex of each hump, there is a plate fulcrum scale of 181,000 KG. (approximately 90,000 lbs.) capacity. Before weighing, the wagons are uncoupled and separated from each other. The platform is of such length that the wagon is on the scale for at least three seconds when humping is at the rate of three wagons a minute. This is sufficient time for the automatic recording device to register the weight of the wagon. It is the practice to check-weigh some trains every day, which permits the Railway Company to keep an accurate check on weight of wagons at other destinations on the railway without additional cost for weighing. During cold weather the scale pit is heated by means of a hot water plant so that a uniform temperature is maintained throughout the year and no difficulty is experienced in keeping the scale in proper adjustment and weighing correctly.

Pneumatic Tubes

The yard is equipped with a system of pneumatic tubes extending between the various offices and the general yard office. When trains arrive in the yard, conductors immediately place the way-bills in a carrier and this is sent to the general yard office. There the bills are checked both as to destination and billing instructions and from this information a switching list is prepared for the hump foreman, and sent to him and the tower operators by means of the teletype machines. When the wagons are assembled in trains in the departure yard, information is furnished to the general yard office as to the formation of the train and way-bills are sent by pneumatic tube to the office at the departure end of the yard. This not only enables the speeding up of all the operations in the yard but also does away with messengers and means of transporting them that would otherwise be necessary.

Teletype machines are used for the printing of switching lists in each of the hump yard master's offices and in the towers. The master machine is kept in the General Yard Office and when the destinations of all wagons in the train have been checked, the operator in the yard office types this

on a continuous roll of paper showing thereon the following information :—

Location in the cut numbering from the head-end.
Wagon number and code.
Contents.
Destination of the wagon by station and railway.
Number of the track in the yard.
Heavy or light load.

All this information is reproduced in the Hump Yard Master's Office and the towers of the respective units. Every towerman and the Yard Master therefore knows the destination of each wagon which comes over the hump and can determine from the contents whether it is heavily loaded or otherwise and knows in a general way what amount of retardation to give to each wagon as it approaches the classification track.

Each Hump Yard Master's Office and tower is equipped with a microphone and loud-speaker so that a conversation can be carried on between the Yard Master and the towerman. Sometimes it is necessary in the operation of the hump quickly to change the destination of a wagon on account of faulty preparation of the cutting list or the track filling up. Under these conditions, the Yard Master merely transmits this information to all towermen by means of the intercommunication system and there is no delay in the hump operation.

Red, green and yellow colour-light signals are maintained on the hump, facing the pushing engine and are under the control of the Hump Yard Master, who controls the actions of the drivers through them. These signals permit him to vary the speed of the pushing engine and, of course, to stop the humping at any time. The distance from the extreme end of the cut is such that it is necessary to place repeater signals about half-way through the receiving yard in order that the driver may always have a clear view of the signal.

(b) Marion Yard

This is the second largest yard on the Erie System, being exceeded in size only by the yard at Jersey City, New Jersey. The total wagon capacity of Marion Yard is 6,600 and the total length of track is about 70 miles. This yard contains all the important features of the Markham Yard.

A teletype system, typewriting by wire, connects principal Erie yards with the general offices in New York, Cleveland and Chicago. Wagon-by-wagon train lists of all east-bound and west-bound trains leaving principal through-train yards, including Marion, are teletyped to the general offices and to the next advance through-train yard to permit the furnishing of information quickly as to the location of wagon and to further expedite their movement through yards.

2. United Kingdom

(a) The Toton Marshalling Yards, Up and Down, completely remodelled and enlarged in 1949-50, are Britain's typical marshalling yards. The up yard is equipped with automatic switching and Froelich electro-pneumatic car retarders. There are 10 arrival lines provided with position light humping signals repeated as necessary. Some are double-sided and have a unique system of applicability indication in the form of wing lights since the signals are only installed between alternate arrival lines. The routes into the 35 sorting sidings are set from the hump room from a panel which controls also the position light humping speed signals.

The teletypewriter system transmits information from the hump room to control tower where there is an illuminated panel diagram of the track circuited point area leading into the sidings. From this panel which is normally set for automatic working, the points can be turned to correct an overtaking shunt or send an engine into the sidings to correct a wrong shunt or close the wagons together. All the

shunting engines are 350 HP 0-6-0 Diesel electric.

Toton Up Yard dealt with nearly a million wagons during 1951 and this is not considered the maximum capacity. 3,948 wagons can be sorted in 24 hours on an eight-hour turn of duty schedule. The work of the operator in the hump room is to set the routes by depressing appropriate buttons after reading the number of the sidings written with chalk on the leading wagon of each cut. He also depresses a button on a smaller bank to indicate the numbers of vehicles in the cut. Both indicators are sent by tele-typewriters to the operator in the control tower.

In Toton Down Yard all the points are electro-pneumatically operated but those beyond the "Jack" points are moved as required by turning switches on the panel in the control tower. This yard deals with an average of 3,500 wagons daily but up to 5,000 wagons a day were sorted on occasions during the war.

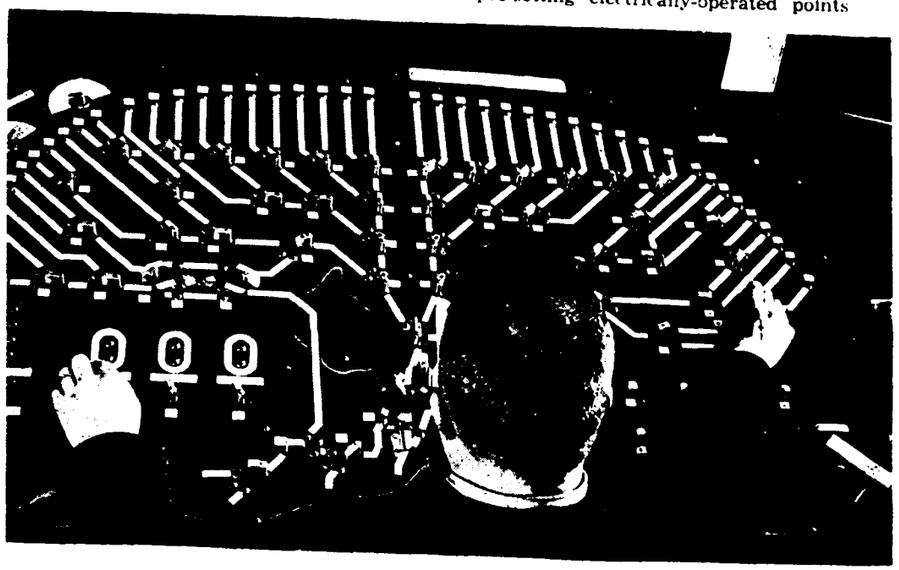
(b) The Whitemoor Marshalling Yard is the biggest in England and is two-and-a-half miles long, a mile wide and contains 70 miles of track. Working non-stop, Whitemoor handles 7,000 wagons a day and if ever it went out of action, the food and coal supplies of millions would be thrown into chaos.

Situated 30 miles north of Cambridge, Whitemoor is the meeting point of the railroad networks serving the coalfields of the Midlands and Yorkshire, the farming country of East Anglia and the Docks of London, Harwich, the North-East and North-West Ports.

Into Whitemoor come goods trains destined for all parts of England and the job is to separate wagons intended for the same direction and make them up into new goods trains. Regional Centres, each covering about 500 miles of lines, keep Whitemoor constantly informed of all wagon movements in the area. This enables the authorities to plan in advance for the shunting of wagons as they come in. But they have also to be prepared to cope with last minute changes and not to be bound by a rigid time-table.

There are the usual 'up' and 'down' yards. Incoming trains in the reception sidings are checked for damage and

Switchboard operator in Whitemoor Yard pre-setting electrically-operated points



mechanical faults (the faulty stock is shunted into a "cripple siding") and a shunter or "cutter up" marks on a "cut card" what should be done with each wagon. The train is then pushed to the top of a hump and from there the wagons run down on their own into the appropriate sidings. At the foot of the hump is a control tower where a switchboard operator receives a copy of the cut card. He presets the electrically-controlled points leading from the hump to the sidings and the settings are "stored up" in a machine till the wagons start to roll down. The first wagon over the points automatically sets them for the next cut and this goes on till all the wagons to be sorted have been run into the sorting sidings to form the new trains.

3. France

The Acheres Marshalling Yard, one of the forty "primary" marshalling yards of the French National Railways, is located about 12 miles from Paris. It handles traffic between Normandy and the rest of the French National Railway's system in both directions. The yard is situated at the junction of the "outer belt" line, the Paris-Rouen Line and the Paris-Pontoise Line.

The installations comprise:

(a) A reception yard consisting of 11 tracks of 770 metres length.

(b) A sorting yard of 30 tracks of 770 metres effective length. At either side there are 4 tracks for making up trains and holding them prior to departure.

(c) A group of 5 waiting sidings of about 700 metres.

(d) A yard for repair of loads and emergency wagon repairs.

(e) The train-sorting yard consists of 5 groups of 8 tracks. The head switches for this section are electrically-worked and are automatically controlled from an "R. Levi" ball-type switching machine. (A working model of this machine has been provided in the model room of the United Nations Railway Training Centre at Lahore.) Each itinerary (from the hump to the particular sorting siding) is selected by the hump master, who pushes a numbered button as the wagon passes over the hump. The route is then set up as the wagon proceeds. Each of the five groups of sidings has a Westinghouse Type Electro-pneumatic retarder which is controlled from the central control post. At the main hump, the use of track circuit has been made by means of two cross beams of light focussed on to two photo-electric cells and a wagon cutting the beam causes the setting of the king point ahead according to the storing of the cuts.

