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SOUTHERN RAIL NEWS

VOL - III

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Southrailnews

PUBLISHED BY THE SOUTHERN RAILWAY

VOL. III

OCTOBER 1956

SOUTHERN RAILWAY

TENDER NOTICE

ELECTRIFICATION OF MADRAS - VILLUPURAM SECTION

Sealed Tenders are invited for:

(1) Provision of complete Sub-station, Track Sectioning Cabin, Supervisory Control and Telephone Communication Equipment.

(2) (a) Provision of complete Overhead Track Equipment for Madras (Egmore)—Tambaram Section.

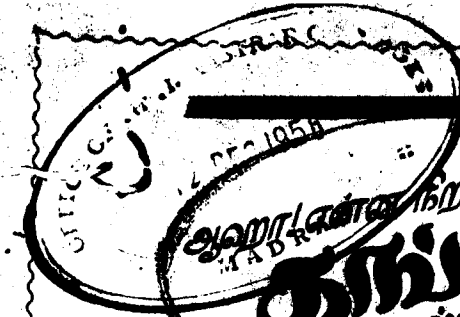
(b) Provision of complete Overhead Track Equipment for Tambaram-Villupuram Section.

2. Tenders should be submitted separately for items (1), (2) (a) and (2) (b) for which the Earnest Money will be Rs. 50,000, Rs. 5,000 and Rs. 50,000 respectively. Earnest Money will be refunded to the unsuccessful tenderers.

3. Tender papers can be had from the Office of the Chief Electrical Engineer, Southern Railway, Madras-3, on any working day on payment of Rupees Fifty per set each for items (1) and (2).

4. Tenders in the prescribed manner must reach the Chief Electrical Engineer, Southern Railway, before 12 noon on the 4th December 1956 and will be opened at 3 p.m. on the same date.

GENERAL MANAGER,
SOUTHERN RAILWAY,
MADRAS-3



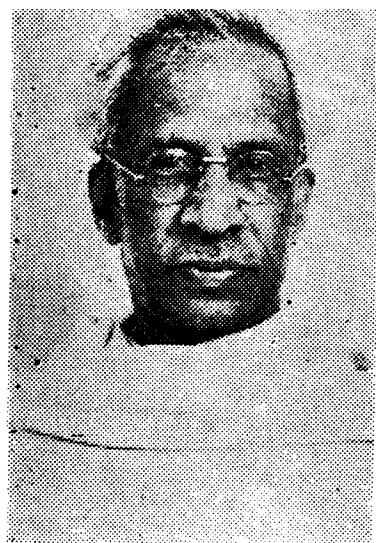
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குணமுள்ளது
தங்கபஸ்பம்



THANGABASPAM TOBACCO
KARAIKUDI





NEW DELHI
1st September, 1956

I am glad to know that you will bring out a special issue of your publication 'Southrailnews' on the 2nd of October, Mahatma Gandhi's birthday, with special illustration of some important roles the railways have to undertake in the Second Five-Year Plan. I hope it will be a useful publication.

S. RADHAKRISHNAN
Vice-President.



NEW DELHI
28th August, 1956

We are now engaged in the stupendous task of building a new India. Lacking in adequate modern machinery and equipment, we have naturally to depend on our man-power, which has, fortunately, immense potentialities. There is also a keen desire amongst us all to eradicate poverty and unemployment and thus build up a new social order, but its fulfilment demands its own price. How much is each one of us willing to contribute towards it? A high sense of duty and sustained hard work can certainly evoke much enthusiasm and a new spirit in the country. Let each individual then look into himself. Let him ask from within if he is faithfully playing his part and trying to do his best. If the answer is 'yes'—even partly 'yes'—I have no doubt that the country could be well placed on the way to progress.

I am glad to know that the 'Southrailnews' is getting increasingly popular with the Railway staff and am happy that it is bringing out Gandhiji's Birthday Number. He was a true 'Karma Yogi' and all of us, in whatever field of work we are serving, can do no better than remember him and his example in the discharge of our duties as well as in our own personal conduct.

I wish the Special Number all success.

LAL BAHADUR
*Minister for Transport and Railways,
India.*



NEW DELHI
4th September, 1956

I am happy to greet the October issue of 'Southrailnews' coming out on Gandhi Jayanthi. We are half-way through the first year of the Second Plan and are confident of seeing the Plan fulfilled with the increasing co-operation of the people. The railways are the nation's life-line. The greatest burden of transport under the Plan falls on them. The legitimate pride of the Railways in their role under the Plan, I have no doubt, will be more than matched by their satisfaction of having fulfilled their part at the end of the Plan period.

GULZARILAL NANDA
Planning Minister.



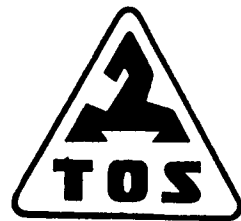
NEW DELHI
19th September, 1956

2nd October every year is a memorable day in the history of our country as it is the Gandhi Jayanthi Day. I am very happy to learn that the SOUTHRAILNEWS is bringing out a special number to mark this occasion.

Railway travel, especially III-class travel, left a deep impress on Mahatma Gandhi's mind and he was one of the crusaders who fought for a better deal to III-class passengers. Looking to the conditions existing now, Railways can certainly take pride that they have paid special attention to improve the lot of the III-class passengers. Perhaps it is not without significance that the first air-conditioned train carrying III-class passengers, which cannot be characterised as anything less than a revolution in III-class travel in this country, will steam out of Delhi station towards Calcutta on this date.

May Railwaymen on this sacred day draw inspiration from the Mahatma's concern for the common man and resolve to strain every nerve of theirs to serve the public even better and more.

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



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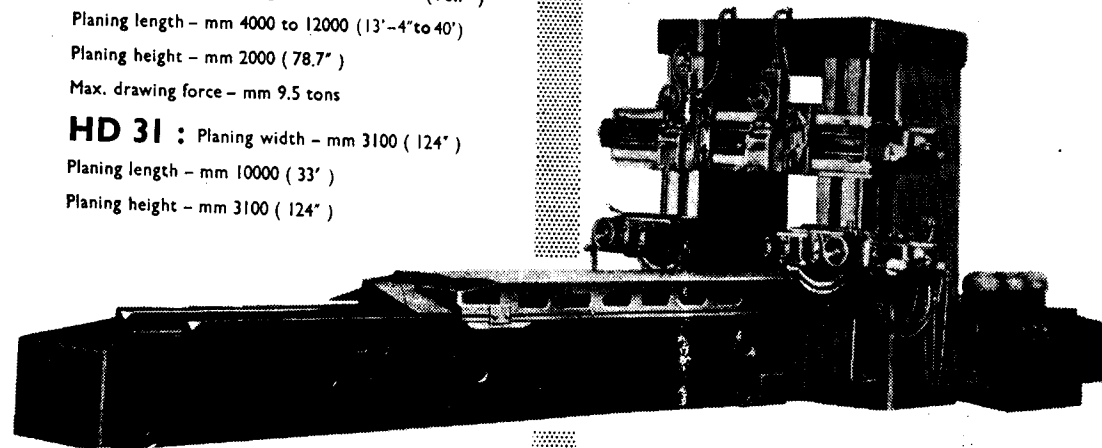
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SOUTHRAILNEWS

(Official Organ of the Southern Railway)

EDITORIAL NOTICE

VOL. III

No. 7

Editor :

K. SRINIVASAN

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

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

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

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

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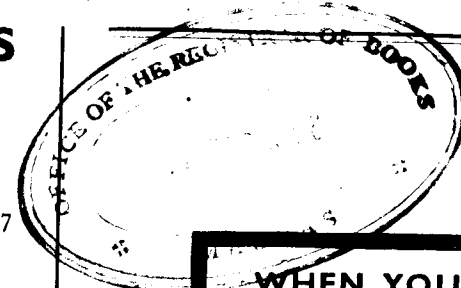
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Others ... 4 8 0 0 6 0

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THE EDITOR
Southrailnews

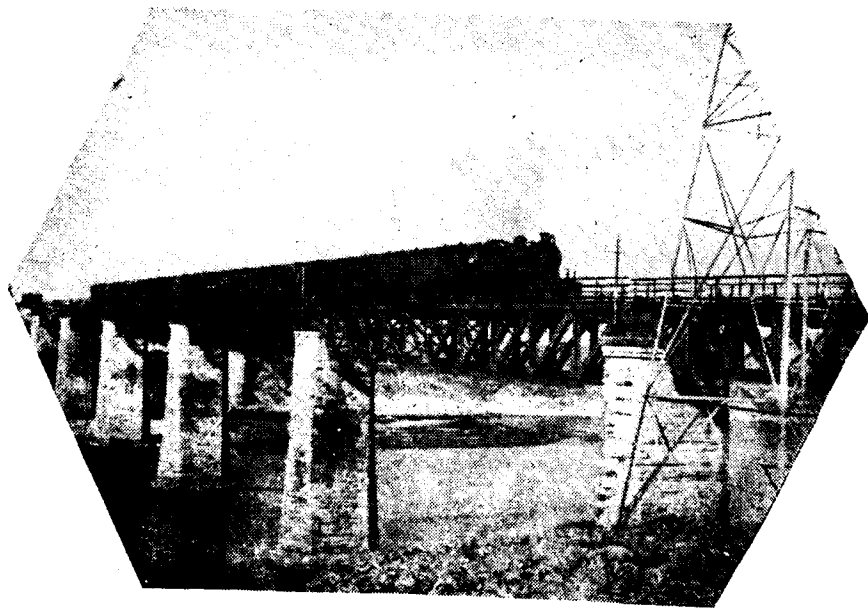


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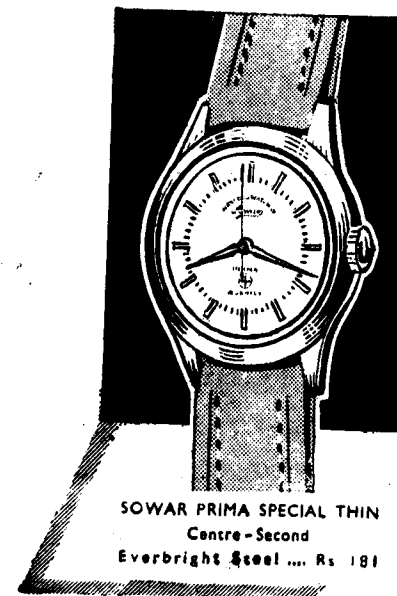
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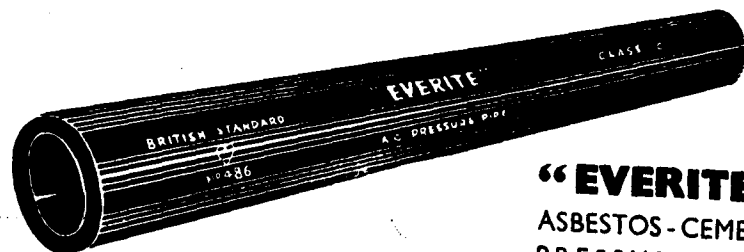
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talking of pipes...

There are some pipes, such as bagpipes, which make hideous noises (so some say). But there are no better pipes than "Everite" Asbestos-Cement Pressure Pipes for the conveyance of good clean water. Manufactured to the highest standards, they are light but strong and easily and rapidly laid. They are bitumen-dipped for added safety. They cannot rust or corrode. Specify "Everite" pipes; they have been in use in India over the past 20 years. This long experience, combined with our unequalled service, is your assurance of satisfaction.



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&

NEW DELHI

SOUTH RAIL NEWS

VOL. III

OCTOBER 1956

No. 7

MAHATMA GANDHI AND RAILWAY PUBLIC RELATIONS

THE social education on railways is one of the recent activities which has been drawn up according to certain programme. It includes cleanliness, orderliness and less noise. Cleanliness is next only to godliness. Mahatma Gandhi emphasised on greater importance of godliness. In his post-prayer speech on the 28th October, 1947, Mahatma Gandhi impressed on the audience the necessity for observing laws of sanitation in railway compartments, spitting within the compartment was an instance in point. This pertains to cleanliness in station premises and in carriages. He also deprecated disregard of railway rules like pulling the alarm chain without sufficient cause. Removing bulbs, metals and electrical fittings from carriages is an anti-social act. The grievances against railways are that they do not replace the fittings that were lost. The travelling public being apathetic to the illegal travellers removing fittings and bulbs from carriages, are disgruntled because the railways do not replace fittings then and there. The persons really responsible are illegal travellers of the vagrant class, technical members, people working with scrap dealers; some of them are pickpockets. If the public would co-operate, even though not in sympathy with the administration, it could see that its own self-interest was respected. The fittings require a lot of effort for removing them. This is being done by people who can think of a resale value. When these facts are known, the grievance against the railways will be turned into an active resentment against the real culprits; this will help railways catch the thief.

The capital invested on railways has been made up from the money collected as tax from the public. The loss to the railway administration caused by vagrants is a loss to the tax-payer. It is in the public interest to stop such thefts. If the railway earnings ran into crores, Mahatma Gandhi said, it was equally true that the expenses of running trains were no less heavy. If he were at the head of the railway administration, Gandhiji said, he would advise the railway management to tell the public that unless they purchased tickets, trains would be stopped and they would resume journey only if the passengers willingly paid the fares due. Mahatma Gandhi laid stress on the charter of duties on the part of railwaymen and all citizens.

As the largest employees of labourers in India, the Railway conceive it to be their duty to provide terms of employment for railway workers which are fair and reasonable in relation to the prevailing pattern of wages and working conditions in other industries. They consider it equally their responsibility to the nation directly served by the railways to meet the demands of workers and watch other repercussions on other labourers. The Railway Administration believes that a corresponding responsibility to the public devolves on the railway employees. This is worthy of emphasis. The granting of any unreasonable demands to Railway workers, the largest undertaking in India would set a pattern which would clearly dislocate the existing wage structure of the country and impart a serious shock to business confidence and may result in major price-inflation which should be avoided.

QUILON-ERNAKULAM RAILWAY

ONE of the many large undertakings of the Indian Railways in the post 1947 period for the development of the country is the 96 mile metre gauge line between Quilon and Ernakulam. The Quilon-Ernakulam link will not only give metre gauge access to the port of Cochin but will also provide rail facilities to a thickly populated territory in Travancore now served mainly by country craft on the "backwaters." Thus it will provide a through connection from Cochin Harbour to the south and will play a vital role in the economy of the south, especially in the transport of foodstuffs, oil, etc.

With a view to cater to the increasing needs of business and trade in the hinterland of Travancore Cochin State, a north-south rail link between Quilon and Ernakulam was a long-felt necessity, which has been more keenly felt, with the integration of the two States—Travancore and Cochin.

Fauna and Flora are wonderful: The rail line passes through sunny fields and pastures filled with a natural joy. The land is full of beasts and birds with cottage gardens smelling everywhere confused with smell of orchards. Besides the coconut, pepper, rubber, ginger and turmeric, the chief commercial crops of the area, and tapioca which virtually keeps famine out of Travancore, there are a few valuable minerals found in great quantities ensuring commercial success. Prominent amongst these are illiminite, zircon, monozite, sillinite, rutile and kaolin. Kayamkulam is said to have

the world's largest known deposit of illiminite. The kaolin deposits, available in unlimited quantities in a few places, are stated to be the finest in existence in India and they are used in ceramic manufacture as well as in certain manufactures like tiles, cloth, paper, etc.

For purposes of construction, the above Railway link has been divided into 3 sections, as detailed below:

(a) Section I--	Miles
Quilon to Mavelikara (Inc.)	30.62
(b) Section II--	
Mavelikara (exc.) to Kottayam (exc.)	28.70
(c) Section III--	
Kottayam (Inc.) to Ernakulam South	37.23
Total	96.55

The construction of the line was inaugurated by the Prime Minister Shri Jawaharlal Nehru who cut the first sod at 8 hours on 24th December, 1952 at a public meeting held at Ernakulam South Station. The construction of the line was started on 25th December, 1952, and the line between Kottayam and Ernakulam South, which forms Section III of Quilon-Ernakulam Railway has now been completed. This section is going to be opened for traffic, by the Hon. Minister for Railways and Transport, Shri Lal Bahadur Shastri, in the middle of October, 1956.

NOTES AND COMMENTS

RAILWAY CHIEF ENGINEERS CONFER

Various issues connected with the execution of works on the railways during the Second Five-Year Plan were discussed at a two-day meeting of railway Chief Engineers and Engineers-in-Chief (Construction), with the Railway Board in New Delhi, in September.

The meeting reviewed the progress so far made in the recruitment and training of technical staff for planning and execution of works, and discussed the measures to be adopted in securing staff in adequate numbers and in proper time, as the quantum of work to be carried out increases and reaches its peak.

The importance of making an all-out effort to execute as expeditiously and economically as possible the works necessary to carry the heavy second Plan traffic was repeatedly stressed.

As most of the engineering works depend on basic materials like steel and cement which are in short supply in the country, the meeting devoted considerable time in considering the measures taken for the procurement of these and other important materials from indigenous and foreign sources. In this connection, the importance of using locally available materials in place of imported materials and use of reconditioned materials to the maximum extent possible was emphasised. The meeting also considered several technical issues like the welding of rails, speeds over turnouts and use of imported steel to specifications other than the Indian Railway or British standard specifications, and the recommendations of the Chief Engineers recorded.

Shri G. Pande, Chairman of the Railway Board, emphasised the urgency and importance of executing all the works included in the 1956-57 works programme. He asked the engineers to be ready with their organisation both in the office and in the field to successfully tackle the heavier works programmes of future years.

DEVELOPMENT CO-ORDINATION CELL

A Development Co-ordination Cell has been set up as part of the Railway Equipment Directorate of the Railway Board to assist in the development of specialised railway equipment manufacture in the country, and to provide technical guidance to prospective manufacturers.

A recommendation that such a cell should be set up was recently made by the Railway Equipment Committee.

The Railway Board had last year invited manufacturers of railway equipment to offer new products of particular use to the Indian railways for trial and for eventual adoption by them after they had been found satisfactory.

To encourage prospective Indian manufacturers, four show rooms were set up, and are continuing at Calcutta, Delhi, Madras and Bombay for displaying items of railway stores which are either not manufactured in India or are in short supply.

The Railway Board has also compiled rough estimates of the future requirements of imported railway equipment and important indigenous railway stores in short supply, and printed copies of these are available at the four show rooms.

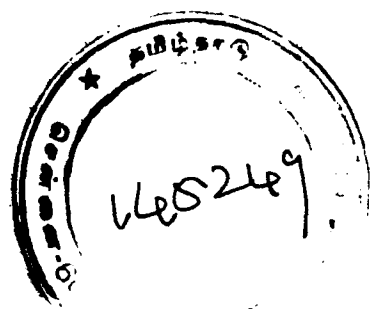
The Government of India feel confident that manufacturers in the country will extend their co-operation in achieving the aim of self-sufficiency in respect of railway equipment, so as to eliminate the need of importing these during the course of the Second Five-Year Plan. Governments are prepared to entertain offers for new products of use to the railways, and products proved to be satisfactory as a result of trials will be standardised.

Work in relation to trials with new products is handled in the Central Standards Office for Railways, Baroda House Annexe, New Delhi, by the following officers:

For Carriage and wagon items: Chief Design Engineer (Carriage and Wagon); for track and building items: Chief Design Engineer (Civil); for signalling items: Chief Design Engineer (Signals); for locomotive items: Chief Design Engineer (Locomotives), at Chittaranjan.

In case of doubt, correspondence may be addressed to the Chief Design Engineer-in-charge, Central Standards Office for Railways, Baroda House (Annexe), New Delhi.

Individual railways can also undertake trials of new products offered by local manufacturers. The adoption for all-railway use of products found successful in such trials will depend on the result of trials on other railways also. The General Managers of



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individual railways and the Chittaranjan Locomotive Works may also be addressed on this subject.

CONCESSIONAL RETURN TICKETS FOR DUSSEHRA, DEWALI AND CHRISTMAS HOLIDAYS

Concessional return tickets at $1\frac{3}{4}$ single journey fares will be issued this year for first, second and third classes on the occasion of Dussehra, Dewali and Christmas holidays, by all Indian railways. The tickets will be available for 14 days, including the date of issue, for completion of the return journey.