(f) Position light signal is given to the shunting engine driver. An indicating board shows luminous figures on a dial, thus indicating in order of arrival at the hump, the destination track number of the last 5 sortings, providing a connection between the hump master and the sorting staff (yard master and the retarder operator).

(g) Two-way radio communication has been provided between the two humps and drivers; each of the humps and each shunting locomotive has a transmitter-receiver, while loud-speaker installations are fitted in the reception, sorting and formation yards.

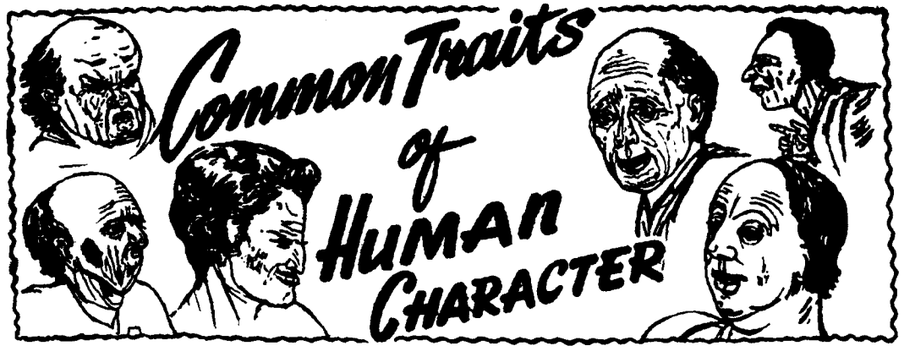
(To be continued)

DO YOU KNOW

Continued from page 45

booking of wagons from the Madras harbour to suburban stations and sidings to distances of 4 and 5 miles even. Thus there is frequent booking to the Madras Mill siding of the Buckingham Mill, or to Perambur Works to feed the Integral Coach Factory.

This short resume of leads of wagon load traffic would at once show how limited is the idea one gets in trying to judge rail movements by figures of the "average distance a wagon moves" or "a ton of goods is carried," and how complex and variegated rail movement in India really is.



14. SURLINESS

S. R. SRINIVASARAGHAVAN

Integral Coach Factory

SURLINESS is incivility in word and deed, in speech and behaviour. The surly man is offended by the least provocation, in fact, by no provocation at all. He expects the people around him to know his thoughts without asking him any questions and is incivil towards the most inoffensive individual. He shows contempt towards all men and happenings; the pettiest things make him lose his temper.

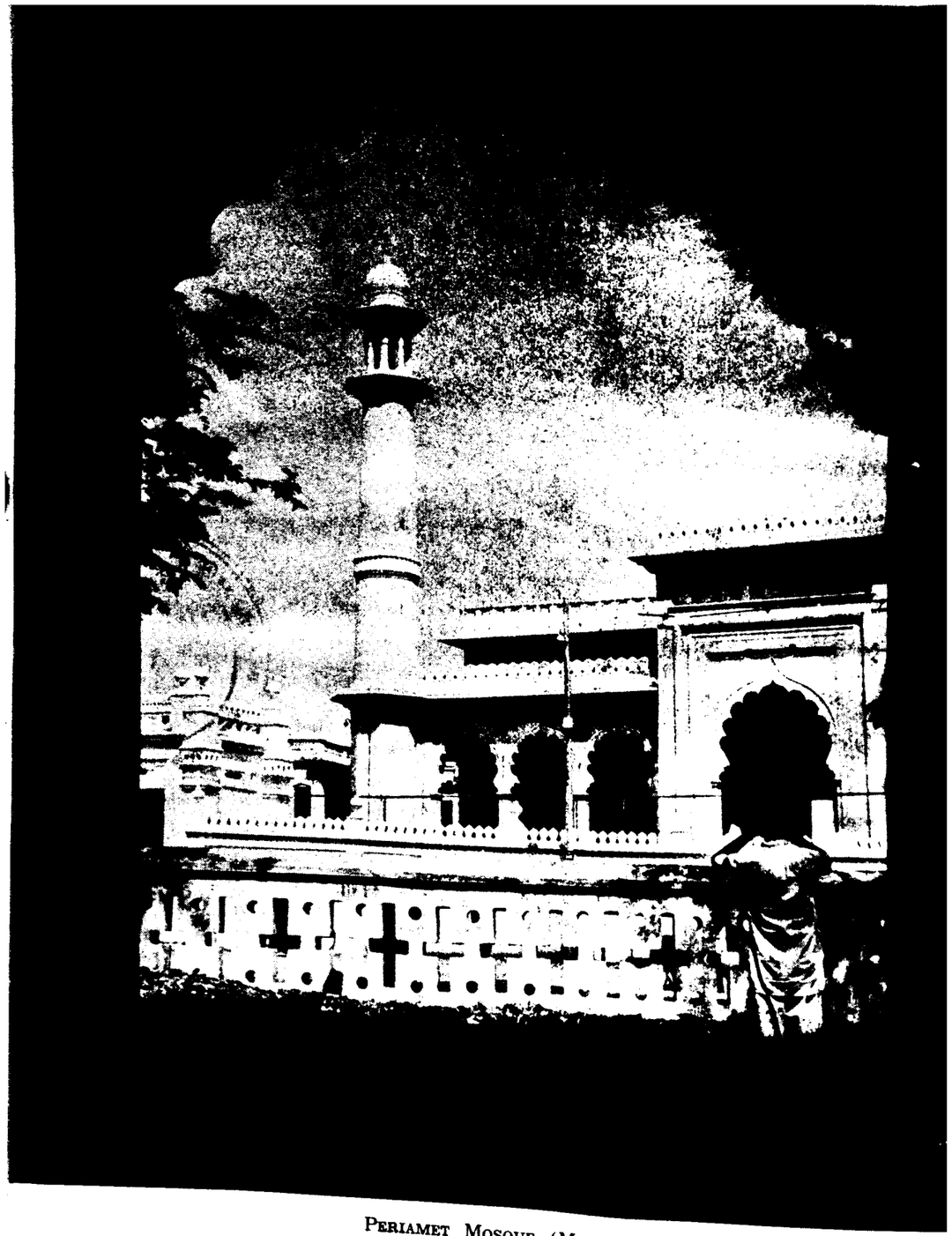
The surly man is not naturally sociable and avoids company; to be exact, company avoids him. He swears at his wife, is rude to his child and offends his neighbour. Even inanimate things like a piece of stone, a banana leaf and a rush of air provoke him into crude pronouncements. He does not think logically and gets irritated even on occasions that need some self-searching.

The semi-historical account of the law-giver Chanakya burning a piece of grass which toppled him is interpreted as representing a strong will, but somehow I feel that it was an act of surliness.

Surliness, naturally, is not a social virtue, because it is against all civility which is the essential quality necessary to keep friends. Surliness towards a lifeless thing is harmless and in fact serves as a piece of humour for the casual observer. But even a cat would protest against any surly act, if pointed against it. Western legend has given us the story of King Cresus and his cat which jumped to his dinner table as many times as the monarch threw it down in a state of temper. I have heard an account of one of our forebears who was so surly as to knock off the window door of his house while there was a stormy atmosphere prevailing in the place; perhaps the window offended him by beating fast against the frame in the wind. He ought to have lived an example of surliness.

Surliness may sometimes represent a curedly philosophic temper. There are some men amidst us, 'far from the madding crowd's ignoble strife' who live a life of seclusion and feel impatient of the pettiest human frailty. They feel offended by the least disturbance to their solemnity and hate half-digested discussions done in their presence. I am at a loss to say whether such characters can be called surly.

Theophrastos says that the surly man has no pardon for anyone who has accidentally bespattered him with mud or jostled him or trodden on his foot. "If he trips on the road he is sure to curse the stone. He will not submit to be kept waiting for anyone, and will refuse to sing or recite or dance, possibly, too, he does not pray to the gods."



PERIAMET MOSQUE (MADRAS)

GITA PRINCIPLE ENUNCIATED IN THE SINGLE FILE SYSTEM

K. S.

WHICH, in the beginning, is as venom and in the end as Nectar is the happiness of the Good order and which is as Nectar in the beginning and ends in unhappiness is the happiness of the dull order (Thamasik). This is what Gita says in the 18th Chapter, which is described as Karmasanyasayoga.

" Yethadagre Vishamiva
Parinnamemruthopamam
Thathsukham Sathvikam
Proktham . . . ."

In the case of the Single File System, there will be, in the beginning, some delay to files due to the staff not being able to know what to do at the various stages about putting up papers, despatching them to other offices and the method of dealing with papers. In practice, many difficulties are experienced in the initial stages. As soon as a file is put up and sent to other branches, staff find it difficult to trace where it has gone. It looks as if the whole file has disappeared and also it takes some time to see the file again. It must at the outset be pointed out that the Single File System is a record of the various endorsements of the various officers and the staff who deal with the case. It is unity in diversity. There are the endorsements of all the staff and orders of all officers who deal with the case in the various departments at various stages.

When one file is to go from one branch to another branch a circulation slip is to be attached and the file should go through the circulation centres. The basic principle of the Single File System is that only one subject should be dealt with in one file. There should be only one major file in Headquarters Office for one major subject. Such a file dealing with one subject will, therefore, be comprehensive and will contain all endorsements on the subject. Different branches concerned with the same subject will deal with the subject on the single-file, noting and issuing letters on the same file on behalf of the General Manager. Only one letter will be issued on a subject to an addressee at a time. If a letter is received with more than one subject in it, extracts should be taken and placed on the appropriate file, leaving a brief note on the original.