Return tickets for the Dussehra holidays will be issued from October 1st to 14th; for Dewali holidays from October 30th to November 4th and for Christmas holidays from 15th December 1956 to 5th January 1957.

Passengers are required to present the return halves of their return tickets at the booking office at the station of commencement of their return journeys, and have their tickets dated indicating the date of commencement of the return journey. Passengers holding return halves without being so dated will be treated as travelling without tickets.

Return tickets will be issued only between stations situated at a minimum chargeable distance of 150 miles apart. In the case of stations situated short of 150 miles, when two single journey fares are more than the return fare for 150 miles, return tickets will be issued charging the return fare as for 150 miles.

No break of journey will be permitted on the return journey; but break of journey will be allowed on the outward journey according to the normal rules as for holders of ordinary single journey tickets.

ASSISTANCE TO THIRD CLASS PASSENGERS

Conductor guards on railway trains throughout the country are being reminded that their duties include assistance to all classes of passengers, and not to upper class passengers only.

This reminder has become necessary as complaints have been received by the Railway Board that, in certain cases, conductor guards have been occupied with looking after upper class passengers only.

Conductor guards are being asked, in particular, to pay attention to the needs of third class passengers and also to help in evenly distributing passengers throughout the train, so that some coaches may not run more crowded than others.

CHITTARANJAN TOUCHES NEW PRODUCTION PEAK

The Chittaranjan Locomotive Works, which recently turned out the 400th locomotive, touched a new production peak by completing 14 locomotives during August, 1956.

The output at Chittaranjan has increased rapidly from six locomotives per month in the early part of 1954 to ten per month from January to June 1955. Thereafter, production was increased to 11 locomotives per month and subsequently to 12 per month.

DRIVE TO MAKE WAGONS "WORK HARDER"

The Railway Board has issued orders that the time at present allowed for the unloading of coal wagons for the railways' own requirements should immediately be cut by 50 per cent. in order to increase the availability of wagons to carry additional traffic during the Second Five-Year Plan period.

The time allowed for unloading has accordingly been reduced from six hours to three hours.

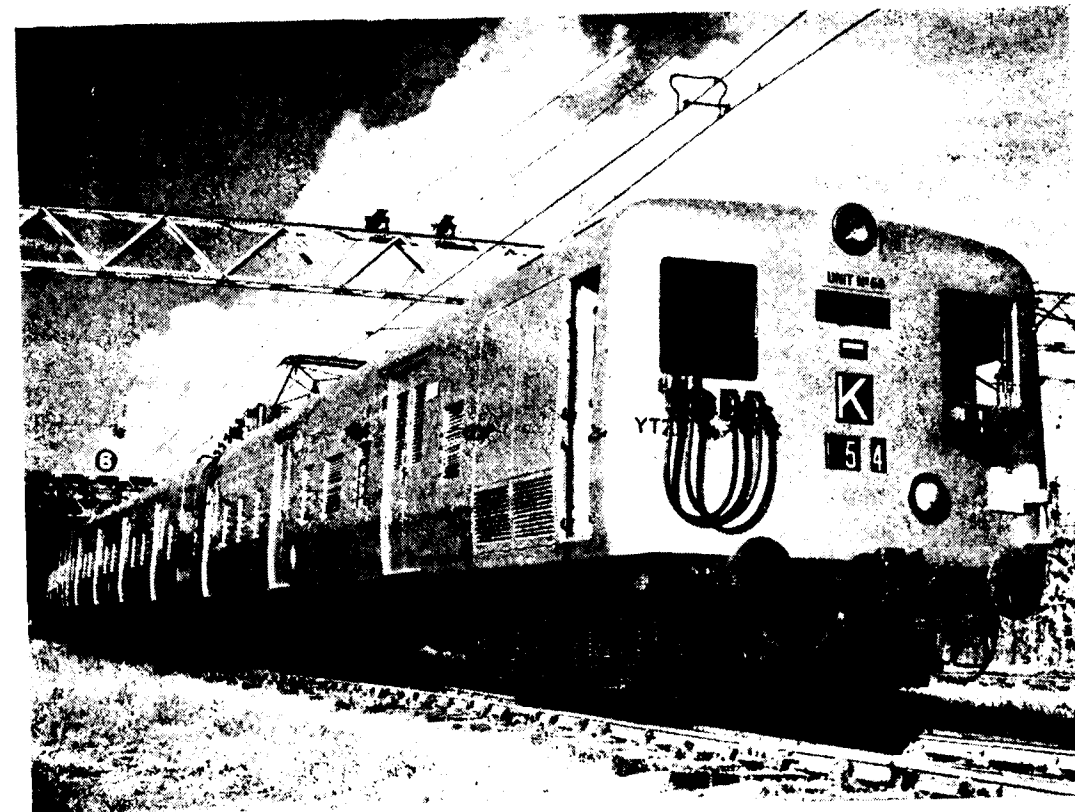
Orders have also been issued that there should be an immediate reduction from six to five hours in the time allowed for loading and unloading of wagons carrying other railway materials.

These steps mark the start of a drive to make railway wagons "work harder".

A beginning has been made with the railways' own traffic, but it is expected that orders will issue shortly requiring the business community also to co-operate with the railways in various ways and to help in their efforts to "create" new wagons.

LARGE-SCALE KHADI PURCHASES BY INDIAN RAILWAYS

The Indian railways purchased Rs. 76.86 lakhs worth of khadi during 1955-56, which was more than $7\frac{1}{2}$ times the value of khadi purchased during the previous year—Rs. 10.13 lakhs.



The New Multiple Unit Coaches made in Italy put into service on Independence Day (1956) on the Central Railway, Bombay Suburban Service

The khadi goods purchased by the railways included bedsheets, table cloth, towels and napkins. Dasuti thick blue khadi was also purchased for uniforms for class IV staff.

The Northern Railway spent the largest amount, Rs. 23.77 lakhs, on the purchase of khadi during the current year, as against Rs. 0.79 lakhs during the last year.

The value of non-khadi cloth purchased during 1955-56 was Rs. 72.40 lakhs compared to Rs. 57.02 lakhs in the previous year.

MACHINERY AND PLANT FOR COACH FACTORY ORDERS PLACED IN EIGHT COUNTRIES

Railway machine tool manufacturers in eight European countries have secured orders aggregating about Rs. 40 lakhs for the second instalment of machinery and plant for the Railway Ministry's Integral Coach Factory at Perambur, near Madras.

The Factory, when equipped with these, is expected to reach its annual target production of 350 coaches one year ahead of the original schedule—in four years instead of five.

Firms in West Germany and the United Kingdom together have secured more than 50 per cent of the total value of the orders, which cover 189 machines of various types. Smaller but sizable orders have gone to manufacturers in Switzerland, Italy, Czechoslovakia, Poland, Austria and Sweden.

Two senior railway officers were in this connection recently deputed to Europe to negotiate and finalise the contracts on the spot after inspecting the machines where necessary, in order to save the time that would otherwise have been spent in settling matters through correspondence. Global tenders were invited, and nearly 170 firms in 15 different countries submitted tenders which formed the basis of the negotiations.

FRENCH TEAM'S REPORT ON RAILWAY ELECTRIFICATION

A report on certain technical aspects of railway electrification in India by a team of French railway experts was presented to the Railway Board on August 31, at a ceremony in New Delhi.

The report was presented by the leader of the team Mr. F. Nouvion, Chief Engineer of the French National Railways, to Shri G. Pande, Chairman, Railway Board. Among those present at the ceremony were Mr. M. Christian Belle, French Minister Counsellor in New Delhi, Mr. M. Guy Chaumet, French Counsellor for Economic Affairs, Mr. J. Boulgne, Project Engineer, French Railways, and Members and Additional Members of the Railway Board.

Acknowledging the "very hard" work put in by the team, Shri Pande said that the report would be most valuable in helping the

Government of India in coming to a final decision on Railway electrification. He requested Mr. Belle, the French Minister Counsellor, to convey to his Government and to the French National Railways, the gratitude of the Government of India for the help given by the team.

In their report, the team has expressed the opinion that the A. C. 50 cycles traction system would be more appropriate for the Indian conditions, and substantially cheaper than the D. C. system.

The services of the team were placed at the disposal of the Government of India about three months ago by the French Government, which had also offered to meet the team's expenses on travel and stay in India.

The team undertook a tour of certain sections of the Indian railways where electrification is proposed, and flew back to France, where the report was finalised.

Mr. F. Nouvion, fourth from left, presenting the report to Mr. G. Pande (on his left)



A powerful GEA type Beyer-Garratt steam locomotive, heading a heavy goods train on the Cape Town-Port Elizabeth route

WORLD OF RAILWAYS

ARTHUR L. STEAD

Our London Correspondent

TWICE every week, at midday on Monday and Thursday, the "Blue Train" of the South African Railways heads northwards out of Cape Town for Pretoria, 999 miles distant. This luxury outfit is one of the world's outstanding passenger services, operated by a system that has contributed much to world railway efficiency.

A century ago, the "Iron Horse" was unknown in Africa. It was in the country known as Natal that, in 1860, the pioneer steam locomotive, "Cadiz", made history by inaugurating South Africa's first steam rail service over a short length of track connecting the township of Durban with the sea. Today, the primitive "Cadiz" occupies a place of honour at the main passenger station in Durban, to remind one and all of the humble beginnings of the Union of South Africa's present-day 13,483 route-mile rail network.

Prior to the appearance of the "Cadiz", the good folk of Cape Town had toyed with the idea of railway building, but it was not until 1862 that the Cape Town Railway and Dock Company opened its first section of steam-operated line between Cape Town and Eerste River. Two years later, another con-

cern—the Wynberg Railway Company—opened a short route between Cape Town and the suburb of Wynberg. The Cape Town-Eerste River route was extended gradually to Wellington, but at the end of the eighteenth century South Africa had less than 100 miles of rail track.

It was the discovery of diamonds, gold and coal that really encouraged the South Africans to replace their ox-wagons by "Iron Horses". By 1880, the Cape Colony had 913 miles of track opened for traffic. Five years later, mileage had grown to 1,654, and in 1909—on the eve of the establishment of the Union of South Africa—there were 3,329 miles of line in Cape Colony. In Natal, the Transvaal and the Orange Free State, railway building through the years proceeded apace, and in 1916 all these separate undertakings were combined to form the government-owned South African Railways.

The first South African lines were constructed by British engineers and equipped with English machinery. The pioneer lines in both Cape Colony and Natal were of 4 ft. 8½ in. track gauge. By degrees, however, the 3 ft. 6 in. dimension was found better suited to local

conditions, and this gauge was many years ago adopted as standard for South Africa—just as was the case with the Central African lines further north.

The principal main-line of the South African Railways runs north from Cape Town to Johannesburg (956 miles) and Pretoria (999 miles), *via* Beaufort West, De Aar and Kimberley. From just north of Cape Town on this route, a main-line goes east to the coastal cities of Mossel Bay and Port Elizabeth. From De Aar, main-lines run south-east to East London, and north-west to Windhoek. Kimberley is the junction for a main-line running east to Bloemfontein, Pietermaritzburg and Durban, and a west-going line to Lohathla. From just north of Kimberley, a main-line proceeds north through Mafeking to Bulawayo and the Rhodesian Railways, while from Pretoria main-lines run east to Lourenco Marques, and north to Messina.

Tremendously difficult construction work was involved in building the South African Railways, particularly in the mountain regions around Cape Town and between Johannesburg and Durban. Tracks are divided into various classes, Class I track—as employed on the principal main-lines—being of 96 pound steel, axle-load 22 tons, 2,376 sleepers per mile, and 2,200 cubic yards of ballast per mile, with maximum permissible speed on straight track 60 miles per hour. Rails usually are laid either on chairs or soleplates, secured to steel or timber sleepers by screws. There are only 64 tunnels on the system, the longest being near Durban (3,002 ft.).

Bridges on the South African Railways total 10,000, longest steel bridge being that across the Orange River at Upington (3,514 ft.). An interesting steel bridge—the only one of its special kind in South Africa—crosses the Buffalo River at East London. This is a

double-deck rail and road bridge, the road and footways being carried on the upper deck and the railway on the lower deck. Total length is 1,000 ft.

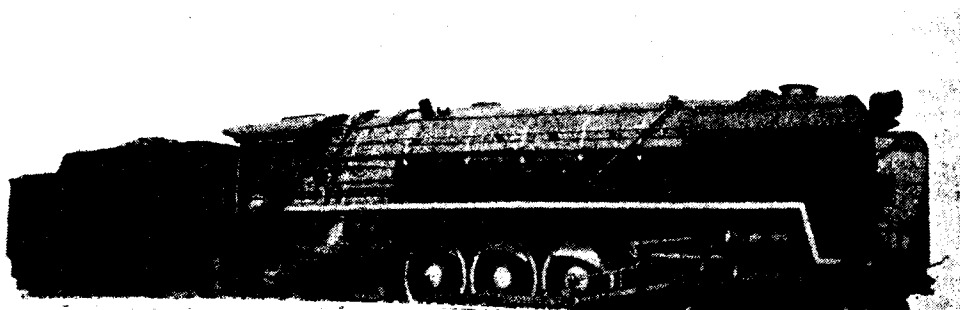
South African locomotive engineers, limited to the 3 ft. 6 in. track gauge, had no precedent in other parts of the world to serve as a guide in designing large type locomotives for this gauge. In every class of engine designed, therefore, ideas based on local experience have been incorporated. In course of years, engines specially adapted to South African conditions have been developed, until today South African Railways operate some of the heaviest locomotives for the weight of track.

Steam locomotives in South Africa total 2,400. For both passenger and freight business, 4-8-2 type machines often are utilised, the latest design being the 15F. This locomotive has dimensions as follows: coupled wheels, 5 ft.; leading wheels, 2 ft. 6 in.; trailing wheels, 2 ft. 10 in.; tractive effort, 42,340 pounds; water capacity, 6,000 gallons; coal, 14 tons; total weight engine and tender in working order, 178 tons.

In recent years, powerful Beyer-Garratt articulated steam locomotives have been introduced on the South African Railways with great success, and these machines now form the backbone of the system's motive power. The latest type of Beyer-Garratt (the GEA class) is a giant machine of 4-8-2+2-8-4 wheel arrangement, having a total weight of 184½ tons.

Principal dimensions of the GEA are as follows:—Cylinders (4) 18½ in. by 26 in.; coupled wheels, 4 ft.; total wheelbase, 80 ft. 10 in.; boiler pressure, 200 pounds; heating surface (including 463 sq. ft. superheater) 3,003 sq. ft.; grate area, 51.3 sq. ft.; coal capacity, 10 tons; water, 5,560 gallons; tractive effort, 63,030 pounds; and maximum axle load, 15 tons.

4-8-2 type, class 15F steam locomotive, for passenger and goods haulage on the South African Railways



The Cape Town—Pretoria 'Blue Train' of South African Railways, hauled by 4-8-2 steam locomotive, 'Princess Elizabeth'

Diesel traction has not much appeal to South Africa, probably owing to lack of local oil resources. Electrification is the thing the country pins its future hopes upon. About 200 electric locomotives are at present in main-line service, electric traction having first been introduced in 1925 on a 73-mile stretch of the Natal main-line. At present, electric train services are operated over about 600 route-miles, while a further 400 route-miles are in process of conversion, with other big projects to follow.

In Natal, very steep grades have to be negotiated, and on the Durban-Johannesburg main-line (494 miles) four-axle 1,200 h.p. electric locomotives perform fine service. They are operated in multiples, up to three units being controlled by one driver. More than 12,000,000 train-miles are run annually in Natal by electric traction, the ton-mileage figure being 6,526,000,000.

In the Cape Province, electric working is confined to Cape Town and its environs, where suburban services are operated over 45 route-miles. The longest electrified stretch is from Cape Town to Simonstown, and multiple-unit motor-car trains are employed over this 27-mile length. Cape Town Station is one of

the busiest in the Union, being only second to Johannesburg. In a single year, passenger journeys on the Cape suburban services reach around 78,000,000 and train mileage 2,500,000.

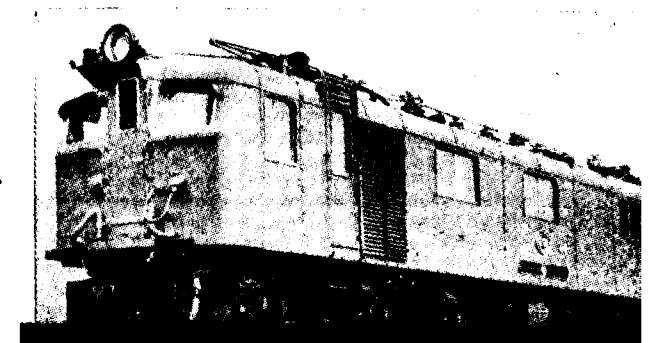
At the present time, there is proceeding the electrification of 195 miles of main-line in Cape Province, from Bellville—the most northern point of the present suburban services—to Touws River. This line winds up and down the precipitous passes of the Hex River Mountains that place a formidable barrier between the Cape coastal belt and the interior, and electrification will result in much more favourable working conditions.

The present working voltage of the Cape suburban system is 1,500 D.C., but this is now in process of being changed to 3,000 D.C., to bring the Cape into line with the Transvaal and Natal. In the Witwatersrand—the main centre of the Union's gold-mining industry—inter-urban services between the various Reef towns have for many years been electric, and Pretoria was later included in this network. Annual train-mileage in this area is about 4,000,000 and passenger journeys 85,000,000.

Train signalling has received great attention in South Africa to ensure safe operation. All semaphore signals are of the two-position type operating in the upper left-hand quadrant, the proceed indication being given by the arm when inclined at 45 degrees to the horizontal. Modern power signalling, with colour lights, has been introduced on many sections, while route relay interlocking is being developed on a big scale.

Passenger carriages on the South African Railways total 5,000 and goods wagons 64,000. Every year, about 250,000,000 passengers and 50,000,000 tons of freight are carried. Different standard passenger cars are provided to meet the needs of the three different passenger groups, *viz.*, the long-distance night traveller, the medium-distance day traveller, and the suburban patron. Each of these

2,500 h.p. electric locomotive (six axles) of the South African Railways, used for main-line haulage



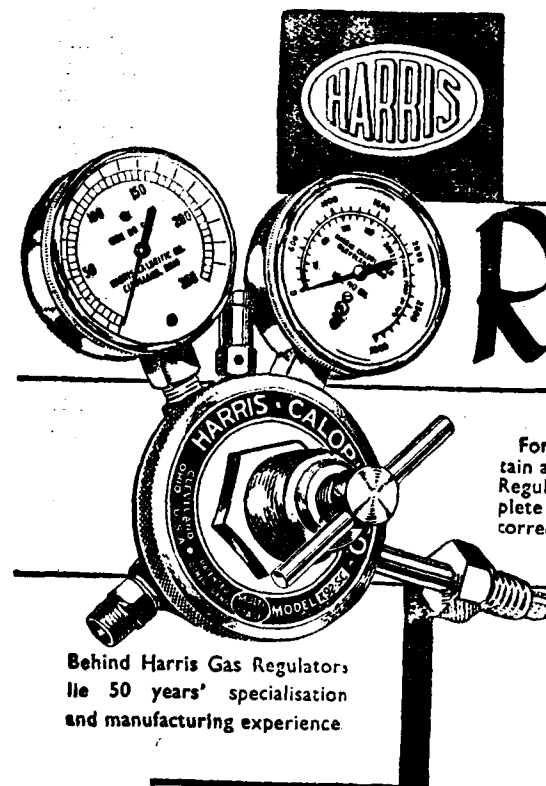
groups is divided into three classes of travel, first, second and third. Sleeping accommodation is provided as standard on all overnight journeys in all classes. In addition, there are special types of coach, which include kitchen and dining-cars, observation saloons, and de luxe air-conditioned coaches for use on the "Blue Train" and other outstanding services. Standard length of passenger coaches is 63 ft., and width 9 ft. 3 in., the wide cars being a surprising feature of the 3 ft. 6 in. gauge.

The famous "Blue Train", covering the 999 miles from Cape Town to Pretoria in 27½ hours, has become a great favourite with tourists. With its double windows and air-conditioning, luxury seating, first-class restaurant service, and a host of other amenities, this unique South African train compares very favourably indeed with the best any other land can offer. The "Blue Train" is the only limited (first-class only) train operated

by the system. All other expresses include both first and second-class. The sections of all passenger trains are readily convertible into bedrooms at night, small adjustments turning the seats into beds, and the upper berths being formed by opening out the panelling and securing the berth which lies behind.

South Africa, of course, has its own peculiar problems arising out of the mixed population. On the railways, however, the total staff of 178,000 embraces men and women of many races who work happily together for the common good, enjoying very fine health, education and welfare services. Without doubt, the South African Railways is a truly "up-and-coming" system, making an immensely useful contribution to the continent's development and to world railway progress.

[Photographs Courtesy South African Railways]



HARRIS

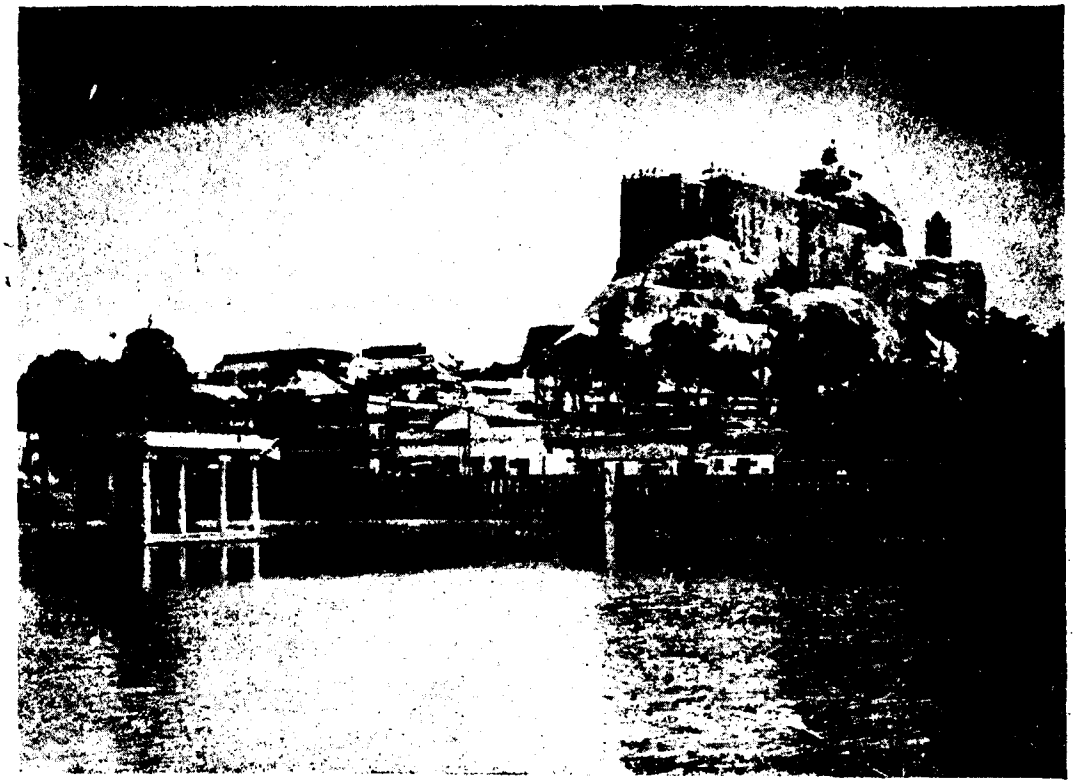
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THE ROCK FORT AT TIRUCHIRAPALLI AND

A BIRD'S-EYE VIEW OF THE TOWN

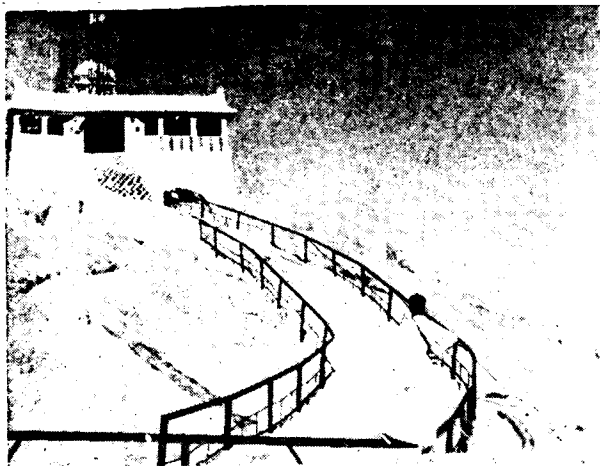
N. RAMAKRISHNA

WHO has not seen the famous Rock Fort at Tiruchirapalli the well-known landmark of the famous and ancient city in South India? Many have seen it, many have heard of it, and many have gone up the steps to the summit, but how many know exactly the history of the place? Probably the most photographed subject in South India the Rock Fort commands a majestic appearance when seen from many miles around in any direction.

Situated on the southern banks of the River Cauvery Tiruchirapalli has long been known in the history as the Key of the Carnatic and it is also a central town in the Southern Districts. The two famous rivers the Cauvery and the Coleroon flow near this place and Trichi is made still more famous by the two great temples at Srirangam and Jambukeswaram (Tiruvanaikoil) nearby.

Tiruchirapalli got its name from the three headed-hemon Trisiras. Said to have been the cousin of Ravana, the demon worshipped Lord Siva here. Another legendary belief is that a boulder blown out from Maha Mehru fell at Tiruchirapalli and came to be known as Kailas of the South. There is yet another version that as there are three sections of the rocks with the Uchi Pilliar Koil topping them, the place came to be known as Tiruchirapalli. Anyway the huge monument is there from time immemorial.

The temples at Rock Fort are well known. On the western half of the rock are the magnificent temples of Mathurbootheswarar and his consort Sugandakundalamba. The Lord goes by the name Thayumanavar—Lord who appeared as mother—and there are paintings on the walls depicting the famous story. The temple of Ganesa is on the topmost point and



The Ucchi Pilliar Koil

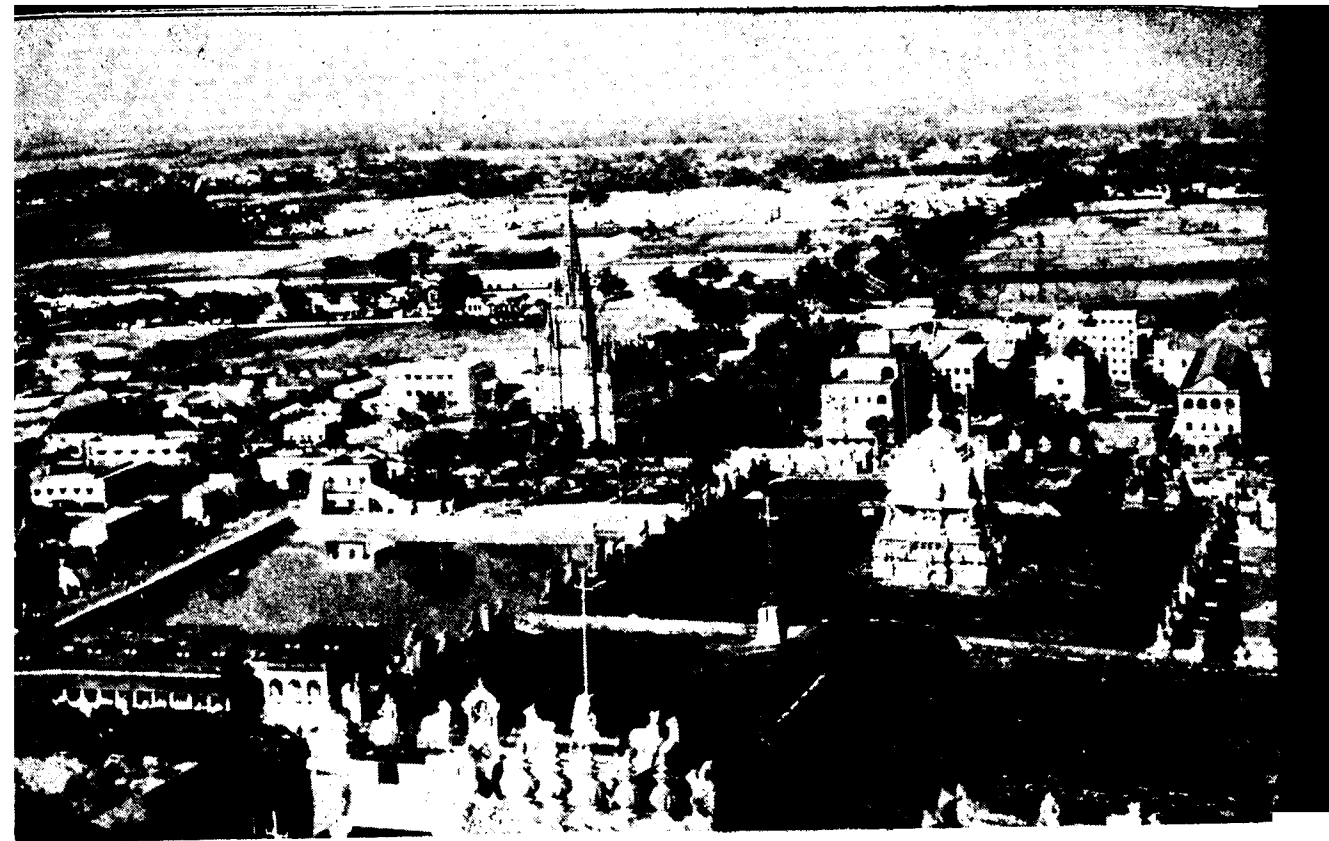
is called the Ucchi Pilliar Koil commanding an unique position and the big light fixed on the top can be seen from miles around.

According to historical references the Pallava King Mahendravarma built the temples in the 6th century. One sees two cave temples, one on the way to the top of the Ganesa temple and the other in front

of the flight of steps from below. The top one is the well-known one bearing inscriptions in Grantha and Tamil. There are figures cut in stone also on the walls. Inscriptions relate to Raja Raja Kesari Varman a Chola King who ruled in the 10th century and the Pandya King of the 9th century. Tiruchi Fort has been connected with the wars between the English and the French in the 18th century. It is said to have been the storehouse of gunpowder. One sees small pits in the cave at the top. It is also said that there was a thousand-pillared hall at the entrance where the shops are now situated, and that the hall was spoiled by an explosion in 1772. There is also a reference to the Pandya rule with the symbol of a fish cut in stone. The steps leading to the Ucchi Pilliar Koil are cut in the rock. Originally there was no protection but after a mishap in 1849 at the time of the Vinayaka Chaturthi, iron railings were constructed for the safety of the devotees and sightseers in 1866.

Ucchi Pilliar Koil is the topmost point on the rock. Situated at a height of 273 feet one has to climb 417 steps to reach the

The river Cauvery in the foreground with the Road and Railway bridges, and river Coleroon in the background



The Tillai Nagar Extensions : In the foreground is the famous church and the buildings nearby are those of the St. Joseph's College

top. There is a huge light installed at the top which can be seen from many miles around at night.

There are many Mantapams at Tiruchi Rock Fort. They are the Vahana Mantapam, Hundred-pillared Hall, Chitra Mantapam and the Sixteen-pillared Mantapam. But the most notable one is the Mani Mantapam or the Bell Tower. It is said to have been built in about 1918 by public donations. There is a huge Bell inside weighing 2½ tons with a height of 4 feet 8 inches and diameter 4 feet 6 inches. Probably this is the biggest bell in South India. It was made in South India in the Negapatam Railway Workshop of those days.

The history of the Rock Fort at Tiruchi will not be complete without reference to Saint Thayumanavar who lived during the time of the Vijayanagar Kings. Born as the son of a minister, he became the minister after his father at a very early age. He came across a Sage on the Rock in a shrine

known as Mouna Guru—the Silent Sage. He became his devotee and was initiated by him later. He became his disciple leaving off office. He sang in praise of the Lord and later attained Samadhi near Ramanathapuram. At Tiruchi the anniversary of his death is

Bird's-Eye View of Trichy Town showing a section of the Bazaar and the area near the junction





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celebrated during the Brahmothsavam on a grand scale every year.

There is also the Mouna Madam where the saint lived. The entrance is small when compared with the spacious interior. Many Tambirans have lived here and it belongs to and is managed by His Holiness Sri La Sri Maha Sannidanam of Dharmapuram Adhinam. A representative Tambiran is there to look after the affairs of the Mutt and daily rituals.

Malaivasal Manikka Vinayakar attracts a large crowd every day.

Apart from being a place of historical and religious interest, the Rock Fort at Tiruchi accords a fine and panoramic view of the whole of Tiruchirapalli City and its surroundings—a view of the rivers with the road and railway bridges, the distant temple towers of Srirangam and also Tiruvanaikoil. The crowded city with thousands of houses most of them terraced because of the monkey menace, is a treat to watch from the top. On the other side in contrast can be seen the new extensions of Tillai Nagar with well-planned houses forming an extension. Tiruchirapalli is the central place of the Southern Railway and the buildings of the junction are modern and attractive.



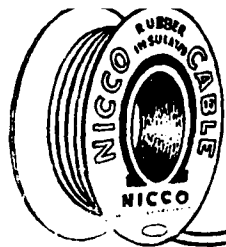
The Bell Tower, which stations probably the biggest bell in South India

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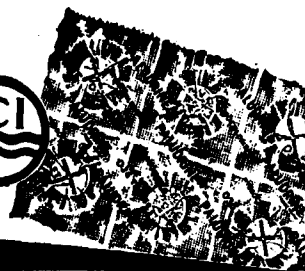
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RAILWAY BLOCK SYSTEMS

T. S. PARTHASARATHY

Deputy Chief Optg. Supdt. (Coaching)

RAILWAYS in the various parts of the world use different block systems for working trains in a safe and efficient manner. The fundamental purpose of a block system is to give communication between the staff controlling the dispatch of trains so as to maintain an adequate space interval between following trains. The principle of 'space interval working' superseded the original 'time interval' method of dispatch as soon as the electric telegraph became available to afford the necessary means of communication. Prior to this, some attempt had been made to establish space interval working by visual means (e.g., the "Highball"), but these methods suffered from serious limitations.

A 'block' is a space interval as opposed to a time interval. Under the latter, all trains are expected to reach the crossing station in time to clear the road for trains in the opposite direction. This system still exists in countries like U.S.A. but safer methods are required in other places and a 'space interval' is an obvious improvement on 'time interval'.

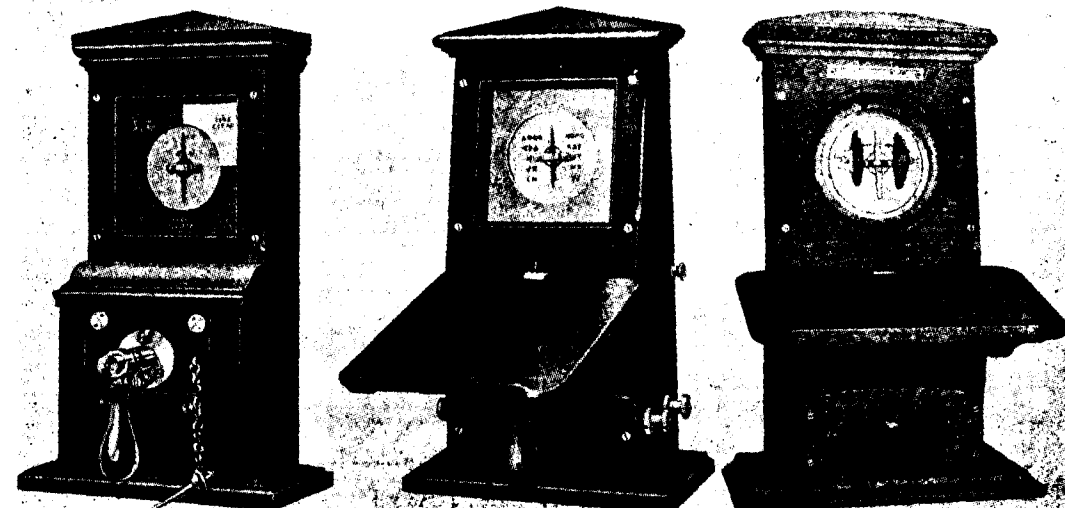
On lines carrying traffic in one direction only (such as double or quadruple lines) the block instruments give all the necessary safeguards but with single line working, additional means have to be provided to establish direction of working as well as spacing of following trains.

Originally, the safety of block signalling system depended on the correct manipulation of the instruments by the operators in accordance with a rigid code of regulations. As a result of accidents caused by carelessness and non-observance of regulations, it has become the practice to apply automatic controls to the instruments to safeguard against such contingencies. A modern set of block instruments, for example, ensures that

(a) The starting (or section) signal cannot be cleared unless the block instrument is at 'Line clear' and once pulled, the signal cannot be cleared a second time under the same permission.

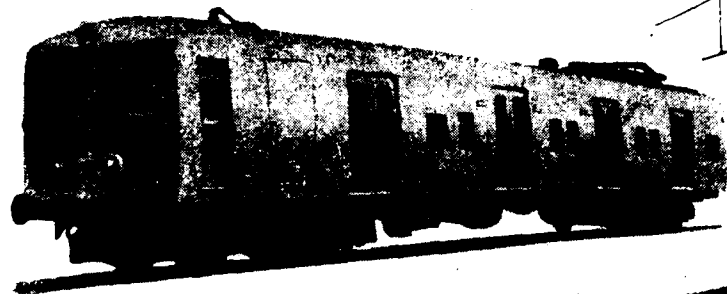
(b) The starting signal must be replaced after a train has entered the Block Section before it can be approached by a second train.

Early Block Instruments





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(c) Once permission has been given for a train to approach, the instrument remains locked until that train has actually arrived.

(d) The Home Signal(s) must have been replaced behind the previous train before permission can be given for a following train to approach.

There are two fundamental systems of block working, viz., the Open Block and the Closed Block. Under the former method, the line is considered clear as soon as a train has passed clear of the Block Section and the signalman at the rear signal can permit another train to enter the section without further reference to the forward signalman. With "Closed Block" working, although the rear signalman has been advised that the previous train has cleared the section, he must obtain

permission from the forward signalman immediately before permitting a following train to enter the section. This leaves the forward signalman with the "power of refusal" for any train that he does not wish to approach him.

Those who are in favour of the "Closed Block" are of the opinion that the station in advance should always have the right to refuse Line clear, while adherents of the Open Block think that it is a waste of time to obtain Line clear when the section is free.

The block systems adopted by the railways of the world can be broadly grouped further under five basic types:

- (1) Manual.
- (2) Machine.
- (3) Controlled Manual.
- (4) Auto-Manual.
- (5) Auto.

Permissive 'indication' Block Instrument

British systems have only manual and auto or auto-manual. U.S.A. and Japan adopt more forms of these systems.

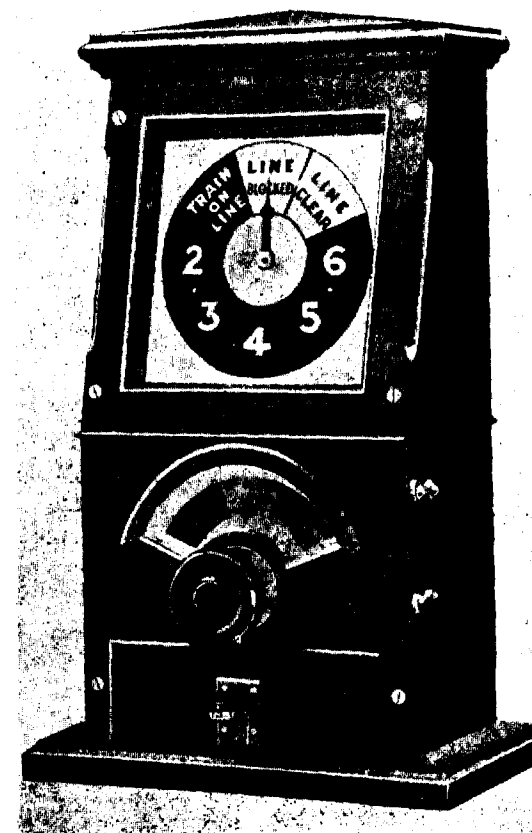
The Simplest System of Working

The simplest of single line working systems is the "One Engine Only" system (in use on the Alnavar-Dandeli section of the Southern Railway) which requires no communication between the ends of the section. One train staff is provided which is the sole authority for the driver to enter the section. Intermediate sidings, if any (like Shingatgeri and Shirgur on the Alnavar-Dandeli Branch) are released by the staff or by a key attached to the staff or carried separately. There is, obviously, no flexibility of operation under this system as no other train can enter the section until the first engine had returned after completing the round-trip.