Each subject is given a specific heading and a number. A Major Heading is given for a major subject which can be subdivided into sub-subjects and further into minor subjects. The policy file on a major subject will bear the number of the index of major heading followed by the letter 'P' with an oblique line. The General Manager, Southern Railway has issued a special circular on the Single File System which contains various details of procedure in opening and dealing with files under this system.

Headings have been distributed to the branches according to the nature of work done in each branch, i.e., all Civil Engineering, Bridge and Permanent-way works have been included in the Engineering Branch and no other branch will open files on these subjects or allied subjects. Code abbreviations for headings have also been given such as 'B' for Budget, 'C' for Commercial, 'G' for General, 'PUB' for Publicity, etc. 14 such code abbreviations have been introduced. Alterations of major headings and adding of any new major headings to those which exist should get the previous concurrence of Senior Deputy General Manager.

The index of headings will give only branch wise distribution of main subjects and the index number allotted to each main subject. Under each

major head several sub and minor files will have to be opened and each branch should maintain a register of files. Major headings should be written on the top in red ink and fresh loose-leaves can be inserted suitably when more sub files or minor files are opened and the Files Register is kept in the custody of the head-clerk of the branch.

From 7th May 1956, this Single File System has been introduced in the Headquarters Offices of the Southern Railway.

There is a system of division wise splitting of major headings. For instance W. 101/A for headquarters and W. 101/B for Bezwada Division, etc.

These details are given in the Procedural Office Order issued in connection with the introduction of the Single File System.

Where a division wise splitting is not possible, the major subjects may be split according to the sub-subjects or according to individual items or according to organisations. Minor files should be numbered serially with the index number (file number) preceding. In Claims and Refunds Sections of the Commercial Branch, minor files may be numbered upto 10,000 followed by the last two digits of the calendar year of opening.

All existing files which are still current, but which refer to subjects allotted to other branches should be handed over to the respective branches concerned for example all current files in Transportation Branch which are now included in Works Branch will have to be handed over to the respective branch for being kept there.

All letters received in the Headquarters Office will be known as 'Receipts', which will refer to one of the branches of the Headquarters Office. The District or Divisional Offices will send the letters in separate covers addressed to G.M. (Works), G.M. (Transportation), etc. The Record Sections of the branches and the Central Receipts Section will each maintain a 'Receipts Register'.

A file contains two parts—the Correspondence portion on the left-hand side and the Noting portion on the right-hand side. Approved drafts, which are not to be filed, may be kept under the tape on the inner left-hand side cover and the same will be destroyed after the issue of letters unless the drafts are considered very important and have to be preserved. There will be no noting on the left-hand side, i.e., correspondence side. On the Noting side only foolscap sheets should be used and both pages of the sheet should be used. If on a page of the Noting some space is left, the page should be completed before a fresh page is attached.

There should be no correspondence official or demi-official between officers at the Headquarters Office. This will eliminate a lot of unnecessary correspondence. If an officer of one branch likes to draw the attention of an officer of another branch, a note to that effect should be putup and the file should be sent to the officer concerned.

Each branch will have a file circulating centre which centre will maintain two registers, one for parent files and another for other branches. These registers are called the File Circulation Registers. If a file is marked to an officer of another branch, the file will first be recorded in the File Circulation Centre of the parent branch and then the file will be sent to the File Circulating Centre of the branch to which it is marked. For example if an officer of the Works Branch wants to refer a matter to the Law Officer, the file will go to the Works Branch Circulation Centre, where it will be recorded and forwarded to the Commercial Branch Circulation Centre as the Law Section is attached to Commercial branch and then sent to the Law Officer by the Commercial Branch Circulation Centre. Here there is the record of files as having been received. The

question of issuing D.Os. is practically eliminated. Endorsements are properly made and movement of files recorded.

There is a Central Despatch Section for the Headquarters Office receiving letters from the various Circulation Centres. The Despatch Section will make out triplicate challans entering letters in the respective challans. After entering the letters in the challans, they will be put in the pigeonholes. One copy of the challan is to be kept as record in the Despatch Register and two copies sent with the letters. At the receiving end, the cover is checked with the challans.

Railway Board tapals will be opened by the Secretary to General Manager, and registered in a special register maintained for the purpose. Similarly all letters to the Board will be entered in a special register after being closed in the presence of the Secretary.

There will be a Central Confidential Section, where confidential files of all branches will be maintained. Confidential references are attached to the appropriate file and the file will be taken to the officer concerned by a member of the Confidential Section. After the files are dealt with by the concerned officer, the same will be returned to the Confidential Section.

By the introduction of the Single File System correspondence is considerably reduced, as correspondence between the branches of the Headquarters Office is totally forbidden. Delay due to interchange of correspondence is avoided. Linking of files is avoided to a large extent. Paper work and clerical labour on the whole are reduced.

Difficulties such as delays in attaching letters and receipts and detention of files are some of the drawbacks which have to be avoided. Officers and staff have to be meticulously careful about dealing with the files and the preservation of files because it will be very difficult to re-construct the file particularly the noting portion containing notes of all branches. After the staff have settled down to the Single File System, it will be found beneficial on the whole. Indeed in the beginning there will be lot of inconveniences, delay and difficulties in dealing with the files and tracing the files. But in the end, as pointed out in the beginning of this article, it will be a beneficial system.

Single File System for every case minimises confusion; ensures and facilitates concentration. In spite of the Kaleidoscopic variety of the endorsements and notes, letters and comments of various officers and staff of the several departments in one file, the single file system ensures co-ordination given by the final decision presumably by the G.M. or somebody on behalf of G.M. and thus ensures unity in diversity.

THE ART OF "MAKING FACES"

V. S. SHANTHALAKSHMI

JUST think for a moment how important a part of you the face really is. It is the shop window of a whole personality. If the goods in it are tawdry, bizarre, flashy, and second-hand, if they repel, if they are too obviously false, then the shop badly needs to be under a new and improved management.

The chief aim while making a face must be to emphasise its natural beauty, apart from concealing and mitigating its blemishes and faults. Thus the achievement of feminine glamour calls for the same principles of display as concern successful salesmanship. Shop windows invariably present the most superior merchandise contained in the stores. Advertisements in newspapers and magazines always expound upon the most meritorious points of the articles whose purchase they advocate.

So too, women should present themselves to the world with their most attractive features distinctly emphasised and their blemishes artfully concealed. This idea is neither foreign nor modern. Our most ancient civilization boasted as elaborate an art of make-up and hair dressing as does Hollywood today. It was merely a matter of showmanship.

While buying your artificial aids to beauty you should be careful to choose the shade of make-up (foundation or powder) that goes with your own natural colouring, and the type of skin yours is. To discover which type of skin yours is, take a mirror to the brightest daylight available and look at the skin just below your collar-bone, and out towards your shoulder. You will get a much better indication of your true skin tone in this way than through the colour of your complexion which may be affected by exposure to winter winds or summer sunshine. Never use a white face-powder. Always choose a shade slightly darker than your own skin and supplement it with another that is exactly one shade lighter.

Age must also be taken into consideration. The girl in her late teens may use a touch of face-powder, a faint dab of natural-colour lip-stick. The woman in her twenties and thirties is at a safe age for experimenting with various kinds of make-up. But scrupulous care of the skin will reap a rich reward that will last well into old age. And as you advance in years you must decrease your make-up; use softer shades, paler lip-sticks, very little or no rouge and practically no eye make-up. All your cosmetics have a little bearing on the choice of colour of your clothes too. For example, avoid using orange tones of make-up with clothes that have blues and pinks, and *vice versa*. Powder, base, lip-stick and rouge must match at all times not only with your clothes but with each other as well.

Good taste in the choice of make-up has it that your morning make-up must be laid on with a lighter touch than that of the evening. It is a good rule to accent natural colouring during the day and use dark or brilliant lip-stick and a lighter shade of powder for the evening. The most ordinary precautions to take are not to smudge the lip line, and always to blend the rouge cunningly into the skin so that no harsh edges are left to the blush on the cheek.

Successful make-up depends a lot on the correct choice of a powder foundations. You have a choice of vanishing creams which may be white or delicately tinted, complexion milk, foundation creams and the block type of make-up base. Vanishing creams and complexion milks are suitable for a light make-up. Women either like vanishing creams or detest them, because the vanishing cream which suits one woman may be disastrous for another. It is only by trial and error that you can discover which of

these particular creams is good for you. As a rule, vanishing creams are suitable for the normal complexion. Some of them contain glycerine and many women dislike this. One objection to glycerine is that it has a tendency to absorb water after it has been applied to the skin, which makes the face look as if it has perspired after it has been powdered. A high percentage of glycerine may also irritate a supersensitive skin. Complexion milks is also used for light make-up. But liquid foundations and block type powder foundations are suitable for only heavier make-up.

I am afraid I may sound a little presumptuous if I try to tell you how to powder your face. But there is a right way and a wrong way in doing that too; and there is no harm done if I touch on that also. The way to apply powder is to use a soft clean puff or a piece of cotton-wool and dust the powder over your face beginning with the chin and working upwards. The powder should be pressed well into the corners of the nose where the shine is most likely to appear. After the face has been powdered, take a clean piece of cotton-wool, or better still a powder-brush, and brush the surplus powder away. The powder-brush helps to blend the make-up and achieve a well-finished effect.

The study of the shape of one's face is also a must in a successful make-up. But we should never forget that health, character, disposition and the ability to look on the bright side of life are natural aids to beauty. Good health gives you soft, smooth cheeks and a radiant complexion. A happy disposition lends sparkle and sweetness to your face. Learn to keep the muscles of your face relaxed. The most charming expression a woman can cultivate is to look as though she is on the brink of a smile.