The next stage in the development of the block system was the introduction of a ticket system which permitted following trains in the same direction but required the provision of block instruments. Non-passing block posts were later introduced for headway purposes.

Token Systems

These cover a wide range of instruments designed to overcome many of the disadvantages



of the train staff system and include Tablet, Ball, Key, Token and Electric Train Staff. These systems are based on the principle that the Driver should be given a tangible, physical token as his authority to enter the Single Line Section. The basic difference between them and the train staff system is that instead of there being only one token, there are a number of identical tokens stored up in the magazines of electrically-interlocked instruments. In 'absolute block' working, only one token can be withdrawn at a time and for 'permissive' instruments, tokens can only be withdrawn at one end until all have been restored.

Apparatus Associated with Block Systems

(1) *Siding Locks.*—These are devices fitted to the levers operating siding connections on Single Line sections. They prevent the opening of the siding points unless released by the Single Line token or by a special key attached to it. Once the siding has been opened, the token (or key) cannot be removed until the switches (points) have again been closed.

(2) *Intermediate Instruments.*—These instruments permit the opening of the Single Line section to other traffic once a train carrying the token has passed entirely into an intermediate siding. The token is first used to release the siding lock and after the train has entered and the points restored, it is inserted in a special instrument. The operation of this instrument permits the restoration of normal working between the stations at each end of the section. Before the token can again be withdrawn from the Intermediate instrument, it must be proved, by the co-operation of both signalmen that there is no other token out for the section. More than one Intermediate Instrument may be employed in one section. On the Southern Railway these 'occupation block' instruments are in use at the Kaza Siding on the Bezwada-Guntur section, the Sitarampuram Siding on the Guntur-Macherla Branch and other places.

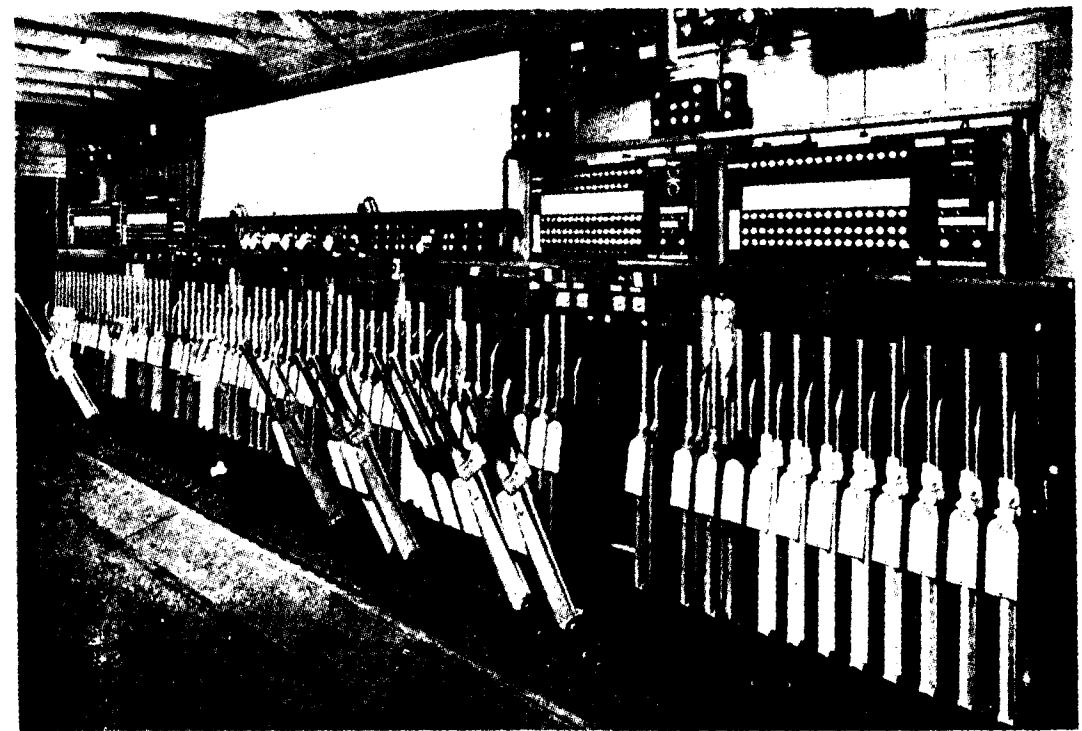
(3) *Auxiliary Instruments.*—In cases where the point at which tokens have to be delivered to or handed up by a driver is remote from the signalbox or would involve danger to personnel in reaching that point from the signalbox (cabin). Auxiliary instruments are provided. These comprise a pair of instruments, one on the ground at the point of token exchange

and one in the signalbox. When a token has been withdrawn from the main instrument, the signalman, instead of handing it to the driver direct, inserts it in his Auxiliary instrument, so enabling the driver to withdraw an identical token from the ground instrument. The reverse operation can be performed for incoming tokens. There must be one auxiliary instrument in the cabin for each one on the ground. These instruments are similar to electrical key transmitters (like Hepper's) with the difference that they transmit tokens instead of keys.

(4) *Portable Magazines.* It often happens that, owing to unbalance in train working, the tokens for one particular single line section tend to accumulate in the instrument at one end. Arrangements must be made to transfer the surplus by hand to the other end of the section. The portable magazine forms the safest method of performing this operation since no loose tokens will become available.

(5) *Switching out Arrangements.*—Under this system, the staffs for the sections on either side of a signalbox which is to be switched out are arranged so that they can be joined and locked together and thus form the staff for the long section. Another arrangement under this system is that a separate staff or token, normally locked up, is provided for the long section. When 'switching out' takes place, the two short section staffs are inserted in the special staff box at the intermediate station and serve to release the long section staff. After withdrawal of the latter the short section staffs become locked. This system is most commonly used with electric token working but means that there must be a train at the intermediate point at the time it closes. As an alternative with electric token working, the intermediate box may be provided with a special switch which, by purely electric operation, proves the short sections clear and releases the instruments for long section working and *vice versa*. In this case, there can be no train at the intermediate box.

As the 'switching out' system is not in existence on this Railway, an example may be given. Let us suppose that it is desired to 'switch out' at night Basavapuram and Bogada stations on the Nandyal-Donakonda section to avoid staff being on duty. The Gazulapalli-Basavapuram token can be combined with the Basavapuram-Chelama token



Cabin with electrically-illuminated diagrams

and the entire Gazulapalli-Chelama section can be treated as one block section for the night. Similarly, the Chelama-Diguvametta section can be made into one long block section, 'switching out' Bogada for the night. Points will be set and locked for the Main Line and signals kept lowered from both directions before the staff leave the station at dusk and no crossings can take place at the 'switched out' stations for the duration of the night.

(6) *Reversible Staff and Metal Ticket.*—This equipment was designed to produce the best features of both staff and electric token working. One train staff is provided at each end of the section but only one of them can be free at a time. The free staff is used to release the metal tickets, one at a time, but itself never leaves the signalbox. All tickets are counted electrically before the direction of operation can be reversed. The staffs and tickets are used in conjunction with block instruments and intermediate block posts to reduce the headway between following trains can be provided.

The American System

Different methods of employing telephone and telegraph for block working are employed in Europe and other continents. Almost invariably detailed record books are maintained by the operators and written orders are given to the train crews.

In the American system, however, telephone and telegraph are only employed to supplement train order working. This system gives trains individual superiority by Right, Class and Direction. The superior train always has right of way over an inferior train, but passing points, as defined by time-table and train order, have to be strictly adhered to. The telephone and telegraph are used mainly for recording of movements and the issue of revised train orders to meet special circumstances. The safety of the system depends on the strict obedience of the train crews to their orders. Frequently, automatic headway block is used to improve line capacity but crossing is determined by the train order.

Non-Token Block Systems

The main purpose of these systems is to avoid the delays which are occasioned by the necessity to handle tokens or paper line clear tickets. The following fundamental requirements must be met by these electrical instruments:

(1) Before a train may be permitted to enter a section, the previous train in either direction (on a single line) must be proved to have cleared the section and the signals replaced to the 'ON' position behind it.

(2) No permission has been given for a train to approach from the opposite direction.

(3) When there is an intermediate non-crossing signalbox provided for headway purposes, permission for a train to proceed from one end of the complete section may be given as soon as the preceding train in the same direction has passed the intermediate box but may not be given if an opposing train has entered or been given permission to enter any part of the whole section up to the next loop.

Non-token working does not present any difficulties in regard to switching out of intermediate block posts. It is only necessary to provide a switching unit at the box to be closed, operable only when the whole section is clear and which, when operated, switches through the block lines and releases any necessary locking or controls.

Track Circuiting. Continuous track circuiting is the ideal means of control for non-token working. It provides continuous or intermittent detection of the block section. Normally associated with Direction Levers or switches, track circuiting is expensive and impracticable with steel or concrete sleepers.

Axle counters are alternatives to track circuiting as a method of ensuring vacancy of the section. The provision of axle counters is independent of the type of sleepers but expensive in line wire cost. Axle counters are provided at the beginning and at the end of block sections and unless the same number of axles, as were counted when the train

entered the section, are again counted when it leaves the section, the block section cannot be treated as vacant.

Another cheaper method of detection of the vacancy of a block section is the 'entry and exit' detection known as the 'NX' system. This is usually achieved by means of short track circuits or treadles. A train passing over the detector at entry of section causes the controlling instruments to become locked until it has actuated the detector on leaving the section. The system works in connection with Lock and Block instruments (like Syke's) but does not ensure that the whole train has cleared section. The system does not provide for vehicles left behind in the section.

Rotation locking.—The starting signal must be released (for one train only) by block acceptance or direction lever control. In addition, the Home and Starting Signals at the remote end of the section should be proved to be at danger. This must be ensured by rotation locking, i.e., that the starting signal is replaced after each train.

C.T.C.

Centralized Traffic Control is the most modern method of train operation and enables long stretches of track to be under the direct control of a single despatcher. He has continuous visual indication of the position of trains, points and signals and operates all points and signals himself as required. This undoubtedly produces the highest possible capacity but the installation is very expensive as it necessitates continuous track circuiting or axle counters, electrically-operated signals and similarly operated or released points. The controlling circuits and apparatus are complex and a steady power supply is essential. The cost of installing C.T.C. can only be justified as an alternative to doubling a line which has reached its saturation point.

In the light of the above remarks, systems, installations and appliances used by railways in various countries will be examined in my next article.

THE SECRETS OF SUCCESS

RAGHAV

EVERY human being is born with certain inherited abilities and disabilities.

These are modified, quite profoundly, in his childhood, boyhood and adolescence so that when he arrives at that stage of life when he has to face the world, his capabilities are circumscribed: the limits to his capacity are already set. But he owes it to himself and to the world to develop this capacity to the full and achieve a maximum utilisation of his talents. The success of a man depends on the efficiency with which he puts his abilities to work. Just as even a small well-maintained, well-tuned engine is more desirable and more useful than a powerful engine, ill-maintained and ill-tuned, so also the world prefers a man of even mediocre skill who puts to work his entire capacity, to one who may possess extraordinary abilities but who fritters them away. This fundamentally is the reason why we often find that men of greater capacity are failures while their inferiors are on top. The latter group has achieved a maximum of efficiency with their resources while the former in spite of their obvious superiority, have by a dissipation of their energies, failed to achieve the same results. Thus mental efficiency is a prime factor in success.

How is this mental efficiency achieved? First and foremost there must be a driving force behind. This is the purpose or aim in life. A man who has set a goal, who is inspired by certain causes is more likely to achieve mental efficiency than one who is not sure of what he is living for and whose life is purposeless and meaningless. It may be the desire to remove untouchability or to establish the supremacy of truth and ahimsa or to establish a communistic society or to make a lot of money—there is an ideal, an inspiration, an intense desire, a driving force which brings out a man's capabilities—evident and latent—to the full.

Lest an impression be given that this inspiration should be of a revolutionary character, it is necessary to state clearly and emphatically that it is not so much the nature of the driving force as its intensity that matters. Whether it is a steam engine or a diesel or a petrol engine, it is the horsepower

delivered that really matters. A clerk in an office who aspires to become the Office Supdt. as soon as possible as a first step towards further promotions, and consequently exerts every faculty of his to do his work perfectly and thus prove his fitness to hold the higher post, is no less profoundly moved by an aim in life than a social worker desirous of eliminating slums or a politician pursuing the ideal of a socialistic pattern of society. Similarly Robin Hoods or his alleged counterparts in Modern India, have their own desires and aims, however unsavoury they may be, which bring out all their abilities to the highest pitch of efficiency. The aim may be high or low, worthy or unworthy, it is its intensity that is the deciding factor.

The emphasis on a goal in life eagerly desired for and anxiously sought after, is especially necessary to the educated middle class who unfortunately confuse a wish for the unattainable with an aim in life and are consequently easily frustrated, disillusioned and discouraged. The goal must be not only possible to achieve generally but capable of attainment by the person desiring to do so. Let each person recognise his limitations and at the same time assess his capabilities and strive towards a goal he can reach. It is essential that anyone desirous of progressing should deliberately examine his purpose in life, his qualifications and limitations and then set about developing his personality to the full.

For this development the first step is the deliberate attempt at excellence in the work undertaken. If one had a purpose in life, it is but natural that one subconsciously attempts at excellence in anything that leads to an achievement of the desire. But the secret of success lies in making these subconscious attempts conscious ones. It is that extra effort in a deliberate try at perfection that makes all the difference between being just good at one's job and being a recognised authority and expert.

It may appear a trivial truism to say that any job should be done as well as it can be. But how many of us strive consciously after excellence in results? Too many—far, far too

many—are satisfied with mediocre performance, and accept a second-rate result far too easily. But successful men in any profession have been those who have consciously striven after the best, to whom no detail has been too trivial and who have patiently overcome every shortcoming however small it may be. Therein lies the secret of success, the conscious seeking after excellence, the patient striving after perfection.

One of the prerequisites for attainment of excellence in results is the power of concentration. Concentration does not mean the focussing of the entire mind on just one subject, but the exercise of control over the functions of the mind to keep them strictly within bounds. To keep one's attention confined to a limited orbit without permitting it to wander off into irrelevant channels into which it is dragged by association of ideas—that is concentration.

The benefits of concentration are too obvious to be detailed. Nothing substantial has ever been achieved by the human mind which did not arise out of an intensive study. It has been recognised that genius consists almost entirely of patient, undivided attention.

Concentration comes easily if the subject under study is interesting; in other words, to a man who has a purpose in life which naturally should be of deep interest to him, concentration in the fulfilment of his desire is easy. But it is also true that concentration can be attained to a certain degree by mental discipline. The degree to which one's interest is stimulated and curiosity is sharpened even in what would normally appear to be a boring subject if only one deliberately immerses oneself in the subject is surprising. Queer facts are unearthed, unexpected facets are discovered and it is not improbable that what was initially an effort to study becomes soon an eagerly sought after pleasure. The appetite grows on what it feeds.

The aim or purpose in life, the attempt at perfection and concentration form a harmonious cycle which produce mental efficiency. This is a perfect example of the "non-vicious" circle. A well-defined purpose will bring in its wake a desire for perfection in achievement and the necessary concentration. Every attempt at excellence will improve

the ability to concentrate and sharpen one's desire to reach the goal set, and every effort at concentration will revive and revitalise the purpose in life and make perfection easier.

In the process further benefits accrue: self-confidence is increased. The basis of self-confidence are knowledge and the consciousness that one's powers can always be brought into play at a moment's notice.

One of the hall-marks of an expert in any field is his uncanny ability to forecast the future in his sphere of activities. This prophetic foresight, almost magical to the uninitiated, is but the final fruit of mental efficiency. A deep abiding interest and an intensive study of any subject with a systematic application of one's faculties to produce the best results, lead almost automatically to a skill in anticipating what the future holds for the subject. Put this way, the skill is not unnatural for in the effort to attain mental efficiency, one goes out of one's way to study all aspects of a problem, to analyse it to its fundamentals which have as their end-products the ability to forecast, with a fair degree of certainty, the future. Every step towards mental efficiency increases one's mental stature.

It might be asked whether every successful person in the world has followed these steps. The answer is emphatically 'yes'; may be not consciously but an analysis will reveal that every such person's mental life has primarily consisted of an intense interest, a sustained effort at excellence in result and a deep concentration. Conscious exertion of his faculties in these channels may perhaps have helped him to achieve the successes earlier and better, with less strain, helping him to avoid and overcome heart-breaking pitfalls in the pursuit of his career.

Therefore analyse your life, ascertain what you are living for and then go all out to achieve your ambition. Do not be satisfied with second-rate results and performances; nothing but the best should do for you. Concentrate; do not let anything stand in the way of deliberate intensive study of your problems and of ways and means of overcoming the obstacles between you and the desired goal.

(Continued on page 46)

AUTOMATION OF MARSHALLING YARDS IN THE U. S. A.

P. M. NATARAJAN

PROGRESS or advancement in any field of activity is quite often the result of compelling necessity that brooks no delay. Human ingenuity is challenged most when it has the least to feed up on. Most inventions were not tumbled into for the mere fun of it but were the results of years of toil and fortitude in the search for something to meet the challenge set by the problems that arose in the evolution of man. Such was the development of Automation of marshalling yards in the United States of America.

Although scientific advancements took place simultaneously in most countries of the West, rapid mechanisation and automation were most pronounced in the United States due to such factors as scarcity of labour, rising wage levels, unhealthy competition and above all, a determination to improve their standard of living through industrial progress.

Briefly stated, the bubble boom after the first global war more than doubled the wage levels while the awakening spirit of emancipation which set a large percentage of the coloured population free brought about an acute scarcity of cheap labour. In most states the Negro could be no longer chained to work for a mere morsel of food. The Whites who were all along used to being served abhorred the idea of slaving themselves and even if they were prepared, they were not enough to go round. Naturally, all the large scale employers had to look around for alternatives. The more fortunate Rail Roads adopted the only alternative, i.e., mechanisation while the smaller units whose finances were not adequate, either merged with the bigger Rail Roads or went into liquidation.

This was the origin of mechanisation which eventually culminated in automation in a number of railway activities. On the Operating side, among the many branches in which mechanisation was introduced, the marshalling yards yielded the second largest dividends, advanced signalling and centralised traffic control yielding the maximum economy.

The march of mechanisation in marshalling yards started with what is called "mechanical retardation", which is a device to regulate the speed of the wagons rolling over the hump on to the various classification tracks. Two pairs of specially processed steel flats, fixed on either side of the running rails, actuated either electrically or electro pneumatically and capable of moving towards each other would about describe the mechanical retarders in use on American Railways. These retarders are remote controlled and vary from 1 to 2 retarders per group of classification tracks besides the main retarder which is situated at the foot of the hump. The subsidiary retarders are called the group retarders. The length of each retarder varies with the number desired, the length increasing or decreasing in inverse ratio to the number proposed. These retarders besides saving considerably on skidmen and compensation for injuries sustained by them—believe me that in the United States, an injured skilled employee on the sick list is a lot richer than if he was on active service—secured a drastic reduction in claims paid on damages. The economy achieved as a result of quicker turn round in the marshalling yards was not inconsiderable. Still the American Railways could not rest content in view of the fact that the rise in wage levels which continued unabated was out of all proportions to the economies achieved by mechanisation. Fortunately, the recent development in electronics and the fillip the Rooseveltian new deal gave to the Industries, came to the rescue of the Railways just about the time when most Rail Roads once again faced liquidation. Automation was born. The principle of radar control began to be applied to the technique of retardation. The radar, located about 90 feet from the point where the released wagon gain speed and momentum, measures the velocity and determines the amount of retardation necessary, taking into account the weight of the vehicle, its rolling characteristics and the distance the vehicle has to travel. The retarders are set for three different speeds and the pressure applied by the retarders varies according to the

different velocities with which the vehicles pass them.

Automation is further extended to the Control tower where a teleprinter feeds the switch and retarder controls with what is called "the train consist" or the vehicle guidance together with the number of the classification tracks to which these vehicles are to be shunted. These controls are also capable of storing seven different moves, irrespective of the number of vehicles involved in each move. Thus automatic retardation combined with automatic switching, revolutionised the working of marshalling yards to such an extent that the number of men employed in such yards is hardly a tenth of what it used to be. The Kirk yard which serves all the industries in and around Chicago is one of the two yards which have been completely equipped for automation. This yard has 54 classification tracks, capable of holding about 5,000 wagons and dealing with an average of about 3,500 vehicles per day. A yard of this magnitude has not more than 100 men on its rolls. Barring the vehicles that have to be shunted into the various industrial sidings, the average detention to stock is not more than between 4 and 6 hours and the time taken to break up a 100 vehicle long train, with the worst imaginable marshalling, does not exceed 30 minutes and similarly, thanks to the automatic couplers, the formation of a train takes even less time. The density of traffic is so heavy for each direction that often each of the classification tracks has a minimum of one train load ready to be pulled out.

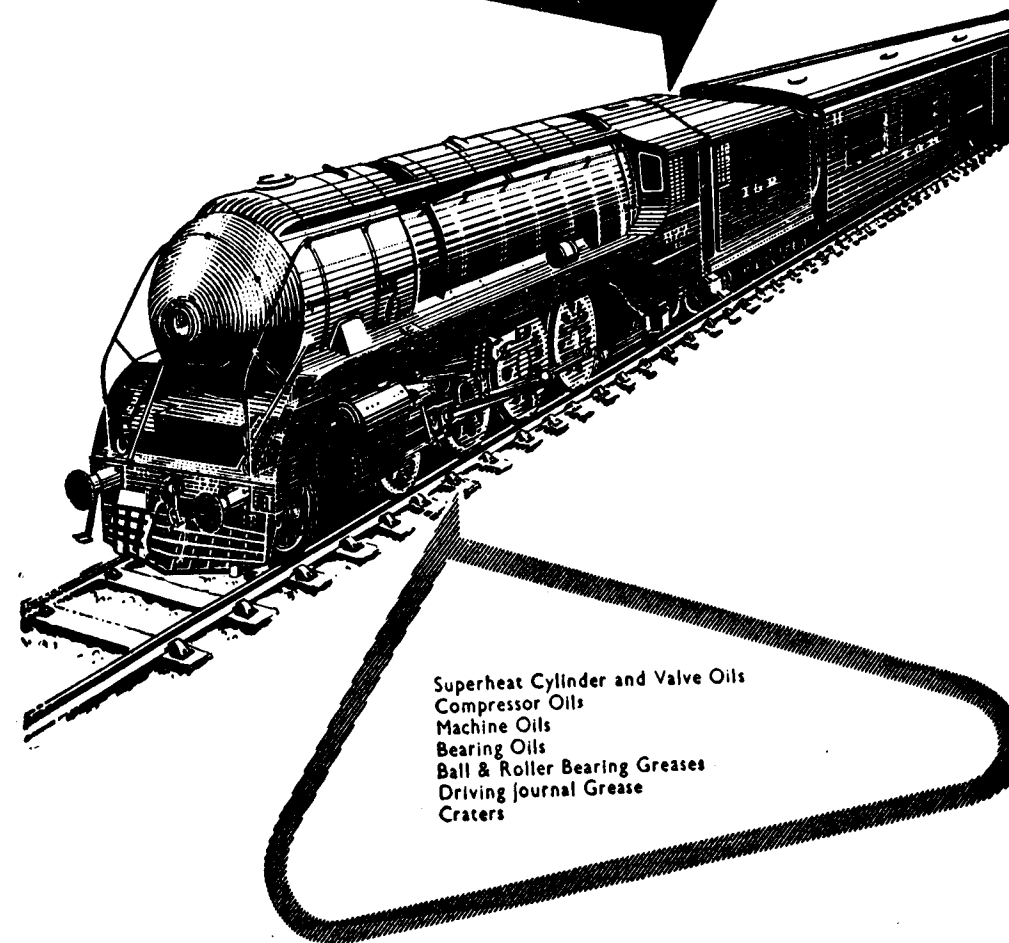
The other yard which is also equipped with automation is the "Mon Southern Yard" near Pittsburgh in Pennsylvania State, serving all the iron and steel industries in and around Pittsburgh. In fact, this yard which is slightly smaller is owned by the United Steel Corporation of America.

The last but not the least important item that completes the picture of automation is the unpretentious looking stand pipe which

sprays every axle box as it passes. The automatic oiler is a simple device, actuated by the flange of the wheel and the amount of oil sprayed is uniform. The automatic oiler apart from saving on cost of oiling staff, has contributed not inconsiderably towards ensuring quicker turn round and also reduces the incidence of hot boxes considerably by ensuring that every axle box that passes by gets its quota of lubricant.

I can almost visualise the gnawing fears in the eyes of the readers of this article as regards the effects of automation on the question of employment. Therefore, I wish to allay their fears immediately in the following lines. Undoubtedly, automation means reduced numbers in the personnel engaged in the field of activity wherein automation has been introduced but does not necessarily mean retrenchment or unemployment. Particularly in a country like ours which needs highly skilled workers concurrently in a number of new undertakings which are not advancing rapidly on account of dearth of skilled artisans, automation would, besides improving the production potential and quality, also release a number of skilled workers for absorption in other industries. These men could be usefully employed elsewhere in other undertakings which need them and thus help rapid industrialisation of the country. While the increase in production adds to the wealth of the country, improvement in quality attracts larger markets and both in turn secure a better standard of living for the country as a whole. Therefore, automation actually secures larger benefits by releasing skilled artisans for other needs, increasing the production potential of the industry concerned, improving the quality of the products, etc. Quite apart from these benefits, automation which has the effect of reducing the man-power employed in the industry in which it has been introduced, offers a much larger scope for employment in the industry making the machinery for automation, thereby proving the age-old saying that nothing ever gets destroyed but transforms into something equally useful.

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SOUTHERN RAILWAY

TENDER NOTICE

The Chief Engineer, Southern Railway, Madras-3, invites LUMP SUM-CUM-PERCENTAGE SEALED TENDERS for the Construction of Staff Quarters at Olavakkot as per particulars below upto 12-00 hours on Wednesday the 10th October 1956.

Type of Quarters	No. of Units	Total Approximate Value	Earnest Money
		Rs.	Rs.
Type II	40	1,80,000	9,000

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

The Tender Form is not transferable.

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

Tender forms will not be issued after 15-00 hours on Thursday the 4th October 1956.

The earnest money for the tender mentioned above should be paid in advance to the Chief Cashier, Southern Railway, Madras-3 or to the Regional Accounts Officer, Mysore or to the Divisional Accounts Officer, Trichinopoly 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 will not be accepted after 15-00 hours on Friday the 5th October 1956.

The tenders will be opened at 12-00 hours on Thursday the 11th October 1956 in the Chief Engineer's Office at Madras.

The Chief Engineer 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.

THE TRADITIONS OF THE SERVICE

ONE OF THE SPECIES

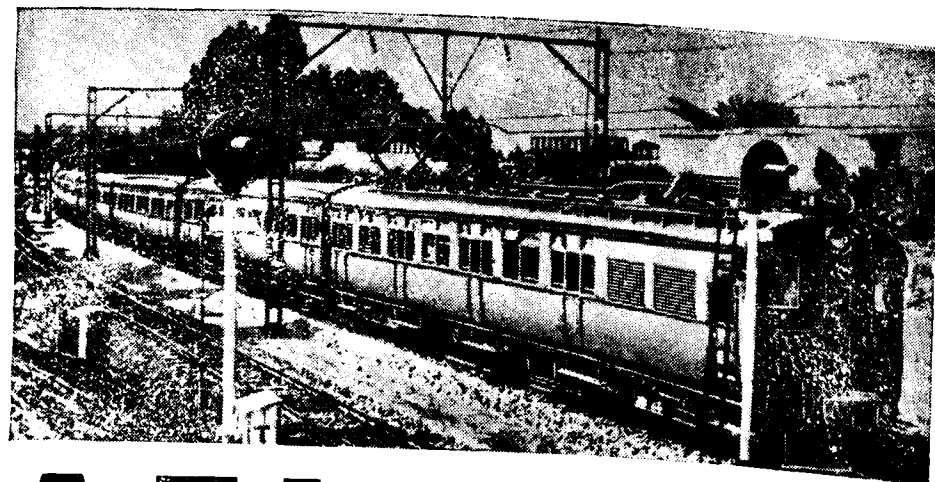
WHEN my friend Mr. Q was recruited as an Officer on the ex-M. S. M. Railway in the good old thirties, he felt that an important ambition of his life had indeed been satisfied. I am telling this short story as Mr. Q is now not with us nor anywhere in this country and the telling of it will hurt no one.

Soon after joining the service, he went the usual rounds of the palatial offices of the ex-M. S. M. Railway at Madras which is the present Headquarters of the Southern Railway and duly noticed tucked up in a corner in what was then the topmost storey a room marked "Tiffin room for Officers."

Now my friend Mr. Q if he was gifted with nothing in particular, was at least gifted with that particularly valuable quality, namely, an extremely logical mind. Hence what more logical for him, than to go into the sanctum sanctorum of this place, and have his tiffin in this place reserved so exclusively for officers. He, of course, noticed with some tepidation that the place was apparently haunted almost exclusively by the white officers of the Railway though by then quite a number of others too had joined the Railway, some of these being much more senior and older than himself. Yet the logic of it clearly dictated that he must occupy a seat in this room and have his lunch with the rest. May be the others of his kind did not go in because, while they doubtless knew all the rules of the Railways' working they did not know the rules for wielding the weapons of the table—or again probably because they had their religious taboos. But these disabilities obviously did not apply to him. He may not have actually gone overseas but he could give points to the white men in the correct handling of tableware and as for religion *vis-a-vis* food, he believed in none of that shibboleth. And so it chanced, after many a day of resolute resolutions, one day, he did actually step into the dining room, well ahead of the usual hour, and before any one else could troop in. Then, having selected a chair which appeared to him unobstrusive and humble enough, he seated himself in it with all the tepidation and bravado of a real hero and awaited developments.

The Head waiter of the room in those days was indeed a great figure. If ever there was a Chief Officer in that most dignified calling of "Waiter" he surely was that. In his immaculate dress and a bearing that would have done credit to his corresponding number in the Buckingham Palace before the days of Socialism, this worthy moved with unruffled steps to the seat of our friend who was anxiously expecting the approaching worthy. He, for his part was ready with his orders—which he had so carefully selected from the menu card stuck up so nicely on the table. But what was his surprise, if not chagrin, when without as much as bating an eyelid, the worthy of the tiffin room, uttered in sombre tones, "Sir, you are sitting in the chair of the Signal Engineer." This would have looked very much like a rebuke but the very dry and expressionless way in which it was pronounced convinced Mr. Q that his mistake was not indeed too serious; that in fact it was capable of easy rectification. So he quietly moved to another seat and looked up for that look of approbation from his mentor which would, so to say, give him the green signal to proceed. But alas, this was not to be. For, the voice spoke again, in that same expressionless tones, "Sir, you are sitting in the seat of the District Electrical Engineer." This definitely was disconcerting. But surely, thought Q, this was not past remedy. Surely he would get some vacant seat somewhere. And there were so many about! But a couple of more false moves convinced Mr. Q that the problem was certainly not that much easy. Now, almost on the verge of tears, Mr. Q bent down and mustering up all his courage, looked up that impassive face and asked, "But then, where is my seat?" And the answer came in the same dry tones "That is exactly what I too am wondering Sir."

From that day Mr. Q was very much one of us. He of course did not tell us his experience—nor did the waiter. But as you know, these things somehow come out. All these belong to an age that is past and dead and so now, if you search anywhere in the present Southern Railway Headquarters for a name board reading "Officers' Tiffin room", you will only be sorely disappointed, as there is no such board now.

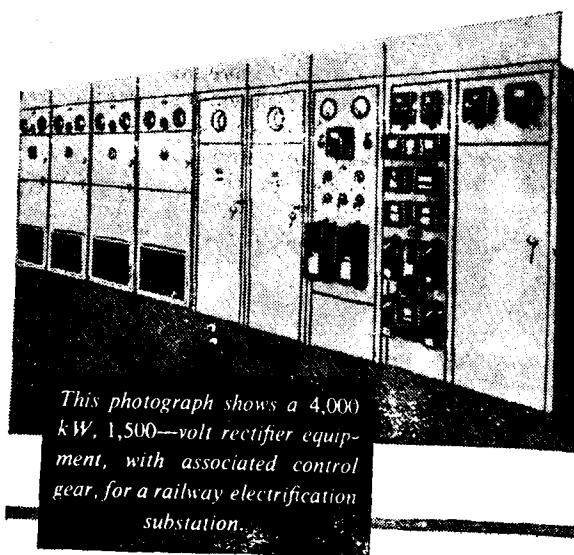


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- Greater frequency of trains
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- Increased efficiency and reliability of operation.
- Elimination of coal dust and smoke with consequent cleaner stations and a more comfortable journey.



This photograph shows a 4,000 kW, 1,500-volt rectifier equipment, with associated control gear, for a railway electrification substation.

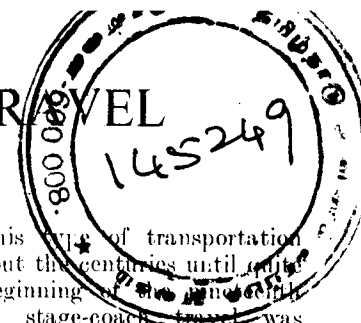
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AIC-166

HOW FAST CAN WE TRAVEL

OPRAIL



HOW fast can a man walk? From three to five miles an hour? How fast can a man run? Perhaps from five to ten miles an hour, and a little faster under athletic tournament conditions.

When man first found the necessity to travel from one place to another far back in history, or to take his goods and chattels from one abode to another, his speed of locomotion was governed by the rate at which he could walk, trot or run. This was before man used any form of animal transport, and long before the wheel had been thought of and made it possible for him to fashion any type of vehicle that moved on wheels.

In the 6th century B.C. an average speed of up to 6½ miles an hour was attained by the couriers who traversed the empire of the great Persian king Cyrus, from Susa to Asia Minor, Persopolis, Babylon, and even to China. These were the messengers the Greek historian, Herodotus, described as 'nothing faster in this world than those couriers.'

Then came the wheel; one of the greatest of human inventions, whose origin lies buried deep in the darkness of prehistory. The wheel revolutionised not only the entire history of transportation but of industry, and so many other aspects of man's living conditions. The wheel is truly something extraordinary. It has no top or bottom, and cannot even stand up by itself. Yet when it starts rolling, through its motion it acquires an astonishing stability, and is able to carry on its axle a burden. After man had made the wheel, it was not long before he mounted various types of vehicles or carriers on a single, a pair, or two or more pairs of wheels. Vehicles or carriers thus mounted made it far easier for man to move a heavier load, and when the vehicle was eventually harnessed to an animal that could move more swiftly than man, marked progress had been made in the speed of travel.

Apart from the horse-drawn chariots used more as a means of transportation for warfare, and the heavier and slower type of vehicle for carrying goods, market produce, etc., the horse-drawn coach became the chief means of rapid transportation that could be

used by man. This type of transportation continued throughout the centuries until quite recently in the beginning of the nineteenth century. Although stage-coach travel was much faster than the old methods of travel, the average overall speed attained on journeys was by no means spectacular. It was considered good going if the stage-coach travelled at more than five miles an hour; and journeys were uncomfortable, interrupted by long periods of rest, or when the coachmen decided to pull up at some hostelry on the way for refreshments. In fact, it was not uncommon that a forty-mile journey would have stoppages *en route* up to a total of fifteen hours.

Early in the nineteenth century the means of harnessing steam and using it as the motive power for locomotion was discovered, and the first steam locomotive was built. In January 1825, the original steam locomotive started its first run between Stockton and Darlington in England, and thus was the age of railways born. These early locomotives were squat and ugly in appearance, and did not even move as fast as the stage-coach. It was also once the laughing-stock of the scoffers of the day, who said the steam engine was doomed. But they were wrong. Steam locomotion progressed in every way, the locomotives attaining higher and higher speeds and becoming capable of hauling heavier loads at high speeds. From five to ten, to fifteen, to thirty, to forty and so on up to speeds of over one hundred miles an hour were achieved. Although it is not common today to travel by railways at a speed of over one hundred miles an hour, there are fast trains in all parts of the world which move over long distances at speeds of sixty to eighty miles an hour.

Today we can hardly imagine what enormous progress has been made in methods of transportation. Within less than a century almost, railroad transport has lifted people from the old stage-coach method of travel to stream-lined, air-conditioned trains.

But steam was not the only means of motive power found to be useful in speeding up the pace of travel in the early nineteenth century. In Germany, engineers were working on what

October 1.

is now known as the internal combustion engine. Otto had invented the four-stroke engine, but it was not suitable for use in vehicles, and Daimler had constructed the high-revolution small gasoline motor. All this led up to Wilhelm Maybach building the first true automobile in 1889. Credit for the structural development of the motor car goes to the Germans. Otto, Benz, Daimler and Maybach, but it was the French who popularised the automobile by organising competitive road races.

Within a few years enormous strides had been made from the horse-drawn vehicles to the fast motor cars roaring along the roads at incredible speeds. Advancement came rapidly, and before long the American automobile industry now took a major part with its mass production methods. Apart from road transportation, all kinds of vehicles were motorised. Within a quarter of a century the highway transportation system over the whole world had been revolutionised. The piston steam engine dominated the railways, electricity, the tramways as well as suburban and inter-urban trains, and petrol and diesel motors, the streets and roads. On the sea the piston engine was replaced in ships by steam turbines which, in turn, soon came up against the keen competition of the new diesel engine. This latter economical motor soon started taking over from the steam locos on railroads, and the electric traction of street transportation.

But man was never satisfied with surface transportation over land and sea. He wanted to fly like the birds. After several unsuccessful attempts at flying with weird contraptions, in 1903 an American, named Wright, succeeded in gliding through the air for fifty yards with a self-constructed plane driven by a gasoline motor. At his fourth attempt Wright covered a distance of 250 yards in the air in 59 seconds. This glide was the birth of modern air transportation.

With incredible rapidity, and in a short period of time, air transportation has achieved a magnitude and importance the extent of which we can only appreciate if we look back a mere fifty years. In 1905 the Wright brothers flew a distance of 25 miles in 38 minutes. In July 1909, the Frenchman Bleriot crossed the English Channel in a plane within 27 minutes. In 1911 Helmut

Hirth flew from Munich to Berlin in less than six hours. In May 1927, Charles Lindbergh crossed the Atlantic Ocean from New York to Paris in a solo non-stop flight. In 1931 Wiley Post flew around the world in six days and eighteen hours, and five years later Howard Hughes covered the same distance of almost 15,000 miles in a little under four days. The reduction of time to cover immense distances by air was only possible because of the rapidity with which the inventive genius of man kept improving the motors and structure of aircraft. The piston motor continued to be the dominant means for the propulsion of planes, until it was found that the exhaust gases discharged by these heavy motors contained enormous unused power that was being wasted.

The gas turbine now came into the picture. At first it was simply a matter of using the exhaust gases of the piston motors. Soon, however, such motors were abandoned altogether, the propeller and compressors being driven directly by the gas turbine. But man wanted more speed, which the propeller driven motor could not give. Then an old and well-known principle was again resorted to—the principle of recoil. The burned gases of the turbine were forced through a narrow channel, or 'jet' causing a strong recoil which gave the plane a high push in the direction it was flying. This is now known as jet propulsion, which gave man the higher speeds he wanted.