Children's CORNER

"The Battle of the Giants"

THERE is a well-known and wise saying that pride always ends up some day in a fall. Even amongst those whom we know as friends or playmates, we have perhaps found a boy or girl who is always boasting that he or she can always do something better than others, but when it comes to the real test, they find that there is someone who can beat them at their own skill or game. So our story this month, is about two giants, and what happened to them when they boasted too much.

Once upon a time there lived some people in a lovely and beautiful valley between two mountain ranges. For a long, long time, these people were very happy, as they had everything they needed in their valley. They had nice homes, plenty to eat and drink, as they grew their own food, and had cows and sheep and goats and pigs. There was also a broad river running through this valley which gave them all the water they wanted, as well as all the fish they desired for food. These people worked hard and when work was over, they played hard too, and sang and danced, and quite often had festivals, at which old men and old women, men and maidens and all the children, including the little toddlers would gather to make merry.

The people of the valley lived in this happy and peaceful way until two giants suddenly turned up in the mountains and made their homes on either side of the valley. First came one giant, a huge, ugly and hulking fellow, with great strength and a booming voice that could roar like ten lions. He stalked through the peaceful valley, and coming to the town, would roar, "Listen, all you little people. I've come to live here in the mountain on the left side of your valley, and I have no house. So I want at least one hundred of your strongest young men first to build my home, and from now on you must feed me with the best of your crops and cattle and your sheep and goats and pigs. Each day you will kill and cook for me, and you must bring forth from your cellars the best wine you have for me to drink. My orders are given; now go to work at once. To disobey will mean death."

The peace-loving valley people at first did not know what to do. They had never been bullied by anyone before. They thought they would refuse, but then they knew that this huge, ugly giant would come down to them and kill anybody within his reach. So the wise men and leaders of the town decided that they must carry out the orders of the giant.

Within a short time the giant's home was ready. A huge castle-like building. And for this house he took away one hundred young men and one hundred young women to be his servants, and to do all his work, for

this giant was a lazy fellow and hated to do any kind of work.

A year had barely gone by, when another sad day dawned upon the valley. From the mountain on the right side, another huge ugly giant came thundering down to the valley. Like his brother giant, he too roared that one hundred strong young men must set to work at once and build his home, and he too demanded that he must be fed with the best the valley could give.

With both these giants making so many demands on the little valley, the people soon became poor and had very little for themselves. No more did they feel like singing and making merry at festival times, as there was always the bad thought of the giants to make them sad.

Soon they realised that they could not go on feeding and working for these two lazy giants. There must be some way of getting rid of them. But how? These peaceful people had never killed other people, had never known what it was to even have enemies or fight against other people, and they were so afraid that if they did not give all that the giants demanded, these two ugly and lazy monsters would kill off the young men and girls who worked as servants in the homes of the giants. But there must be a way, and this way they must soon find out.

The wise men of the valley one day all gathered together to find some way of getting rid of the two giants. They sat and talked for hours and hours. Then, as they were about to break up their meeting and go home, a little old woman walked in and said, "Wise men of the valley, I will get rid of your two giants for you."

The wise men smiled. "How will you get rid of them, Granny. You who are so old and so tiny and so weak?"

The old woman chuckled and said with a twinkle in her eyes, "Just leave them to me, and in a few days, I shall get rid of them."

The wise men were doubtful, but agreed. "All right, Granny, go ahead, but please do be quick about it."

The next morning the old woman set off to the giant who lived on the left of the valley, and soon managed to get a word with the huge rascal. She told him that the giant who lived on the other side had been saying that he was much stronger and could run, jump, fight and in fact do anything better than him. The giant roared and said: "Can he? I'll show him one day what I can do."

The little old woman then left, and the next morning went across to the giant who lived on the right of the valley. She told this giant that the other fellow who lived on the other side was boasting about what he could do and was the better giant in every way. The giant then said: "Oh, so he is the better giant. Well, I'll soon show him."

It was not long before both the giants, who were now very angry with each other, strutted out of their houses and walked to a part of the mountains, where there was a deep gorge through which the river flowed into the valley below. One giant stood on one side of the valley, and the other on his side, with the deep gorge between, and huge sharp rocks far below, where the waters of the river ran swiftly. Now the two giants started boasting to each other what they could do, and how strong each was. Little by little the giants soon became angry with each other, until they were almost fighting mad. In a short time, the two giants were tearing out huge rocks from the mountainside and hurling them at each other. In the valley below all the people had gathered to watch the two giants having their battle, and amongst them was the

little old woman, who had started the whole thing.

The battle went on with the giants throwing huge rocks, or tearing out huge trees from the ground, and throwing these at each other across the gorge. This fight went on for about an hour, with the giants getting more and more mad at each other. Then suddenly the people of the valley heard a terrific bellow from the giant on the left: "Here's one thing I can do. I'll jump this gorge and get my hands on your throat and choke you to death." The giant on the other side also roared: "Why, you cursed monster, I'll be across the gorge first, with my hands on your ugly throat."

The battle of the giants was getting more and more exciting. And then it happened. The people below saw the two giant figures jump, sail through the air for a brief moment, and both missed getting their feet on the other side. Down, down, down, into the jaws of the sharp, jagged rocks, and the rushing river below, hurtled the bodies of the two giants.

The battle of the giants was finished. When the people went to see what had happened to the giants, they found both of them with their huge bodies smashed and broken on the jagged rocks below.

The little old woman was now the hero of the people of the valley. It was she who in the wisdom of her old, old age, knew that if you boast too much, some day that boasting will make you have a great fall, like the two giants who jumped to their deaths because of their foolish pride.

And so, once again, the people of the valley had peace, and happiness.

UNCLE TELLATALE.

Earnings

The approximate earnings on originating traffic for April 1956 compare as under with those for the corresponding period of the previous year :

(Figures in thousands of Rupees)

	April 1955	April 1956
Passengers ...	1,63,98	1,72,29
Other Coaching ...	33,74	32,28
Goods ...	1,82,43	2,00,92
Sundries ...	8,39	8,65
Total ...	3,38,54	4,14,14

Compensation Claims

The following is an analysis of the position regarding compensation claims for the month of April 1956 :

1. Number of compensation claims received during the month of April 1956 ... 2,979
2. Number of claims disposed of and the amount paid during the month of April 1956 ... 3,237 (Rs. 1,83,910-8-11)
3. Number of claims outstanding at the end of the month ... 3,297
4. Number of days taken to settle a claim ... 39 days

GODAVARI PUSHKARAM FESTIVAL

(11-5-1956 to 2-6-1956)

During the period from 20-5-1956 to 4-6-1956, 208 specials were run and the running of 34 scheduled trains extended.

A scrutiny of the approximate returns pertaining to GVN, KVR and RJY stations, where the Pushkaram Festival is held, has disclosed that there was an increase of 188,501 passengers and Rs. 1,59,917 during the one month period ending 31-5-1956 as compared with the corresponding period of the previous year. Examining the figures in respect of Traffic originating at stations on Bezwada District, only, there has been an increase of Rs. 3·41 lakhs, the bulk of which could be attributed to the incidence of Pushkaram Festival.

SOUTHERN RAILWAY

TENDER NOTICE

Renigunta-Gudur Section—Conversion to Broad Gauge—Construction of Staff Quarters and Passenger Latrines at Kondagunta station

The Engineer-in-Chief, Southern Railway, Egmore, Madras-8, invites sealed tenders for the above work upto 12-00 hours on Friday the 10th August, 1956.

Tenders should be submitted in the prescribed forms obtainable from the Office of the Engineer-in-Chief, Southern Railway, Egmore, Madras-8 or from the Executive Engineer's Office, Renigunta-Gudur Conversion, Renigunta on production of a receipt for the sum of Rs. 10 (Rupees Ten only) paid to the Chief Cashier, Southern Railway, Madras-3 or any Station Masters on the Southern Railway towards the cost of each tender form. In no circumstances will the cost of tender forms be refunded. Tender forms are not transferable.

Tender forms will be issued upto 12-00 hours on Wednesday the 8th August, 1956.

An earnest money Rs. 750 should be paid in advance to the Chief Cashier, Southern Railway, Madras-3 not later than 12-00 hours on 8-8-1956 and the receipt submitted along with the tender. No cheque or demand draft should be attached to the tender.

Tenderers are required to submit Income-tax Clearance Certificate, in original, along with the Tender. If previously sent and is current, reference to the particular tender with which it was sent should be furnished.

Earnest money is fixed at 5 per cent of the value of the contract and the successful tenderer will be required to furnish 10 per cent of the value as per his accepted tender towards security deposit.

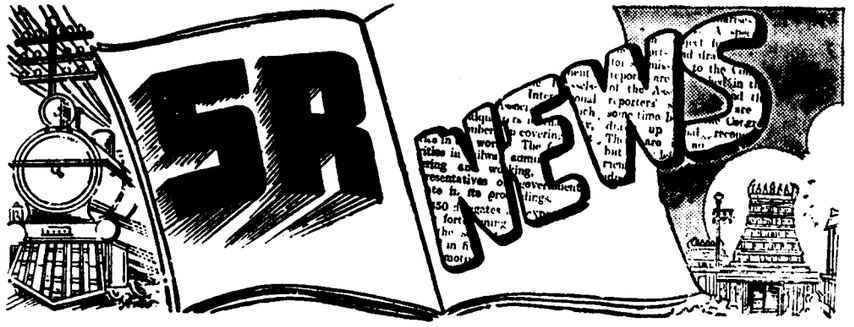
Tenders will be opened at 11-00 hours on Saturday the 11th August 1956 at the Office of the Engineer-in-Chief, Southern Railway, Egmore, Madras-8.

The Engineer-in-Chief 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.

PRESS STATEMENT ISSUED BY CHIEF MINISTER, ANDHRA STATE IN APPRECIATION OF THE PUSHKARAM ARRANGEMENTS

I am very happy that the Pushkaram at Rajahmundry has come to a successful conclusion on the 2nd instant. While the expectation was a million people coming and taking their bath in Godavari reports reaching us show the crowd exceeded 2 million this time. I am also glad that people came in large numbers only from the 22nd May which according to the Government is the correct and scientific commencement of Pushkaram. The arrangements made were greatly appreciated by the public. I congratulate all the officials and non-officials who co-operated with each other in an admirable manner and saw to it that the pilgrims were not inconvenienced in any manner. Particular praise must be given to the Railways, the Police, the Public Health and Revenue Staff. They spared no pains in seeing that no untoward incident took place. There was no stampede, no jamming of traffic and no outbreak of any epidemic. 300 children in both the districts who were lost, were found and restored to their parents. Complaints of petty crime like pick-pocketing also were very few in number and most of them were immediately detected. The rescue party also did good work and they actually rescued all the passengers in a country-boat coming from Bhadrachalam which was capsized near Rajahmundry.

I take this opportunity of congratulating all the officers and men in various departments and the non-officials for the splendid social service they rendered and made the Pushkaram pass off peacefully without any untoward incident.



PARTY TO

SRI O. V. ALAGESAN

The Union Deputy Minister for Railways and Transport Sri O. V. Alagesan was the guest of honour at an 'At Home' given by the Railwaymen's Fine Arts Society, Chetpet, on 29-6-1956, at Hotel Dasaprakash, Poonamalle High Road, Madras

After tea, the Deputy Minister witnessed a drama "Rail Nilayam"

The Deputy Minister, GM, appreciating the drama. Sri A. R. Rao, SDGM, is seated behind them

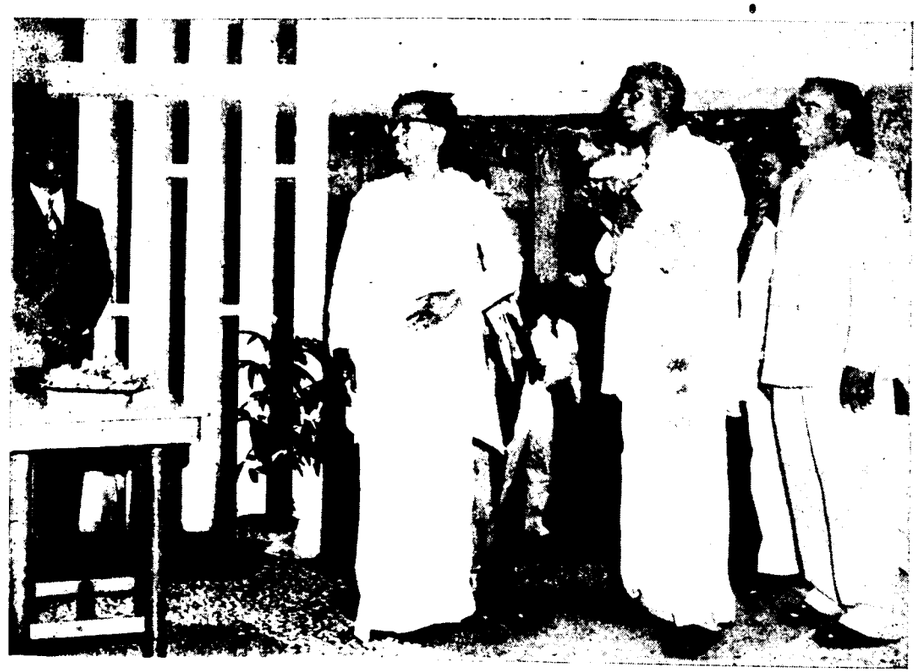
in Tamil, depicting the scenes in a Railway station. The drama apprised the public of the various travel amenities offered to them by the Railways in recent times. The public were warned to be on their guard against pick-pockets and cheats. The need for the elimination of ticketless travel was also stressed in the drama. How a ticketless passenger was reformed, the behaviour of the railway staff towards passengers and the necessity for using Railway carriages, platforms, waiting halls, etc. properly, and maintaining hygienic conditions—these scenes made a deep impression on the Deputy Minister who was almost in a 'Wonderland' for over two hours on that night.

Sri Alagesan complimented the actors on their good acting and was no less enthused over the publicity the Railwaymen's Fine Arts Society of Chetpet had given through such performances in villages for the remarkable progress made by the Indian Railways, after the advent of Independence, in the matter of self-sufficiency of engines, coaches and other materials with the aid of which various amenities are being provided to the travelling public.

The Deputy Minister in conclusion referred to the silver casket in which the address to him was presented and said that it must have cost the society quite a lot. He returned it to the organisers and requested them to keep it in their own office.

Mr. S. C. Chandrasekaran proposed a vote of thanks.

The gathering included Sri T. A. Joseph, General Manager, Southern Railway, Sri K. Sadagopan, Chief Administrative Officer. Integral Coach Factory, Perambur, Heads of Departments and other officers of the Southern Railway and the Integral Coach Factory.



The Deputy Minister with the Secretary of the Railwaymen's Fine Arts Society

The officers and other guests 'At Home'. Sri R. K. Varma is seated third from left

SOUTHERN RAILWAY

TENDER NOTICE

Tenders for supply of Tiles, Hourdis Blocks etc.
(For the period from 1-7-1956 to 30-6-1957) for Bezwada Division

The Divisional Superintendent, Southern Railway, Bezwada Division, Bezwada, invites Sealed Tenders upto 12 hours on Saturday the 28th July 1956 for the "Supply of Tiles, Hourdis Blocks etc." for this Division.

The tenders should be in the prescribed form obtainable from the office of the Divisional Superintendent, Southern Railway, Bezwada on production of a receipt for the amount of Rs. 5/- (Rupees Five only) towards the cost of the tender form paid to the Chief Cashier, Madras-3 or the Regional Accounts Officer, Trichinopoly or Mysore or to any Station Master on the Southern Railway. In no circumstances will the amount paid for the tender form be refunded.

The tender form is not transferable.

The tender forms will be issued upto 12 hours on Monday the 23rd July 1956.

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

Earnest money of Rs. 500/- (Rupees Five Hundred only) is to be paid in advance to the Chief Cashier, Southern Railway, Madras-3, or the Regional Accounts Officer, Southern Railway, Trichinopoly or Mysore not later than 12 hours on Thursday the 26th July 1956 and the receipt issued therefor should be attached to the tender. No demand draft or cheque should be attached to the tender.

Tenders will be opened at 14 hours on Monday the 30th July 1956 in the Office of the Divisional Superintendent, Southern Railway, Bezwada.

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

M. S. MURTY, *Divisional Superintendent*

SOUTHERN RAILWAY

TENDER NOTICE

Contract for the removal of cinders not required for Railway use or other kinds of Workshop refuse or both combined from loaded wagons placed outside the Perambur Workshops from 1-8-1956 to 31-3-1957

Tenders are invited for the above by the Chief Mechanical Engineer, Southern Railway, Ayanavaram, Madras-23. The tender form containing terms and conditions of contract may be obtained from the Office of the Chief Mechanical Engineer, Ayanavaram, Madras-23, on payment of Rs. 2 (Rupees two only) not refundable. Tenders should be submitted to the Chief Mechanical Engineer, Southern Railway, Madras-23, in sealed covers superscribed as above so as to reach him before **12 noon on Wednesday the 25th July 1956.** The tenders will be opened by him or his duly appointed representative and the quotations read at 2-30 p.m. on the same day in the presence of such of the tenderers as may be present at that time. The tenderer should remit on or before 12 a.m. on **21-7-1956**, a sum of Rs. 200 (Rupees two hundred only) as earnest money to the Chief Cashier, Southern Railway, Park Town, Madras-3 and enclose the receipt thereof with the tender.

CHIEF MECHANICAL ENGINEER.

SECOND CHILDREN'S HOLIDAY CAMP AT TRIVANDRUM

The Madras Central Station was again lively on the 7th of May with the children of Railway Employees arriving from various stations with their Guides and getting ready for their second Holiday Camp, organised by the administration, at Trivandrum and Cape.

Girls' group—Oranges

Sri R. Nagarajan, Personnel Officer and Sri E. S. Kalyanaraman. Assistant Personnel Officer were in time at the platform to see the children off by No. 319. Enthusiasm of the children knew no bounds when they were photographed with the Officers and loud cheers, yells and songs rent the air when the engine steamed and pulled out. The journey by train was pleasant through varying scenery and landscape.

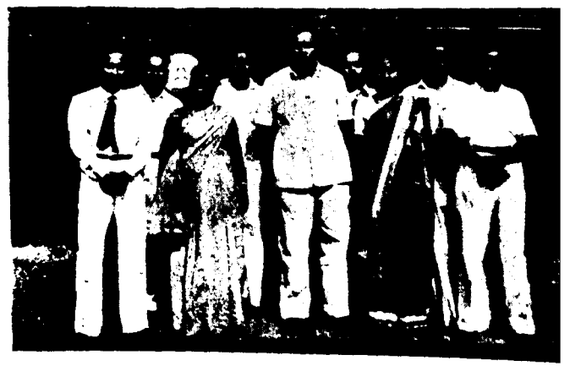
The party arrived Ernakulam South at 7-30 a.m. on the 9th May 1956, where they were met by the DSK and were taken direct to "Woodlands" hotel. The children were surprised to find the elaborate arrangements made and the welcoming dishes served. The host was Sri Warrier, the unostentatious XEN in charge of the Construction of the new line from Ernakulam South to Quilon who believes more in action than in words. Complete thoroughness marked his arrangements for Lodging, Boarding and Transport at Ernakulam South, Vaikom and Kottayam.