Man still lifts up his eyes to the vastness of the heavens above. Up there is the stratosphere, and the speed that is faster than sound. He has already built the planes that travel faster than sound—the supersonic plane. But man's visions go higher and higher still. The space ship is now in his dreams for future earth to moon and inter-planetary transportation.

Within the last century man's inventive genius has contracted time and distance too within a small compass, for it is a long way that he has progressed from the barefoot prehistoric ancestor to the supersonic plane. In the future man hopes to reduce time and distance more and more, but with the immense advantages he has achieved by the rapidity with which he has increased his speed of travel, there are also grave dangers, and it is these that he must ponder over.



SRI MARGABHANDHU TEMPLE AT VIRINCHIPURAM

P. SUNDARARAJALU

IN the North Arcot District, eight miles off Vellore, on the banks of Palar river is situated the temple of Sri Margabhandhu at Virinchipuram which is a famous pilgrimage centre. According to old puranic lore, the temple is otherwise known as the Earthly Paradise in the Tondaimandala of the Chola Empire. The spiritual significance is that Lord Bramdu, in order to find out the head of Lord Siva, performed penance here. The place is four squared with eight mandapams, 4 car streets and mada streets and the temple stands in the centre. The epigraphical index is that the temple was built by Raja Raja Chola Sambava Rayan in 1159. It was further renovated by Chinna Bomman *alias* Lingappa Naickan in 1523. So the edicts say. There are five stone walls around which were built by a devotee named Vali Thonai Nayanar who was doing puja from 1147. Another story says that Siva-nesaselvar, a merchant who was coming from Mysore, saw that his child was knocked down by Lord Margabhandhu who appeared as a tiger. He afterwards appeared before the devotee under a Bilwa tree with the child. He was struck dumb and it was he who built

the four compound walls. So the Lord is known as the Path Finding lord.

The most important festival is the Last Sunday in the month of Karthigai. Bramah appeared as an Adi Saiva boy and worshipped Lord Siva who bowed his head low. The Lord also performed the holy thread wearing ceremony of the bramachari on that day.

There are five important theerthams here. Most important is the Simhatheertham in the temple. It is sanctified by the Bijakshara chakram of Adi Shankaracharya. It is believed that women wishing for children have their wishes satisfied by bathing in the Simha Theertham.

On account of this, thousands of pilgrims gather here annually and especially on the Last Sunday of Karthigai nearly five to six thousand pilgrims take their bath in the theertham. All the mandapams and the inner mandapams are very finely built with beautiful carvings. It is supposed that there is connection between the Vellore Fort temple and the Virinchipuram temple. The sanctum sanctorum is

oval shaped. The Lingam is tall and Swayambu. On the left is Maragathambikai and at the bottom is an underground cellar.

The important deities are

(1) Lord Bikshandeeswara with the rishies of the Daruka forest.

(2) The stone image of Lord Nataraja in the Sabha Mandapam.

(3) The picture of the Last Sunday Festival in the South Kalyana Mandapam.

(4) The picture of Kama and other gods in the Patti Mandapam pillar.

In the entrance walls there are evidences to show that the temple was endowed by Kings and also about the marriage customs of the Hindus.

In the West Gopuram, at the entrance there is the image of a sword, a pig and Sun to show that Kings ruled here.

In the Kalyana Mandapam, there is the scene of a warrior fighting in a single pillar.

In the North Kalyana Mandapam, there is the form of a serpent and a snake charmer.

There are about forty inns and choultries to accommodate pilgrims during the period of the festivals. The temple is now under the control of The Hindu Religious Endowments Board with three trustees and one Executive Officer. The great saint Appayya Dikshita was born here. He built the Meenakshi Sundareswara temple and performed miracles. There is a Sivaswami Matam and another Esanya Matam.

In the Esanya there is a Kailasanatha temple. Again there is the temple of Mahakali, Veerabadrswami. In the centre of the Palar river there is the Veera Anjaneyaswami. In the Sannadhi there is Lord Muruga temple according to Pillai Tamil. In the inner temple there is the human form prostrating before the Lord.

The holy place of Virinchipuram is known as Bhaskara Shetram.

The ray of the Sun is seen to touch the image of the Lingam during the month of Panguni. In the Bramah theertham there is supposed to be three homa pits where the Lord distributes theertha prasada to devotees. The floating festival is celebrated in the month of Masi. Each year there is the Bramah Uthsavam festival in the month of Panguni and the Pooram festival for the goddess Maragathambikai in the month of Adi.

The station leading to Virinchipuram is situated in the Madras-Bangalore Line, two stations off Katpadi. The population is about 5,000. Now the temple is under the Electrification scheme of the Government of Madras Electricity department.

The annual income for the temple is about Rs. 10,000. The West Gopuram of the temple which has been demolished can be re-instated by public co-operation and endowment. This is the historical, puranic, and spiritual background of the famous temple of Sri Margasahayaswami at Virinchipuram, near Vellore in the North Arcot District.

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EDITOR

SOUTHRAILNEWS

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BABY IN THE HOUSE

RAMA SRINIVASAN

IT is nearly 6 p.m. "Isn't it time for Papu's feed?" enquires her father.

"It is not six yet," I reply.

"She does not seem to be hungry. Don't get the milk yet. Let her start crying if she is hungry. Otherwise she will make a fuss over drinking it," says the omniscient grandmother.

Papu has been horse-riding on her aunt's lap. The clock strikes six. The aunt puts her down to switch on the radio. Papu looks enquiringly around. Seeing no signs of milk she starts with a whimper, working it up rapidly to a crescendo of sharp wails. Her father picks her up. He turns to me and says, "There! I told you to get her feed ready!"

I rush in to get her milk.

"Cutie pops! Does your mother make you cry?" enquires her cousin sympathetically, and takes her from her father.

With this sympathy the wails become louder and her aunt retrieves her from her cousin. "Poor darling! Won't mummy give you milk?" she clucks to her.

I have been making so much haste that I have upset the hot water. And as I pour out more from the flask and mix the feed, I find myself all thumbs! How could she get so hungry all of a sudden?

"Bring her to me," orders the grandmother, for the wails have increased with the increased attention, and the aunt hands over Papu to her. "Poor dear!" she croons. "Don't cry dear. Your mother is getting your milk. You know how long she takes over it. You should not wear yourself out, crying like this."

Is that just baby-talk or is it a hint to me to be more brisk about my business. I wonder. I bring the bottle and take charge of Papu.

The audience gathers around us. Papu sucks a few mouths full. "Papu!" calls her father.

She pushes the bottle from her mouth and smiles at him. I turn her face back to me and place the bottle in position again. A couple of

minutes later she gives her aunt an oblique glance, stops sucking and smiles tentatively.

"Go on! Drink up your milk," admonishes the aunt.

So Papu now shoves the bottle away again and laughs. I have to hold her head down firmly and try to make her drink. She sucks half-heartedly for a while, with her eyes roving and then pushing away the bottle, sucks her thumb. I look at the bottle and see she is half way through her feed. I remember having read in a book that the baby should be made to burp half way through her feed, if she is not able to drink up all her milk. So I sit her up on my lap and gently rock her.

"Trying to make her burp, are you?" laughs her father. "I say Mother! Did you ever do this to me? I don't seem to remember your trying to make me burp," he enquires of his mother, with a mock serious look.

"I know," replies the grandmother. "Your wife seems to be trying out novel methods. I should think the baby would burp of its own accord if it wants to."

"What do you know of modern methods of bringing up babies?" scoffs the aunt. Is she being sarcastic, I wonder.

"Has she burped?" enquires the cousin interestedly.

At this stage Papu burps. But she still protests violently at the sight of the bottle. It is now an all out battle between us. I know very well she can drink up the amount as she does her other feeds, and it is mere playfulness and obstinacy on her part that makes this particular feed so difficult. So I put her on my lap, and while holding the bottle in one hand, try to hold down her head, pin down her arms and legs, and thrust the bottle into her mouth. Feeling overpowered, she quietsens and sucks for a while.

All told, she has five feeds of milk a day, a dose of fruit juice, a couple of drinks of water. But of all these there is no doubt that it is the 6 p.m. feed, when she holds the stage, that she enjoys most. At the time of her early

October 1956

morning feed which she has anytime between 5-30 A.M. and 6 A.M., depending on when she starts crying, or when I wake up, she is generally too hungry to be distracted. Moreover her father is still sleeping, her aunt still in bed, her grandmother busy in the kitchen, her cousin in deep slumber - and so no distractions. At the time of her 10 A.M. feed which she has sometime between 9 A.M. and 9-30 A.M., depending on when she starts whimpering for her milk, her aunt is in the bathroom, her father is having his "brunch", her cousin is getting ready to go to college, her grandmother is busy in the store-room or kitchen, and so has no one to distract her, and a warm bath has roused her appetite. At her afternoon feed which she has sometime around 1 P.M. she does not consider her grandmother and me sufficient audience to whom she can transfer her attention from the bottle. When she has her late night feed between 9-30 P.M. and 10 P.M., she is generally sleepy. I am drowsy, her father half-asleep. No one is willing to distract or be distracted. We are all conscious of only one desire - empty the contents of the bottle, and drop off to a good night's sleep.

So it is only at the time of her 6 P.M. feed, which she really has about that time, that

she is in a frolicsome mood, with a full-fledged audience around her.

Just when I think she is drinking, and relax, she gives a sudden jump and is prepared to roll off my lap. In sheer exasperation I put her down. Her aunt looks at the clock and exclaims, "Almost quarter to seven! How much longer is she going to take over her milk?"

Papu looks at her and smiles. "Poor thing! If she has had enough, why do you force the milk on her?" puts in the cousin. Papu laughs at him. "Leave her alone, I say. Why do you torture her like this?" enquires her father. Papu starts bouncing, wanting to be picked up by him. "Nice habit you are forming! Taking three-quarters of an hour over your feed!" exclaims her grandmother. Papu gurgles happily.

By this time I am annoyed and exasperated and abandon the idea of making her take the milk that is still left. I look at Papu accusingly. But my exasperation and my annoyance vanish as she gives me a sweet impish smile. I smile back at her. She catches hold of both her feet and starts rocking contentedly. I feel equally contented and calm. After all it is only for an hour a day. Let every one have some fun.

THE SECRETS OF SUCCESS

(Continued from page 34)

Initial effort may not produce immediate results. But do not be discouraged. You have analysed yourself. You know that you can reach the goal set. So let not initial failures damp your enthusiasm or put out the fires of your ambition. Persevere in your efforts, proceed with self-confidence and the fruit shall be yours.

This country of ours is on the threshold of an industrial revolution. The responsibility of carrying her over the threshold into the house of prosperity and plenty through the hall of industry, lies on everyone of us heavily. We dare not fail. This generation shall be the torch-bearer of progress to the future. We shall set the pace for the future generations. Therefore we must give of our best and let us resolve to do so from this very minute.



The mosque at Taj Khan Pura

THE CITY OF ARCOT

P. G. SREENEVASA RAO

IT was on the First of July, Eighteen hundred and fifty-six, a century ago, the first longest railway link in India was established between Madras and Arcot.

The historic city of Arcot associated with the fame of Robert Clive and immortalised by the facile pen of Macaulay was the capital of the Carnatic and the seat of the Nawab, the only faithful ally of the English. The obligation of maintaining diplomatic relations with him and protecting him against the attacks of other rival powers, lay with the English, who had to quickly and safely transport by rail to his place men and arms arriving from home at the port of Madras.

Mr. E. Smalley, the Agent of the Madras Railway Company, assisted by Mr. George B. Bruce, the Company's Chief Engineer and Mr. T. T. Pears, the Consulting Engineer from the Government of Madras prepared the blue-print and Sir Henry Pottinger-Bart, the then Governor of Madras, inaugurated the project at Madras on the Ninth of June, Eighteen hundred and fifty-three, which was completed in about three years.

The original terminus was at a place now known as Walajah Road Junction, sixty-five miles from Madras, which was subsequently shifted closer to Arcot on to the left bank of the River Palar to a place called Ranipet, which was built by Sadatulla Khan in honour of the young Rani, who committed 'sati' by ascending the funeral-pyre of her husband, Rajah Daysingh, the hero of the popular ballad and the valiant ruler of the mountain fortress of Gingee.

But the prevailing popular version is that the word 'Ranipet' is a corrupt form of the Tamil word 'Ranuva-Pattai' signifying a Military Suburb of Arcot, the remains of which can be seen to this day in its altered and dilapidated buildings of the barracks, the powder magazine, the bank house, the officers' mess, the racquet court, the race course, the hospital, the church, and an extensive cemetery dotted with tombstones and monuments erected over the remains of civilians and men-at-arms.

The old military parade ground now accommodates the weekly fair on Fridays which is noted for the pure breed of cattle in the district on display.



The Mausoleum of Sadatulla Khan

The Railway has laid out a separate 'siding' to cater to the needs of the Burnah-Shell oil-storage-tanks and Messrs. Parry & Co. who regularly receive wagon loads of bones, sulphur and white clay and send in return manures, acids, jars and other porcelain wares prepared by them.

Close to the Railway Station the American Mission has built and equipped one of the best hospitals in the area which efficiently serves the rich and the poor alike.

Ranipet is connected with Arcot by a cement causeway across the river. The long-cherished desire to span the distance with a bridge is in sight as the preliminary work is already in progress. A more laudable ambition is to have a parallel bridge for the Railway to enable it to expand into the country and serve the villages. This is not a vain hope since it is contemplated by the Southern Railways to connect Vellore with Conjeevaram by rail passing close to this place.

The name Arcot is derived from the two Tamil words 'Aru' and 'Kadu', which signify six forests. These were considered sacred

by the 'Puranas' as having been the scene of the penances of various holy 'Rishis' who settled down here long before King Adondai took possession of Thondaimandalam and raised temples in their honour. In course of time, however, the temples became deserted and the country relapsed into jungle.

The fort and the walls of Arcot on the River Palar were built by Timmi Reddy, the brother of Bommi Reddy of Vellore. But little is known about the place till the time of the Mughal Emperor Akbar, when coins of a fine quality were issued from its mint and the alloy of the metal in use was adopted as standard until recent times.

In the beginning of the Eighteenth century Arcot was made the seat of the Nawabs and the capital of the Carnatic by Dawd Khan who improved the fortifications and suitably laid out the town with several localities some of them named after distinguished commanders like Taj Khan Pura and Hassan Pura and others like the Thope Khana, where cannons were either cast or used to be fired during ceremonial occasions and Khasba where revenue and other official affairs of the province were attended to.

Gradually mosques, 'darghas' and charitable institutions called 'makhans,' where many fakirs were daily fed, by the munificence of the Nawab and his nobles, grew up in large numbers. Thus Arcot developed into an important centre wherefrom roads radiated in all directions to other places of historic importance like Vellore, Arni, Gingee, Timuri, Sholinghur, Wandiwash and Kavaripauk which were either fortified posts guarded by petty chieftains or fields where decisive battles were won.

Sadatulla Khan was one of the most benevolent of the Nawabs who succeeded Dawd Khan. His name was long remembered and praised by the people for his peaceful reign and the numerous existing irrigation works constructed by him in the province. Being a devout Mohamedan he built the Jamuna Masjid, in which he lies buried beneath a plain but highly polished black marble tomb enclosed within a domed structure of green stones built by Zulfi-Kar-Khan.

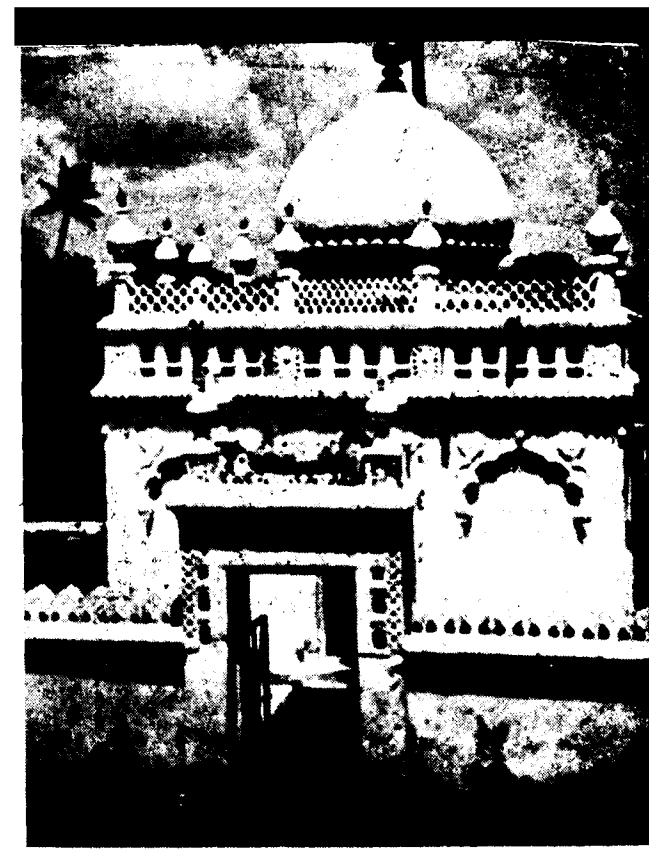
In the centre of the town there is a Dargha built by Sadatulla Khan in honour of Tippu Ali, a very holy fakir and the patron Saint of Hyder Ali, the ruler of Mysore, who named his son 'Tippu' after him.

There is an interesting story connected with the Saint. When Nawab Nazir Jang died at Ambur his body was brought to Arcot and buried opposite the Dargha of Tippu Ali on the other side of the road, with the intention of erecting a fine mausoleum over it. But this was not to the liking of the Saint's Spirit; which repeatedly appeared in the dreams of the Nawab's relatives and protested against it. As no significance was attached to the dream, the construction of the mausoleum reached up to a certain height; but every stone subsequently placed in position mysteriously fell down during the night and the builders were forced to desist and the Nawab's body was eventually buried in Hyderabad.

The city of Arcot was surrounded by a high and tapering rampart about five miles in circumference with bastions embrasured for guns at intervals and faced with a thick masonry wall called the 'Sharpana' or the 'Defender of the city'. The main among the five entrances to the city is called the Delhi Gate, which is surmounted with a small chamber that is believed to have been the favourite resort of Robert Clive during his stay at Arcot. There is a stone tablet on the wall stating that the Gate formed part of the fortifications of Arcot during its defence by Clive in Seventeen hundred and fifty-one.

About half a mile from the Delhi Gate and within the city walls are the ruins of the Citadel gallantly defended by Clive. It must have been a rectangular fortress of considerable size surrounded by a wall and a moat. Now the whole area is under cultivation. The only remaining buildings are a Masjid with a mound at its back which once held the

Ruins of the Citadel



The Dargha of Tippu Ali

flag-staff; two reservoirs with fountains in the middle, fed from the river and a cannon which was dug out while ploughing the moat for cultivation.

A desolate locality beyond the Citadel called Clive Bazaar leads to Taj Khan Pura with its old mosque on the edge of a tank.

The once populous portion is now deserted and left for the historian and the archæologist to contemplate upon, and the lay traveller's imagination is roused for a fleeting moment to play about its glorious past; but is soon forgotten like a wayside flower casually plucked and carelessly thrown away.

In spite of the vicissitudes of its history Arcot is still a city of importance and a large volume of its business in paddy, brassware, handloom clothes, printed sarees and other things is centred in the Mundy Bazaar which is the main theatre of commerce.

The bus stand is located at the entrance to the city from the causeway and is a busy junction which is linked up with far off places and where men pass in and out of the city in large numbers.



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HOW THE DIFFICULTIES FACING THE RAILWAYS ARE SOLVED

K. SRINIVASAN

Transport for coal

THE Railways have come in for a lot of criticism because of their inability to transport all the coal that has been raised in recent years. Although the despatches during 1955 were higher by 9 lakh tons as compared to the 1954 figure of 32 million tons, the pithead stocks have increased as a result of higher production during the year. In other words, transport of coal could not keep pace with production with the result that stocks accumulated, capital was locked up and mines were endangered by possible risk of fire due to spontaneous combustion. Many industries were also affected as a result of inadequate supplies of coal.