Lorries, van and jeep, so kindly arranged by the XEN took the party through the main parts of Ernakulam and Cochin. The drive into Willingdon Island and the walk along the dock was a thrilling experience for the children and the harbour area bounded by the Arabian Sea on the one side and back waters on the other sides was an unforgettable sight.

A steam launch specially chartered for the party was waiting at the Jetty. Sri Warrier who had come to see the children off, congratulated the children on the fine opportunity the camp had offered them and he hoped the children would carry with them happy memories of the country, the people, the climate and the scenery so different from the places they had come from. The children thanked the XEN and with cheers echoing in the air the launch started on its 'Voyage' to Vaikom. Through a watery expanse the launch sped its way along the coast and between islands.

At about 12 noon on the 9th the party landed at the Travellers' Bungalow, Vaikom where an inviting lunch specially arranged by the AEN, Kottayam, Sri K. N. Sundaram was ready. The children enjoyed the lunch with Malabar payasam. Campers can never forget the tender coconuts as many as 250 distributed by the AEN.

Camp Commandant with Deputy, Group leader and Asst. leaders



Send off at Central Station

The party again started by steam launch for Kottayam. The scenery changed. Broad watery roads with rows of houses on either side and the steam launches, boats and cannoes plying up and down reminded us of what we have read about Venice. Houses on the opposite rows and in some cases even the adjacent houses can be approached only by boats. When we reached Kottayam and saw land in front of us we felt as if violently shaken out of a pleasant dream and half-heartedly got out of the boat.

We got into lorries and jeeps and sped up to the new station under construction. The party was shown the overbridge, the cuttings and the modernised station building which almost complete. An excellent tea was provided by our kind host, the AEN. Immediately we left by lorries and jeeps and arrived Quilon by 10 p.m.

Fresh experiences were waiting for the next day. The AEN, Construction, Quilon, Sri M. S. Sheriff took the party in a ballast train for 8 miles along the new construction lines and the children were awe inspired to see the deep cuttings on the hills, embankments, bridges, etc. being built. We alighted at Ashtamudi Station and got into steam launch for Kallada Station. It is difficult to decide whether the Journey through the Ashtamudi (eight faced) lake up the Kallada River and back through the back waters to Quilon or the tender coconuts so freely supplied by the AEN, Construction was more refreshing.

The evening train pulled our carriages into Trivandrum Central where we were met by Sri N. B. Nath,

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Chi. V. Deivasigamani, Typist, CCS's Office and Sow. Padmasani were married on 31-5-1956

With Sri Warrier, XEN at Ernakulam South

District Organising Commissioner of Travancore State Bharat Scouts and Guides, and a band of Rover Scouts and we were escorted to the Central High School.

Early next morning campers took their bath and visited Sri Padmanabhaswami's temple and went by special buses to Aruvikara Dam, Water Works and the Zoo. In the afternoon again visits by buses to the aquarium, rubber factory, beach and Kovilam—seashore with bathing facilities—were arranged. We had camp fire and amusements during the night.

At 7 a.m. on 12th May we started by special buses to Pachipara Dam. The buses wound their way through high hills and thick jungles and rubber plantations. It was a revelation to people who believe that coconuts grow only on the plains to see coconut trees on the highest peak of mountains. The

The party visited Aruvikara Dam

dam is 1,396 feet long, 150 feet high foundation level and 99 feet from the river bed. 42 feet of water is being stored leaving surplus water for irrigation of Nanginad, Thowlala, Agatheeswaram and Kalkulam taluks.

The next visit was to Perunchani Dam on the Perali River. This dam is of a gravity type with a catchment area of 61·57 sq. miles and storage capacity of 2,300 million cubic feet. Lunch kindly arranged by the Inspector of Primary Schools at Thakkalay was appetising.

The party then moved to Padmanabhapuram, the ancient capital of the Travancore State. The grandeur

Bathing at Kovilam

of the old palace bespeaks of ancient civilisation, art and culture of the State.

We reached Cape Comorin in the evening to see the sunset. The children visited the temple of Sri Kanyakumari. The next morning after seeing the sunrise we went to see the famous temple at Tinnevelli on our way back to Madras. The children arrived safe at Madras and were despatched to the respective stations.

The camp was under the charge of the Senior Labour Welfare Inspector as Camp Commandant with Sri R. M. Swamy as Deputy. The 74 boys and 7 girls that attended the

SOUTHERN RAILWAY

TENDER NOTICE

The Chief Engineer, Southern Railway, Madras-3, invites **SEPARATE LUMP-SUM-CUM-PERCENTAGE SEALED TENDERS** for the Construction of Quarters at Guntakal and Hubli as per particulars below, up to 12 hours on **Wednesday**, the 1st August 1956 :—

Serial No. of Tender	Station	Type of Quarters	No. of Units	Total approximate value	Earnest money
				Rs.	Rs.
1	GUNTAKAL	II	150	8,77,500	43,900
2	,,	III IV	12 4	1,69,600	8,500
3	HUBLI	II	100	6,00,000	30,000
4	,,	III IV	8 4	1,47,200	7,400

The tenders should be submitted in the prescribed form obtainable from the Chief Engineer's Office on production of a receipt for an amount of **Rs. 10** paid to the Chief Cashier, Southern Railway, Madras-3 or Divisional Accounts Officer, Trichinopoly or Regional Accounts Officer, Mysore or to any **Station Master** on the Southern Railway, towards the cost of each tender form (including cost of plans and drawings). The tender form is not transferable and the cost of the tender form will not be refunded under any circumstances.

The last date for the issue of tender form is 25th July 1956 up to 15 hours.

The earnest money for each tender mentioned above should be paid in advance to the Chief Cashier, Southern Railway, **Madras-3** or to the Divisional Accounts Officer, Trichinopoly or Regional Accounts Officer, **Mysore** and the receipt issued by him should be attached to the tender. **No demand draft or cheque is to be attached to the tender.** The earnest money should be paid on or before 15 hours on 27th July 1956.

Tenderers are required to submit Income-tax Clearance Certificate (in original) along with the tender.

The tenders will be opened by the Chief Engineer or his representative at 12 hours on 2nd August 1956.

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

camp were divided into four groups under group Leaders Messrs. M. J. Veeraraghavalu, M. Ranganathan, V. John and Mrs. L. Patrick assisted by Messrs. Joshua May, Sundara Babu, M. Velappan Pillai and Miss M. Sundaram. Each boys group was again subdivided into three sections each under a boy leader thus ensuring closer and personal care to the children.

The success of the camp was chiefly due to the elaborate arrangements made by Sri Kutti Krishna Menon, State Organising Commissioner, Travancore-Cochin State, Bharat Scouts and Guides and his assistants, Sri Warrier, Executive Engineer, Construction, Ernakulam, Messrs. K. M. Sundaram and M. S. Sheriff, Assistant Engineers, the Inspector of Primary Schools, Thakkalay and the Headmaster of St. Anthony School, Cape Comorin, for whom our grateful thanks are due.

NAVYA KALA NIKETAN, MADRAS

'NAVYA KALA NIKETAN', a histrionic association, recently formed among some of the employees working in the New General Offices, Southern Railway, presented its sensational maiden production 'ANNAPURNA' a Telugu social play written by Sri Munipalle Raju and directed by Shaik Sulaiman, at 6 p.m. on 19th May, 1956 at the Soundarya Mahal in the immediate presence of Sri Thapi Chanikya, the renowned film director.

The house was packed with special invitees and other visitors. After the play, a meeting under the auspices of the above association, was held with Sri Thapi Chanikya in the chair. The meeting commenced with the welcome address, by Sri Y. Venkateswara Rao, Secretary of the Association. Sri M. Radha Krishnamurthi, President of the Association, explained in detail the purpose of forming the Association.

Afterwards, the presidential address was given by Sri Thapi Chanikya in which he expressed his high appreciation all the artists who participated in the play, with deep sincerity and team spirit that resulted in success of the performance.

Mr. P. M. Reddy was selected as the best actor, and the prize allotted for the Best Actor was presented to him by Sri Thapi Chanikya. In this connection, Sri Thapi Chanikya was personally pleased to award a second-best actor prize to Sri B. Ramakrishna

in appreciation of his talents. Thereafter an announcement of the next item of programme, the dance recitals by Master Venkateswar, Manimala and Party, was made by Sri Thapi Chanikya.

As the Secretary of the Association, Sri Y. Venkateswara Rao, expressed his high gratitude to director Thapi Chanikya for having kindly consented to preside over the occasion; the executive body and members for their strenuous efforts; Mr. Shaik Sulaiman for sparing no pains in discharging his duties as director of the play, Mr. R. Narayanaswamy for lending his melodious tone for play backs; the artists for their sincere efforts and the public that attended the drama and several others that joined their hands in making the venture a success.

The meeting ended with a vote of thanks expressed by Sri Y. Venkateswara Rao, Secretary of the Association.

Miss H. V. Gabriel, Clerk, Finance Branch, FA & CAO's Office—the first lady candidate on the Southern Railway to pass the Appendix II-A Examination (the examination prescribed for promotion to the Grade of Clerk Class I)

Sow. Janaki, daughter of Sri M. Sundararajan, Deputy General Manager (Personnel), Southern Railway and Sri V. G. Nathen, I.A.S., son of Sri S. Venkateswaran, I.C.S., Member, Board of Revenue, Madras, were married at Madras on 21-6-1956

The Trichinopoly Division of the Southern Railway was formed on 1st June. Photo shows the Divisional Offices, Trichinopoly

Sri P. K. Madhava Menon, DS, TPJ (seated at the head of the table) with other officers of the Division

SOUTHERN RAILWAY BHARAT SCOUTS AND GUIDES

Area Rally of the Madras Units

An area rally of the Madras Units belonging to the Central District of the Southern Railway Bharat Scouts and Guides was held on Monday the 4th June, 1956 at 6 p.m. at the District Headquarters, Constable Road Extension, Railway Colony, Perambur.

Sri S. Chaudhury, District Commissioner, Central District and O.S.D., Standing Selection Board presided over the function.

Sri S. K. Gopinath, Honorary State Secretary and Deputy C.E.E. who is on a transfer on promotion as C.E.E., Eastern Railway, took the salute.

Units from the following groups participated in the rally:—

(1) Vivekananda Scout Group, Perambur
(2) Nethaji Scout Group, Perambur
(3) Prithviraj Rover Crew, Perambur
(4) Subash Rover Crew, N.G.O., Madras
(5) Ravi Rover Crew, N.G.O., Madras
(6) Tagore Rover Crew, Rayapuram
(7) Asoka Rover Crew, Perambur

Sri S. K. Gopinath accompanied by the District Commissioner and the District Secretary at first reviewed the units and thanked them for the smart turn-out.

A march past was then held and the State Secretary took the salute.

Welcoming the retiring State Secretary and all those present, the District Commissioner said that he was very happy to be able to participate in the day's rally and to see a good number present in spite of inclement weather. He said that Sri S. K. Gopinath is a 'born' Scout and possessed all the qualities of a Scout and observed that as State Secretary, he was largely responsible for making scouting organisation in Railway an interesting feature.

Certificates for the winners and runners up in the District competitions held on 24-3-1956, for those who underwent RSL's training course recently and for those who served at Kumbakonam Mahamakham festival, were presented by Sri Gopinath.

Sri S. K. Gopinath while thanking the District Commissioner (Sri S. Chaudhury) and District Secretary (Sri S. Krishna Rao) for arranging a rally on the eve of his transfer, highly appreciated the smart turn-out of the units. He then introduced Sri H. C. Krishnappa, the incoming State Secretary to the audience and assured that in Sri Krishnappa the Organisation had found a very able Secretary, who will be able to show all-round improvement in the Scouting Organisation on the Railway.

All arrangements were ably made by Sri M. Ranganathan, ADC (Rovers) assisted by a band of Scouters.

With three cheers to the retiring State Secretary, the rally came to a close.

Sri N. Venkatesan, M.A., OS REN's Office, MYS recently promoted as APO MYS

SOUTHERN RAILWAY

TENDER NOTICE

The Regional Engineer, Southern Railway, Rayapuram, Madras-13 invites Separate Sealed Percentage Schedule Tenders for each of the following works to reach him not later than 12 noon on Friday the 20th July 1956 :—

S. No.	District	Name of Work	Total approximate value of contract	Earnest money to be paid
			Rs.	Rs.
1	Salem	METTUPALAIYAM — Improvements to Watering arrangements	51,000	2,600
2	Shoranur	TIRUR—Provision of an additional loop ..	42,100	2,100
3	,,	ALWAYE — Extension to Station Building and raising the platform to standard height	44,100	2,200
4	,,	MADUKARAI—Converting the 4th stabling dead end line at Shoranur end into a through lay bye and revision of an additional stabling line	10,200	500
5	,,	KOTIKULAM — Proposed extension of the existing platform and provision of passenger shelter	10,600	500

2. Tenders should be submitted in the prescribed forms, obtainable from the Office of the Regional Engineer, Southern Railway, Rayapuram, Madras-13 on production of a receipt for the sum of Rs. 10 (Rupees Ten only) paid to the Chief Cashier, Southern Railway, Madras-3, or Divisional Accounts Officer, Trichinopoly or Regional Accounts Officer, 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 15-00 hours on Monday the 16th July 1956.

4. Earnest money as above should be paid in advance to the Chief Cashier, Madras-3 or the Divisional Accounts Officer, Trichinopoly or Regional Accounts Officer, Mysore not later than 12-00 hours on Tuesday the 17th July 1956 and the receipt submitted along with the tender.

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

6. Earnest money is fixed at 5 per cent of the value of the Contract and the successful tenderer will be required to furnish 10 per cent of the value as per his accepted tender towards the Security Deposit.

7. The tenders will be opened at 14-00 hours on Friday the 20th July 1956 at the Office of the Regional Engineer, Rayapuram, Madras-13.

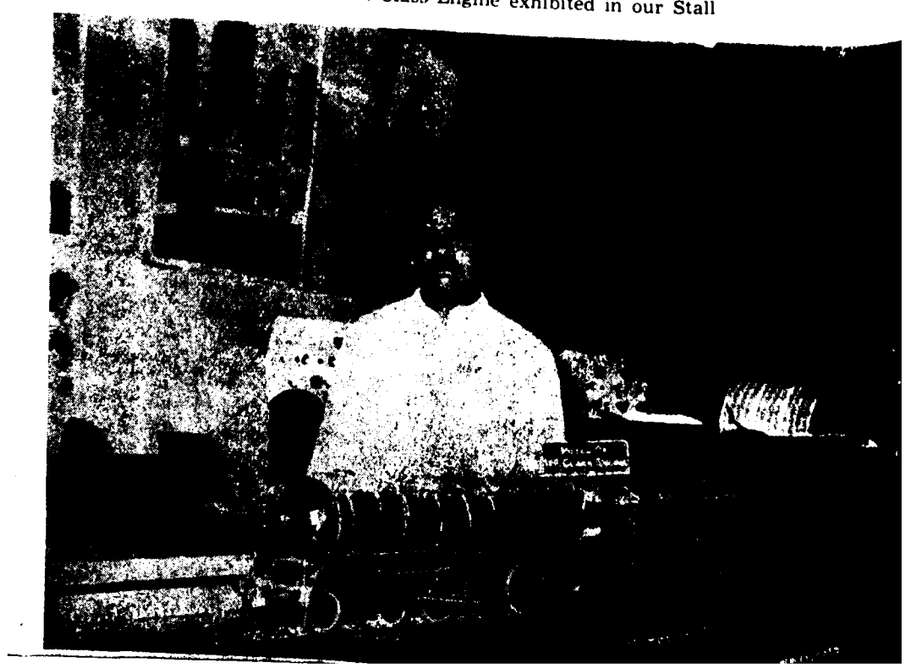
8. The Regional Engineer reserves to himself the right to reject without assigning reasons any or every tender or part thereof and does not bind himself to accept the lowest or any tender or part thereof.

Opening of Chirala-Vetapalam Double lines on 4-6-56. Sri M. S. Murthy, DS BZA and Sri B. K. Kuppuswamy, Engineer-in-chief, MS are in the centre

Sri M. S. Murthy inaugurating the Double lines

Railway Stall at the Chitrai Festival Exhibition held recently at Madura

Model of W. P. Class Engine exhibited in our Stall



REST-HOME FOR THE USE OF RAILWAY EMPLOYEES— CLASS III AND CLASS IV

As a measure of Staff Welfare and in pursuance of the Government's policy of encouraging Class III and Class IV staff to spend their leave or holidays with their family at hill stations or health resorts, Rest-homes have been established on this Railway, at Courtallam (near Tenkasi) and Wellington (on the Nilgiris).

Suitable Bungalows have been acquired for the purpose and converted for the use of three or four families at a time. They are located amidst picturesque surroundings within easy reach of the Railway station, Bazaar and points of local importance.

Courtallam is a station within three miles of Tenkasi Railway Station on the Virudhunagar—Shencottah Section. Convenient bus service is available between the Railway station, and the Rest-home at Courtallam. There is a famous waterfalls within a few minutes walk from the Home and there are also other places of interest nearby which are worth visiting. Courtallam is accessible by regular bus service from Tenkasi Railway station. The address of the Rest-home is : India Vilas Bungalow, Shencottah Road. There are two rooms and a kitchen and three families can be accommodated at a time. P.W.I., SCT, is in charge and one Care-taker and a Mate have been employed specially for this Home.

Wellington is a hill station situated on the Coonoor—Ootacamund Section of the Nilgiris Mountain Railway. The address of this Rest-home is : Muruganadi Bungalow, Coonoor—Ooty High Road (2 furlongs from Wellington Railway Station). Two rooms and a kitchen are available and four families can be accommodated at a time. I.E., ONR, is in charge and one Care-taker and a Mate have been specially employed at this Home.

The Bungalows are furnished and also equipped with cooking utensils. A Care-taker-cum-Cook and a Mate have been sanctioned for each of the Rest-homes. The services of the Care-taker-cum-Cook can be availed of for cooking purposes to enable the Railway servants and their families to go out for picnics, etc. A nominal charge of Re. 1 per day for Class III staff and Annas 4 per day for Class IV staff will be recovered from the salary of the employees for the period of halt. A day for this purpose means a calendar day.

SOUTHERN RAILWAY INSTITUTE, TNPM, MADRAS

The General Body Meeting (10th Anniversary) commenced on 1-6-1956 with Sri Janab Kaseem, APO/1/RPM, hoisting the National Flag and Sri Madappa, APO/2/RPM, presided.