In the Second Five-Year Plan the main stress is on industrialisation. Coal is the basic requirement of all industries—iron and steel, cement, cotton, jute, sugar, electricity, engineering, etc. It is also the basic requirement of rail transport and continues to be the main source of heat, energy and mechanical power. The Planning Commission taking all these facts into consideration have fixed the target of coal production at 60 million tons annually by 1960-61. The railways will require about 14 million tons.

The Railways are fully aware of the requirements of wagons, locomotives and rolling-stock and the need for laying out of new lines, remodelling of station yards, construction of crossing stations, loops, sidings, etc., and have asked for a provision of Rs. 1,480 crores in the Second Five-Year Plan on the basis of an increase of 50 per cent in goods transport, assuming that the demand at the end of the First Five-Year Plan period will be 120 million tons. The Planning Commission, however, have allotted only Rs. 1,125 crores (including Rs. 375 crores to be found by the Railways themselves from their own revenues during the Plan period) which will enable the Railways to move only 42 million tons of the additional goods traffic as against the original estimate of 60 million tons. The result will be that whereas the additional requirements of the Iron and Steel Industry estimated at 25

million tons (5 million tons for iron and steel, 13 million tons for raw materials required for producing the iron and steel, and 7 million tons for the coal for steel works) will be fully met, the other commodities such as foodgrains, cement and coal for industries other than Iron and Steel will be affected to the extent that only 17 million tons will be moved as against the additional requirements of 35 million tons. The difficulties are immense. Side by side with the organisational effort required to achieve higher targets the railways have to carry out schemes for track renewal and doubling, bridge repairs, expansion of yard capacity and other open line works, which during execution will all slow down movement of traffic; many of these schemes will have to be undertaken in the first three years of the Plan. The problem of organisation, therefore, involves much more than a stepping up of routine vigilance in dealing with wagons; it requires improvement in engineering and operational detail.

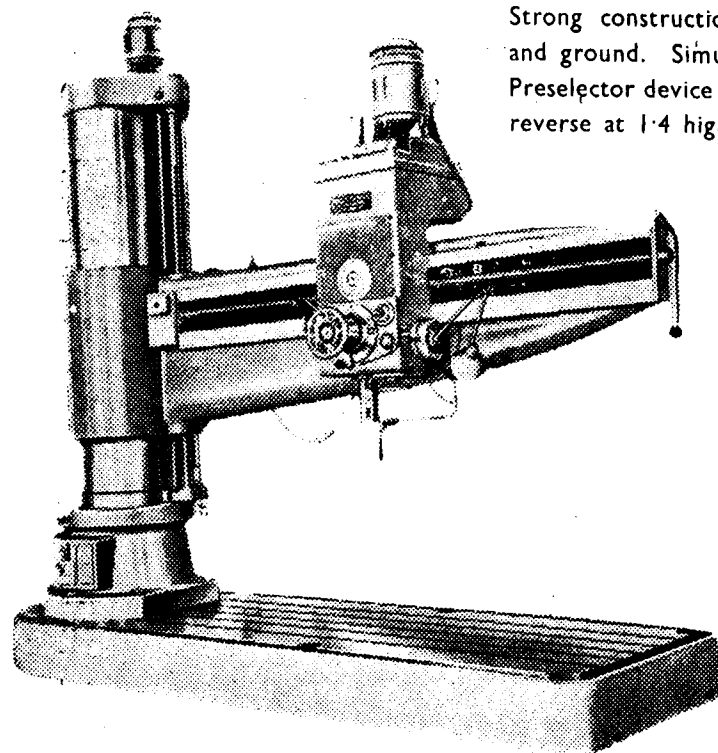
Another major step in improving efficiency is the fostering of morale among railwaymen of all ranks.

Machinery for prompt redressal and a system of incentives to efficiency may go far towards easing bottlenecks at key points. It calls for a new outlook in personnel management.

It is, however, gratifying to note that the Planning Commission have given considerable thought to this subject and have indicated that they will watch the position year to year and see that the development of the Railways to meet the transport requirements of the country will not suffer for want of finance.

The reduction in the railway plan from Rs. 1,480 to Rs. 1,125 crores undoubtedly involves some major changes in the provisions for placing more locomotives and rolling stock on the line, works designed to augment line capacity and new constructions. It has been stated by the Minister for Transport and Railways in his recent Budget speech that, on account of the reduction, railways will

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not be able to provide additional rail transport capacity for more than 15 per cent of passenger traffic and 47 million tons of goods traffic as against the increases of 30 per cent and 60.8 million tons respectively planned for by the Railway Board. The small increase of 3 per cent only per year in passenger train miles (15 per cent for the whole of the Plan period) will mean that overcrowding will continue unabated, may even become worse. The total goods movement during the current year is expected to be 115 million tons, against an estimated demand of 120 million tons, the effective capacity available for the additional goods traffic in the Plan will be of the order of 42 million tons only. This will no doubt cover fully the additional traffic load of 25 million tons for the Steel works; but the balance will have to be rationed out—6 million tons for coal to other than steel works against the target of 13 millions, 4 million tons of cement against the target of 5 and 2 million only for general increases, a margin which may be found to be severely inadequate for the requirements of trade and output in other sectors of the economy.

It may be unrealistic to expect that there would be little change in the current levels of fares and freight charges. The resources for financing the Railway Plan are to be arranged as follows :

General Revenues ..	Rs.	750	crores
Railway Revenues ..	"	375	"
Total ..	"	1,125	"

The quota of Rs. 375 crores which the railways have to find will consist mainly of their net surpluses (after paying the dividend to general revenues) and the contribution to the Depreciation Reserve Fund. An examination of the anticipated earnings (at current charges) and expenditure position during the Plan period discloses that the railway resources would aggregate to Rs. 325 crores only—Rs. 225 crores at the enhanced rate of Rs. 45 crores

per annum to be contributed to the Depreciation Reserve Fund, and Rs. 100 crores from revenue surpluses, interest earned on various railway fund balances, etc. A gap of Rs. 50 crores has to be made good, and the new surcharge of one anna in the rupee on all freight traffic is a measure in this direction.

It will be obvious that the obligations of the railways to General Revenues can be met, and their financial solvency maintained, only by a suitable revision in charges, a revision which also takes into account the development of the country's general economy and the spread of industries on a regional basis. After every allowance has been made for technical aid from other countries, the financing of the railway plan of the size programmed has to be arranged for on as wide a basis as possible within the country.

The emphasis is being shifted slowly from more investment on schemes to the search for ways of maximum utilisation of the existing capacity and the prospective additions to it proposed in the Plan. As in the last year, higher targets have now been set for movement of goods traffic during the ensuing busy season. This must help to keep operating personnel on their toes and ensure a better wagon turn-round the average interval between the successive loadings of wagons.

The use of teleprinter and tele-communication services to report and regulate wagon movements will aid quicker movement of wagons. With present shortcomings of rolling stock and track, there should be unremitting effort in chasing wagons wherever they are, in loading and unloading centres, marshalling yards or break-of gauge points. It is wrong to imagine that the tempo of goods traffic will mount only towards the second half of the plan when the steel and other projects go into production; the larger imports of capital goods and foodgrains will strain the railways from now on, and there is urgent need to relieve our ports of the growing congestion.



RAILWAY EQUIPMENT SHOWROOM MADRAS

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

SOUTHERN RAILWAY
AND
INTEGRAL COACH FACTORY

MEDICAL

GROWTH AND DEVELOPMENT OF CHILDREN

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

Asst. Surgeon I, Railway Hospital, Madras

GANDHIJI used to love children as much as he did truth and non-violence. He saw God in children. He wished that given proper care and upbringing, our children would blossom as ideal citizens of our motherland, known for her great culture and civilisation.

Perhaps nothing is more fascinating a study than watching a child grow and develop. Parenthood is one of the major responsibilities that mankind has to shoulder; that must be done in a careful and planned manner. For, the very growth of the tiny cell in the womb, its journey into the world outside and its development—all these depend on the way in which the parents discharge their responsibilities. And not only this. The mind, the character and the manners of the children are all what the parents make them.

Each baby, as it grows, is retracing the whole past history of mankind, physically and spiritually. It is said to be following the whole history of the human race. But while it does all these things, the care and pains taken by the parents for the birth, growth and development of the children have the most powerful influence on the baby and how it is to be in its later age.

The first thing to know is the mother's responsibility during her pregnancy. There are certain rules to be followed by expectant mothers. The first and foremost thing is to avoid constipation. Secondly, the food must be such that it includes all the necessary substances to meet the needs of the expectant mother and the baby 'within'. If the food that is taken does not allow for the baby's growth, reserves will be drawn by the baby to the detriment of mother's health. The diet must be a balanced one of the substances that build the tissues, viz., Proteins, energy producers, like Sugar, Fat, Starch and minerals. About 16% of the diet must be made up of Proteins.

Personal hygiene should engage more than usual attention. Teeth must be examined

and if necessary, well-cleaned by a Dentist and maintained. At least eight hours sleep in an airy room is essential. Slight exercises like evening walk would be sufficient. For ladies who are accustomed to household work, there is sufficient exercise in their work itself.

Above all, a careful medical check-up is necessary to ensure that the heart, kidneys and other organs are functioning well and are in good order. Laboratory tests of Urine and Blood should be made so that if there are any signs requiring attention, it may be done before it becomes serious.

Of course, in a majority of cases, pregnancy and confinement are quite normal and safe. However, it is advisable to take extra care on the above lines, during pregnancy to avoid complications.

* * *

With a cry the baby enters into our world giving a great relief to the mother who carried the infant in herself. A new member to the society, a new thrill and joy to the parents (of course, to people who are not already parents or who are not 'much-daughtered' to use the term of the late celebrated humorist S.V.V.).

The help and guidance of a midwife or a nurse and elders in the home, experienced in the field would put the new mother in the way of taking care of the infant. Strict regularity in daily routine, correct feeding, and fresh air are the fundamental necessities with each infant.

When anything is found to be not normal, the baby is to be checked up by a Doctor. He will examine the baby for deficiencies, diseases and later give it proper inoculations and advise the mother about the proper diet and routine care of the baby and herself.

* * *

Most babies begin to walk between 12 to 16 months. A few children of good muscular build attempt to walk at 10 months.

When should a child begin to talk?

This varies greatly with children. It appears to be largely a matter of temperament. There are perfectly normal babies who wait many months before trying to talk. There are a few quiet observing children who seem to spend a long time to watch the activities around him before he feels like saying anything!

Slowness to talk does not necessarily mean mental backwardness. One must not worry if the child is slow in this respect. In normal cases, the following indications may be of use: After one year, the child would be able to indicate objects correctly by signs, to speak a few words and understand others. After two years, the child may use simple words and carry out instructions to come near or to go near the mirror, etc. After three years, the child picks up almost all the domestic vocabulary.

The thrill which the parents experience when the baby first uttered the dissyllabic 'Amma' is no longer there when it begins to talk and talk like grown-ups!

* * *

By the time the child reaches six years of age, he gives up part of his dependence on his parents. He becomes interested in everything around him. It is important that a certain amount of ready obedience to elders is inculcated in the early age for several reasons. The child could be protected from a danger which he cannot understand. It is taught to be law-abiding even from the early impres-

sionable age. Simple rules of hygiene, bowel and urine training and cleaning the teeth, etc., must be taught by gentle persuasion and not by threats. After all, the baby is born to be a reasonable and friendly human being.

Every child wants to be smiled at, talked to, played with, and fondled just as much as they need training diet and vitamins!

When a baby cries, it may be because of hunger or pain. It may be that it is bored and needs soothing touch of the dear mother. His cry is a call to the mother.

So the parents must know that with their careful attention, the child will develop his own habits according to his needs. He will soon fit these habits into the family's way of doing things and later on will develop good behaviour and manners. If a child is shy about strangers, he must not be chided; he is merely on the safety side till he has had time to know how the strangers are and their intentions.

The desire to get along with other people happily develops within him as part of the unfolding of his nature, provided that he grows up with loving, considerate and self-respecting parents.

The parent must have self-confidence and affection towards the infants. They must take care of the children as they would do with their own selves.

If this is there, what more is wanted?

INDIAN RAILWAYS

RAILWAY BOARD'S MONTHLY MAGAZINE

The annual subscription for the Railway Board's Magazine 'INDIAN RAILWAYS' has been fixed at Rs. 10, the price per copy being Re. 1. Yearly subscriptions from all Railwaymen are accepted at a concessional rate of Rs. 8 only.

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THE THIRTEENTH 'CRIB'

PENN

I'VE been incarcerated here for the past three weeks now. It appears that the authorities imagine I'm 'batty'. I very soon shall be—with the deferential, accommodating, pacifying treatment I receive at this place. After all it's not *my* fault if the truth seemed strange to them, and I'm tired of trying to make the doctors and nurses see that I'm as rational and sane as any of them. But whenever I broach the subject, a bright, brisk look comes into their eyes, and they start in on a course of humouring the invalid! Of course they believe what I say: no doubt it seems somewhat bizarre, but then there's the old tag of Truth being stranger than Fiction.....Just imagine such a thing happening in London above all places, and in the twentieth century above all times..... But there you are! It must have given me a considerable shock,—in fact, that's just what it *has* done, and I mustn't excite myself over it.....What I need is rest and quiet.... fresh air.... good feeding: I shall be perfectly fit again soon. Crazy? Certainly not! What on earth has given me such an idea: No, no. It's just a matter of being a little over-wrought at the experience I've been through!.... And so it goes on; brisk, efficient, unheeding, and oh! so understanding and helpful! My problem now is, how the dickens am I to get out of this looney bin before I qualify to become a full-fledged, one-hundred-per-cent worthy inmate of it.

It all started with my deciding to have a look round Manton Hall. I had had rather a good London season with no less than four very successful burglaries, making up a grand total of twelve undetected crimes on the credit side of my ledger during the past three and a half years. For me, at least, crime *had* paid till now it had paid handsomely. I wasn't in any actual need of funds at the moment, but the itch to 'crack a crib' was upon me, and, like any habit, it clamoured for attention.

I had been round on a tour of survey of likely places, and I had finally decided to have a shot at Manton Hall. Enquiries in the locality revealed it to be the town residence of the Earl of Norbury, who was at the moment supposed to be away on a shooting trip somewhere in Africa. The place was all shuttered and bolted, but its location and ownership

gave promise of rich spoils within, and I made up my mind to pay it a visit in due course.

The venture wanted careful planning. I had always worked alone, and found that paddling one's own canoe certainly made one wary of troubled waters. I came to know that no watchman was employed to look after Manton Hall, as the Earl of Norbury was apparently a firm believer in the unfailing reliability of the London constabulary to look after the interests of those placing themselves unreservedly under their protection. If for no other reason, I felt that alone indicated the need to administer a rude jar to the complacency of his lordship. Rich noblemen who were too close-fisted to provide an honest watchman with a living should get all that comes to them, and Henry Patrick Fitz-symmons Cavanagh, fifth Earl of Norbury, would certainly be the poorer of whatever I could relieve him. I observed over a number of nights the beat of the policeman detailed to that locality, and the time which elapsed between his periodical passing of Manton Hall. It was a good thirty-five to forty minutes each time, which was most satisfactory from my point of view. I also thanked my lucky stars that policemen on foot patrols are creatures of habit. They like to be systematic and methodical and bovine, and go their allotted round in the same direction every night. And the present guardian of Manton Hall was no exception.

I shall not bore you with the details of my approach-technique: after all, I must retain some of the secrets of the trade! Suffice it to say that on the selected night,—moonless, somewhat foggy, and well after midnight, I found myself at the selected window.

To my utter surprise I found that it wasn't locked at all! The sash had merely been pulled down, but the catches had not been engaged. I wondered whether some disgruntled scullery-maid, under notice, had thought fit to score off her mistress by facilitating a burglary. Then, as I cautiously pushed up the sash, another thought struck me—perhaps my visit had been forestalled by some other enthusiast, who had already 'cleaned up' and taken whatever was worth taking. I mentally gave him a dirty look.

The sash moved up without a sound. It seemed almost as though it were in constant use rather than that it had remained closed for several months. Anyway, it was all to the good, and after entering I pulled the sash closed again.

Manton Hall has rather a pretentious name, for though its size was certainly most generous for a mere *pied a terre* in town, it was by no means as vast as anything named 'a Hall' would lead one to expect.

I first made a hurried survey of the whole premises, below and above. (It is always advisable to know the terrain in case rapid departure should become necessary.) Then I began a systematic passage through the house, beginning with the study.

The study yielded nothing out of the way. It was a comfortable, homely room, sparsely equipped with furniture, but what little there was, was good. There was no safe that I could detect anywhere and the only item of interest was a show-cupboard let into the wall which contained several silver cups and medals. I had switched on the light after making sure that all the curtains and blinds were properly drawn, and I now began a leisurely inspection of the evidence of his lordship's sporting triumphs. It appeared that he was more or less an all-rounder: tennis, cricket, swimming, track events and even some of the indoor activities were represented amongst the cups and medals. Moreover, from the dates that some had been won, it seemed that Henry Patrick Fitz-simmons Cavanagh was certainly not at present well stricken in years. I imagined him to be a well set-up, muscular specimen of about thirty-two or so, and it occurred to me, in passing, that it was just as well that he was not present to do the honours as host that night. I do intensely dislike a rough-house and I never carry fire-arms—nasty things, and liable to make a mess of one's victim. I'm not lavishly endowed with thews and sinews, and depend more upon what M. Poirot would call 'the little grey cells', and the irresistible charm of my personality! Yes, I was glad that the athletic fifth Earl of Norbury was working off his superabundant energy in reducing the lion population in Africa, and I wished him good hunting. It struck me that there could be nothing important here, as nothing was locked up. The drawers of the

expensive writing-table simply invited inspection, as did every other place which, by the rules, should provide the enterprising burglar with the satisfaction of a neat job of 'busting'.

I moved on to the dining room. Here one met the same large-hearted negligence, and quite frankly, nothing else. There was nothing worth lifting, apart from silver salt-cellar and toast-racks and things. It struck me that possibly few meals were eaten here, as there was nothing to indicate the wherewithal for lavish entertainment. Of course, the plate and silver must be at the ancestral pile in Wessex, and the occasional London binge can only really be enjoyed by having one's requirements of proteids and carbohydrates provided at twenty-five-odd shillings a time at those places which exist only for this laudable purpose.

Perhaps it was wrong to say that there was *nothing* worthy of attention. There was a well-stocked wine cabinet which seemed capable of meeting every requirement in its own particular direction; and feeling that had he been present, Henry Patrick would have pressed me to take refreshment, I proceeded to charge up in order to drink to his continued health and longevity.

I had just heard the comforting sh-h-h-h from the soda syphon when a voice addressed me from behind.

"Stout fellow! I could do with one myself!" I spun round and beheld a young man beaming at me from the doorway. "Did I rattle you?" he asked solicitously. "Sorry if I did." He sauntered up, and poured himself a stiffish whisky-and-soda. "Cheerio!" he said, and took a couple of sips. "A foul night, what?"

I had recovered somewhat from the surprise, and looked at my companion. He was a clean-cut, slim man of about thirty: pleasant featured, and with a charming air about him. He seemed to take my presence for granted, and I decided that he and I were probably birds of a feather. His noiseless entry seemed to indicate unlawful occasions, and he was probably as surprised as I to find that he hadn't a solitary run of the place. I waited to follow developments before giving away my game.

"By the way, are you by way of being a burglar?" he asked in an interested and conversational manner.

"You'd naturally suppose so, wouldn't you?" I answered. "But, for the matter of that...."

"No, I wouldn't," he broke in. "You don't look and speak the part, so far as I can judge. Unless, of course, you're a modern 'Raffles'. Are you?"

"I was just about to ask you myself, for the matter of that, who are *you*, and how do you come to be here yourself," I replied.

"But my dear chap," he exclaimed, looking astonished. "I *own* this place. Didn't you know? But how could you; how silly of me," he added. "Yes," he continued. "My name's Cavanagh."

This was really a masterly stroke, I thought. Of all the cheek! This young man certainly had nerve and aplomb! One would have thought to hear him that he really *was* the fifth Earl.

"What a remarkable coincidence!" I remarked, trying to appear as much at ease as he. "My name is Cavanagh too; but if *you* own Manton Hall, my own title to it must have got mixed up somewhere. Not that I would mind giving it up," I ventured: "It's rather too large for me as an occasional London hide-out."