The Secretary Sri T. M. Ramasamy submitted the Annual Report for the year 1955-56. The accounts for the year 1955-56 was submitted by the Asst. Secretary-General and Treasurer, Mr. S. Bakthavatchalam and was unanimously passed.

Sri A. V. Subramaniam, RPO, RPM, in his address explained the vital part to be played by the Railway Employees in the Second Five-Year Plan and advised them to give out their maximum support for the betterment of the Nation. He assured of the Administration's sympathetic consideration to all the legitimate grievances and amenities to the Railway Employees and gave many other special advises to the families quoting from Tamil Literature.

The vote of thanks was proposed by the Asst. Secretary Mr. A. S. Immanuel and the meeting terminated. There was 'Tea Party' to all the members and guests.

SOUTHERN RAILWAY ATHLETIC ASSOCIATION VOLLEY-BALL TEAM

The Volley-Ball Team was formed on our Railway in December, 1955. Immediately after formation, we participated in the Madras State Volley-Ball Championship, which was held at Madura. A Rolling Shield was instituted this year to be awarded to the winners of the State Championship. It will be gratifying to note that the Championship was won by the Railway Team and we achieved the unique distinction of winning the newly instituted Rolling Shield in our very first appearance. This success gave an impetus to our team and within a short duration of six months our Railway Team has become one of the strongest combinations in the State. We participated in seven tournaments so far and in five of them, our team emerged as winners and carried away beautiful trophies, including gold medals in two tournaments. We participated in one tournament in T.-C. State where we lost in the Finals to the T.-C. Police Team, who, no doubt, are veterans in the game. With some more combination and experience, it will not be surprising that our team will become invincible.

Members of the Railway Freight Structure Enquiry Committee with staff of the DTS's Office, Bangalore City

The Railway Freight Structure Enquiry Committee photographed at our Headquarters' Offices where they held meetings recently. Sir A. Ramaswamy Mudaliar (Chairman) and Sri G. S. A. Saldanha (Secretary) are seated facing the camera (second and third from left)

Sri S. K. Mukerji, CCS, Sri T. A. Joseph, GM and Sri Ratan Lall, COPS with the Committee

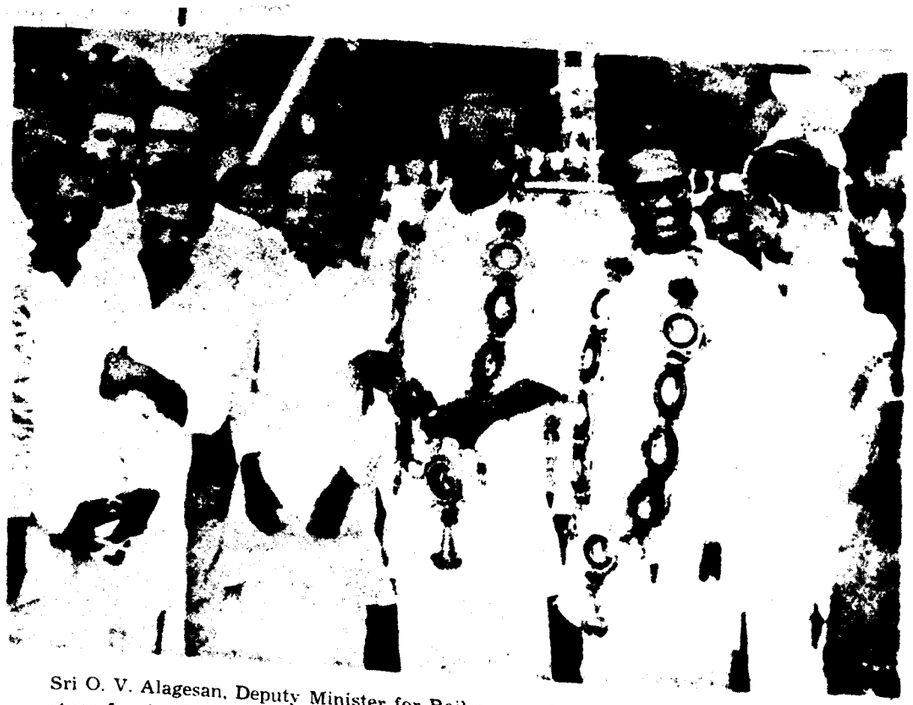
Train Control Office Staff, Godavari Pushkaram. Sri S. S. Viswanathan, Officer on special duty, is seated in the front row (centre)

A farewell party was given to Mrs. and Dr. P. A. Menon, F.R.C.S., DMO GOC, by the staff of the Railway Hospital, TPJ, on 26-5-1956. Photo shows Dr. Menon replying to the address presented to him

Sri O. V. Alagesan, Deputy Minister for Railways and Transport being taken round the Railway Workshops at Perambur

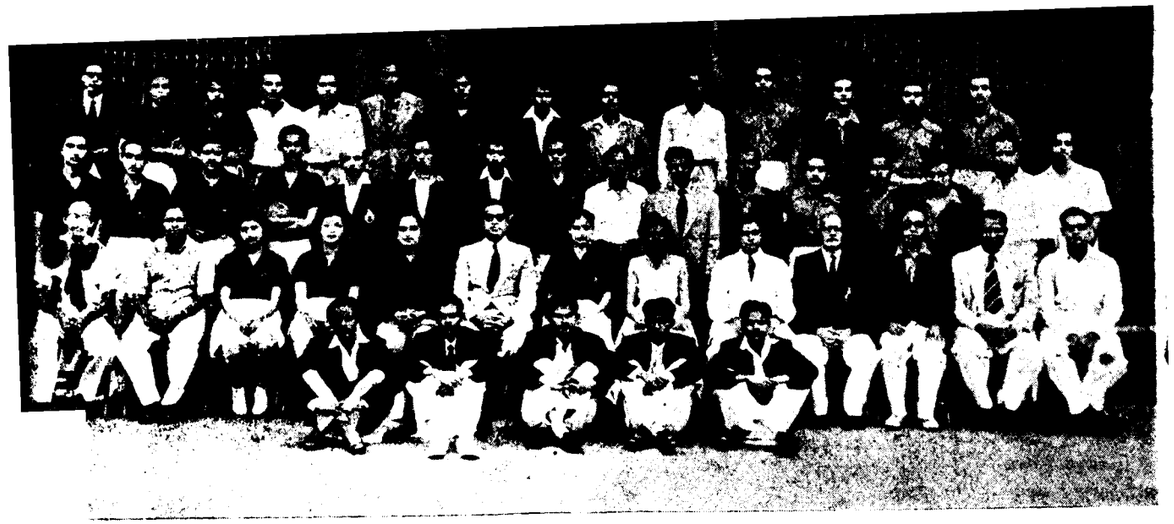
The Deputy Minister with Sri B. Venkatraman, CME

Sri O. V. Alagesan and Sri M. M. Parthasarathy, WM

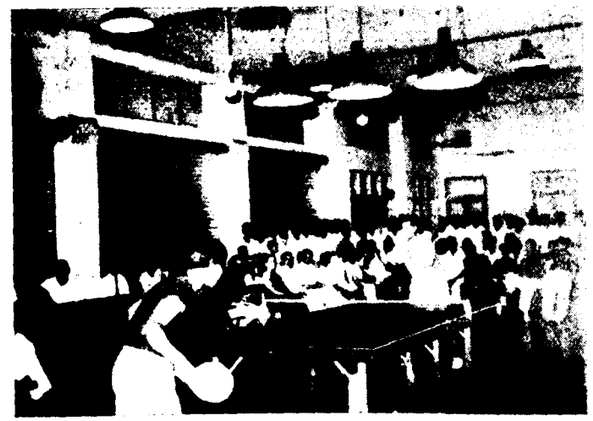


Sri O. V. Alagesan, Deputy Minister for Railways and Transport, laid the foundation stone for the Cauvery bridge on 25th May, 1956. The Minister is seen here chatting with Sri K. K. Nambiar, Chief Engineer. Sri K. Kamaraja Nadar, Chief Minister, Madras is standing to his right

Sri O. V. Alagesan laying the foundation stone



Group photo taken during the Inter Railway Table Tennis Tournament held recently in Madras. Southern Railway retained the team championship



Men's Singles Event between Southern Railway and Central Railway

Sri T. A. Joseph, GM, presided

Smt. T. A. Joseph distributed the trophies

Our Stalls at the Chitrai Festival Exhibition, Madura attracted huge crowds Photo shows a view of the Visitors. Sri Rani Subharaman, Chairman of the Exhibition Committee is also seen in the picture

THE LATE MR. G. RUNGA RAJU

We deeply regret to announce the passing away on the night of 4th July 1956 at the Christian Mission Hospital, Vellore, of Mr. G. Runga Raju, retired District Commercial Superintendent of the Southern Railway.

Born in 1897, Mr. Runga Raju joined the service of the Ex. M. & S. M. Railway as a temporary Rates Clerk in the General Traffic Manager's Office. By sheer dint of hard work he, in course of time, rose to the gazetted rank and was appointed as Assistant Commercial Manager in 1937. He served in this capacity in various posts till he was promoted as District Commercial Superintendent in 1950. He held this post with distinction till 15th June 1952, when he retired from service.

A Graduate in Economics and an Associate Member of the Institute of Transport, London, Mr. Runga Raju was widely read and continued to be a keen student of Transport problems even after his retirement. He was a correspondent of "Modern Transport", London.

Mr. Runga Raju was a regular contributor to the "SOUTHRAILNEWS", and specialised in writing articles on Railway Rates problems. Readers of our journal will remember the excellent articles contributed by him on the proceedings of the Railway Rates Tribunal.