"It is rather big, isn't it," he agreed amiably, and then glanced up quizzically. "But quite seriously you know, I *am* the Earl of Norbury," he said, "and I'm rather intrigued at finding you here."

"'Intrigued' just about covers it," I replied. "A few days ago I was reading a book on Astral Projection, and 'pon my word, I'm beginning to fancy it must be true after all. Because," I added, "no other explanation could account for Henry Patrick Fitz-simmons, fifth Earl of Norbury, tracking down the fauna of Africa, and being in his London residence at the same moment." It was a heavily jocular effort, and I wasn't pleased with it. But he gave me no time to brood on the matter.

"That's just what struck me as being rather odd when you said *you* were Cavanagh," he replied quickly. "Of course, I could explain it all in my case, but it mightn't sound too convincing. So perhaps if I were to show you round, and give you a sort of running commentary on its contents—family photographs, and things like that, it might establish my *bona fides*."

"That's not very flattering to my intelligence!" I remarked. "Or perhaps you consider me naive enough to accept as confirmation of your claim the knowledge of a house which has possibly been obtained by you from a previous visit, coupled with some pretty, imaginative prattle regarding the family photograph-album. Come, come, my dear chap; do you really think me so soft? It'll have to be something better than that, surely!"

"Good God!" he exclaimed. "It has just struck me that you think I am as much an outsider here as you are. This is a lark! We must really get together and do something about that, what?"

"Precisely," I answered. "What exactly shall we do about it? Shall we make it fifty-fifty and call it a day: or can you suggest something better?"

He threw back his head and laughed. Then turning to me he said, good naturedly, "You know, I've never before been suspected of being after my own spoons!"

"Nor have I," said I. "We two Cavanaghs have many features in common. Perhaps we could assist providence further by making our gains coincidental also. In other words, what's the proposition?"

"Proposition! Oh, yes! You mean how do we split the takings?" I nodded.

"I can only answer in the words of my revered Aunt, who used to encourage me to finish the last crumb of cake at the periodical binge she stood me at school, by saying, 'There's nothing there; take it all!' From my side you are welcome to whatever you fancy as a memento of a very diverting occasion, Cavanagh," he said; "But I doubt very much whether you'll be able to take it away with you."

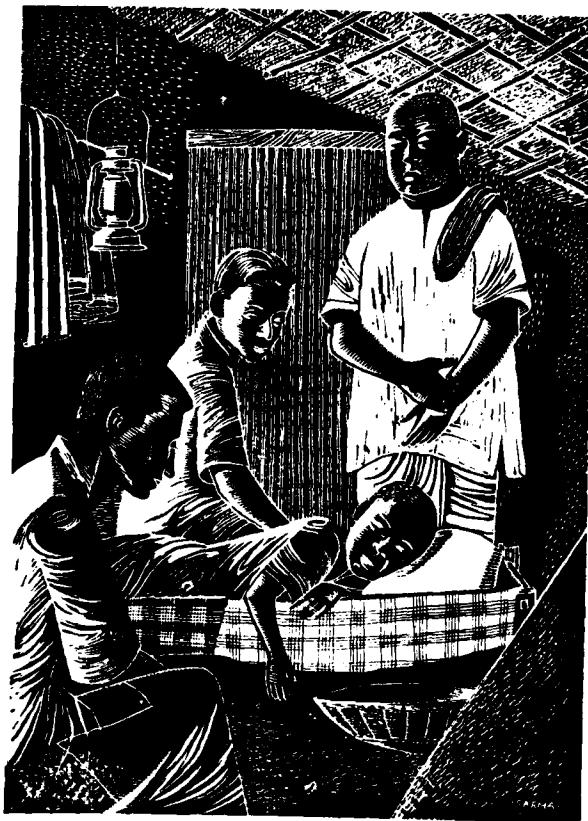
"What do you mean?" I asked warily.

"Oh! nothing much," he answered lightly. "I'll tell you in good time. Meanwhile let me replenish your beaker, then we'll push along and have a bit of a chin-wag in the study."

We each had another scotch-and-soda, and tucking the decantar under his arm, he picked up the syphon and led the way out.

"Biscuits, or anything?" he asked, and settled himself comfortably in one of the two large leather chairs in the study. "Do take a pew," he invited, indicating the other chair.

In India, at the present time, there are not enough healing hands... not enough trained doctors and nurses to bring skilled medical care to all who need it, especially to those who live in the villages. But in the Second Five Year Plan, the sum allotted for the improvement of rural medical and health care is twice that in the 1951/56 Plan. By 1961 it is proposed to establish over 3,000 'health units' in community project, national extension and other areas. Hospital accommodation will increase by about 26% and there will be 30,000 more hospital beds available throughout the country.

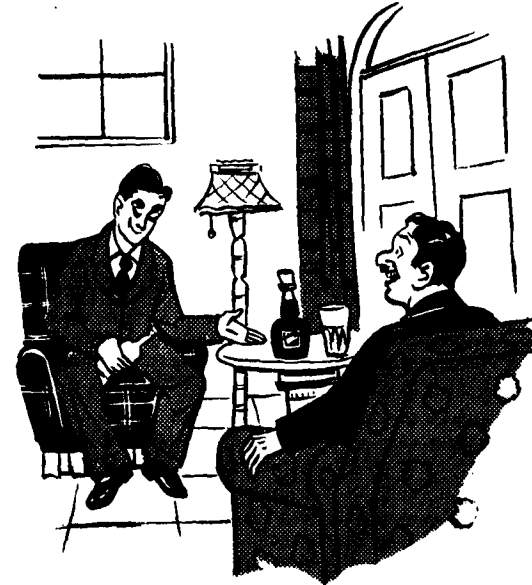


Burmah-Shell supply larvicidal oils and residual sprays in increasing quantities for the national malaria and filaria control programmes. We distribute petroleum based insecticides throughout the land. SHELL petroleum chemicals—aldrin, dieldrin and endrin—protect the country's food supplies: chemicals derived from petroleum are also being used in the manufacture of antibiotics.

**BURMAH-SHELL...
IN INDIA'S LIFE AND
PART OF IT**

The healing hands are coming...

"Now then," he said. "Let's have it all from the beginning. Who are you, what brings you here, and all that sort of rot. You may look upon me as the father-confessor and the silent tomb, and what not."



"Well," I began after a brief pause. "Let's begin by calling myself Cavanagh..."

"Cavanagh, eh? Well, well! That does make us *en rapport* to some extent. Pray continue."

His nonchalance and matter-of-fact acceptance of things began to irritate me a bit. "Look!" I said. "You know damned well what brings me here... or rather what brings US here, shall I say. And as we're in the same boat, with no one around to hear us, I don't mind telling you all about it. You can't verify what I say, and you could hardly have the gall to give me away..."

"Give you away? To the police, do you mean? Good heavens, my dear fellow, what an utterly repulsive idea!" He appeared quite shocked and indignant. "Here you are, enlivening a dull evening for me with a spice of the bizarre, and you expect me to be so dashed ungrateful as to break up the party.... Let me assure you," he emphasized with mock seriousness "The senior partner of Cavanagh and Cavanagh would never let the old firm down!"

I liked this breezy companion of mine, and I felt I could trust him. And anyway, I wouldn't be giving him a signed confession,

so it didn't matter much even if I told him the literal truth about myself. Besides that, one may be excused for having a justifiable pride in having got clean away with twelve fairly sizable robberies single-handed.

He proved to be an admirable listener and became quite absorbed in the recital of my delinquencies. Often interjecting questions on points which were obscure to him, he satisfied himself that he had thoroughly grasped the *modus operandi* of each case. It was going on for four in the morning by the time we thought of calling it a day.

"Most interesting, my dear Cavanagh," he said, stretching lazily. "Most interesting. I had no idea the game had such fascinating thrills in it. It seems even more worthwhile than big game hunting, being, as one is, up against *human* intelligence all the time. I'm frightfully obliged to you for this evening, and it seems such a pity that having got away with all that, you should be 'copped' in the present case, where all you've had out of it is the doubtful pleasure of my company."

"You said something of that nature before," I remarked. "I should like to know just what you mean. Are you going to hold me up, and prevent my going?"

"Hold you up? Why, certainly not! It's just that I fancy you'll find getting out rather difficult."

"I'm afraid I don't quite follow," I said. "My entry here couldn't have been easier if I had come on the special invitation of Henry Patrick himself! The scullery window was obligingly unfastened and worked with the smooth noiselessness of a well-greased piston. I could get through that again, if every other means of egress failed."

"I hate to disillusion you, my dear old top," he replied, "But you'll not be able to leave Manton Hall except in the company of some confounded 'copper'."

"What the devil are you talking about?" I exclaimed.

"It comes to me with great intuitive force," said my companion, "That Manton Hall and its owner are not prepared to have liberties taken with them. The fifth Earl of Norbury seems to feel that the fact that he practically keeps open house even while away on his shooting-orgies in Africa should not be abused, and is prepared to keep inviolate his territorial integrity, if you know what I mean. This

October 1956

must sound the purest drivel to you, but I'm prepared to bet you that even your accommodat-
ing scullery window will leer back at you if



you try to get through it. Make it a fiver each way!"

"Taken!" I replied, and getting up, led the way to the scullery. On reaching there, I crossed over to the window and made to lift the sash. It wouldn't budge! What the devil! I saw that the catches were not on, and tried again. It wouldn't shift. I pulled out the jemmy from my pocket, wedged it securely between the sash and its frame, and levered with all my strength. There was absolutely no result whatsoever! I was astounded, and turned to stare blankly at my companion.

He smiled pleasantly and shrugged. "You owe me a fiver, I think."

"Damn the fiver," I replied brusquely. "Why the dickens won't this work? It was absolutely a dream sash when I came in. What could have jammed it now?"

I began to feel a bit uneasy, but was still far from being prepared to believe that I must perforce stay in Manton Hall till the 'cops' took me.

October 1956

THE THIRTEENTH 'CRIB'

63

Just then the telephone sounded in the study. "You go and take it," said my friend. "I fancy it will interest you. After all, it is well known that the Earl of Norbury is in Africa at the moment, so it couldn't be for me."



"Look here," I exclaimed. "I don't know who the devil you are, but I consider it damned lousy of you to trap me here like this. And let me assure you that I shall get even with you sometime!"

"Hardly likely, I imagine," he replied carelessly. "You see I died a week ago: a nasty, messy death by lion-mauling!"

Just then a heavy footstep sounded outside, and two policemen marched in. "Well, Coates, are you coming quietly?" one of them asked, while both glowered at me ominously.

There was nothing I could do. I nodded: but before leaving I again addressed my companion.

"Perhaps it's just as well you're dead, my friend, because when I come out, believe me, your life won't be worth living." And I turned back to accompany my captors.

I found them gaping at me, and at one another as though they considered me mad. Then taking me firmly by the arm they marched me out.

We went back, and I lifted the receiver and put it to my ear, and heard a conversation in progress. You know the way one hears things when earth-returns are faulty: well, it was just like that.

"This is the X— Road Police Station speaking," said a voice.

"Ah! Sergeant!" said another at the other end of the wire. "Jim Coates is on another job tonight. He's at present at Manton Hall. You should pick him up if you hurry. For heaven's sake don't take this for a hoax, or you'll have the poor chap dying of starvation: he can't get out of the place!"

"We'll be right across," returned the sergeant. "From where are you speaking?"

"That's hardly relevant," came the cool answer. "Your easiest means of entry will be the scullery window," and the informant hung up.

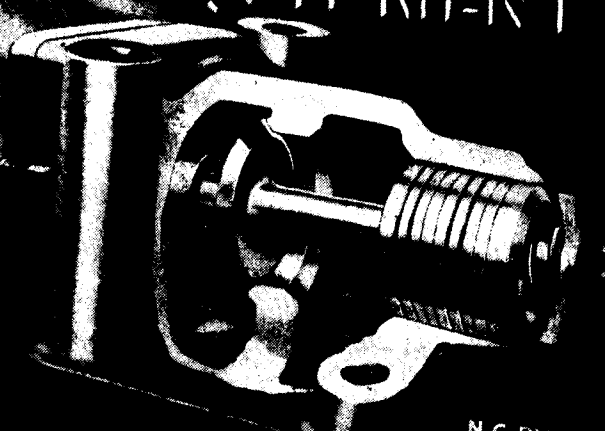
I was momentarily staggered. Then realising the gravity of my position, I raced round trying to get out of Manton Hall. I believe I tried every single means of exit, but nothing would yield. I was as securely locked in as in a prison cell. Finally I rushed back to the study, and confronted my erstwhile friend.



There is little more to tell. At my trial the constables deposed that they had actually heard me talking to an empty chair, and faithfully repeated my words. And when I gave my own account of the affair, and tried to point out that I was speaking the literal truth, the 'beak' shook his head dismally.

WOTA LOCOMOTIVE EQUIPMENT

- N.C. (NON-CHATTER) BY PASS VALVES
- JOCO REGULATOR VALVES
- I.R.S. BUFFERS
- WOTA BUFFERS



N.C. BY PASS VALVE FOR LOCOMOTIVES

WOTA (INDIA) LIMITED,

It appeared to be the general idea that for Jim Coates to have been caught so ignominiously must show that his brain-power had been affected, and that he was no longer responsible for his actions. Since then, I've been psycho-analysed, and put through the whole bag of tricks....but....well, here I am.

It was only this morning that I came across yesterday's Daily Graphic. It lies before me now, and from the first page there smiles up at me the picture of a young man of about thirty years; clean-cut, slim, pleasant featured, and with an engaging air about him. It is the picture of my companion at Manton Hall. Under the photograph appears the announcement:

Our Durban correspondent informs us that the death has been reported of the well-known sportsman, the Earl of Norbury. His Lordship was on a big-game hunting trip in Kenya, and was fatally mauled by a lion that had been wounded by one of the shooting party. His Lordship was prominent in the sporting world, and will be greatly missed, as.....

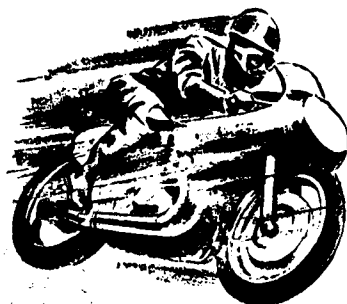
There follows a brief life history of Henry Patrick Fitz-simmons Cavanagh, fifth Earl of Norbury. The reported day of his death was exactly a week prior to the night I met him at Manton Hall.

I'm now going to make one last bid at getting my release from here by making the Superintendent of this looney bin compare my original statement on the day of my arrest with what the paper before me reports. That at least should convince him of the truth of my story. Then, of course, I shall have to take my medicine like a man—but I'd welcome that after what I've been through here!

DO YOU KNOW?

In New York suburban service for every 100 people seated 165 travel standing. In London, the ratio of standing passengers to those seated is seven to three.

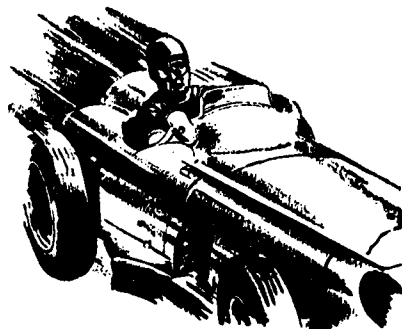
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POET NAKKEERAR

"ARUPADAIVEEDUGAL"

SIX RENOWNED SHRINES IN SOUTH INDIA
DEDICATED TO LORD MURUGA

P. S. VEDHACHALAM

Publicity Inspector, Southern Railway

EVERY devout Hindu in Tamilnad is familiar with the great Tamil classic "TIRUMURUGARRUPPADAI" composed by poet Nakkeerar in the first century B.C. The religious-minded classes of people sing this classic with considerable devotion.

The six sacred temples of Lord Subramanya referred to in this classic are Tiruchendur, Tirupparankunram, Palani, Swamimalai, Tiruttani and Alagarkoil near Madura. These are mentioned in the order in which they appear in "Tirumurugarruppadai." The pilgrims, however, choose to visit them according to their convenience. Passengers from Madras visit them in the order, viz., Tiruchendur, Tirupparankunram, Alagarkoil, Palani, Swamimalai and Tiruttani.

Tiruchendur

Tiruchendur is reached by a branch line from Tinnevely Junction of the Southern Railway. It is a famous seaside shrine said

to have been constructed by Ugrapandya, the fifth of Pandyan line of Kings of Madura. This temple has gained much sanctity because of its association with Sri Kumaraguru Swamigal and Saint Arunagiri who have sung devotional songs in praise of Lord Subramanya, the warrior aspect of Siva.

Tiruchendur is picturesquely situated and attracts large crowds of devotees for festivals and sea-bathing. It may be deemed a seaside health resort also. The temple is about a mile from the railway station.

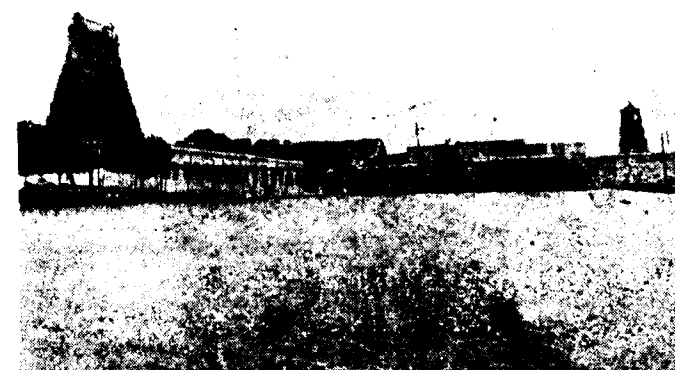
Near the temple, the Devasthanam provides lodging facilities at moderate charges; food and refreshments can be had in a hotel close to the temple.

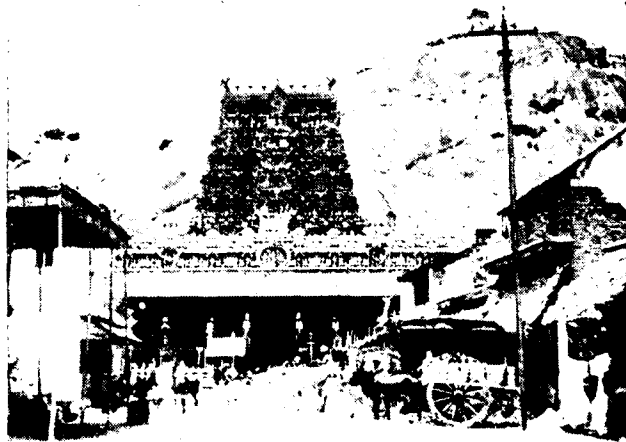
Distance from Madras to Tiruchendur -- 140 miles.

Fares from Madras Egmore to Tiruchendur:

I class—Rs. 37-8-0. II class—Rs. 23-9-0.
III class—Rs. 13-2-0.

A view of the Temple at Tiruchendur





The Temple at Tirupparankunram

Tirupparankunram

The pilgrim next proceeds to Tirupparankunram, about 1 miles south of Madura. Here is a temple on a rock dedicated to God Subramanya, representing 'Gnana Sakti' in union with the Goddess Devayanai representing 'Kriya Sakti'. It is believed that God Subramanya united with the Goddess Devayanai at this sacred place is highly responsive to the prayers of devotees. Many sculptures of the Hindu Pantheon are available for students of iconology within this temple.

Tiruchendur to Tirupparankunram 131 miles.

Fares for I class Rs. 12 8 0. II class Rs. 6-8-0 (ordinary). III class Rs. 3 10 0 (ordinary).

Tirupparankunram can also be reached by rail or by bus from Madura.

Alagarkoil

Before leaving Madura, the pilgrim with his mind set on the yatra to 'Arupadaiveedu' visits Alagarkoil which is referred to as a shrine dedicated to Lord Subramanya, in "Tirumurugarruppadai" of the poet Nakkeerar. About 11 miles from Madura is Alagarkoil which can be reached by bus. The shrine now existing at Alagarkoil is, however, a Vaishnavite one. The exquisite sculptures in the hall facing the Sanctum Sanctorum are indeed beautiful. The utsava idols are noticed to be of surpassing beauty.

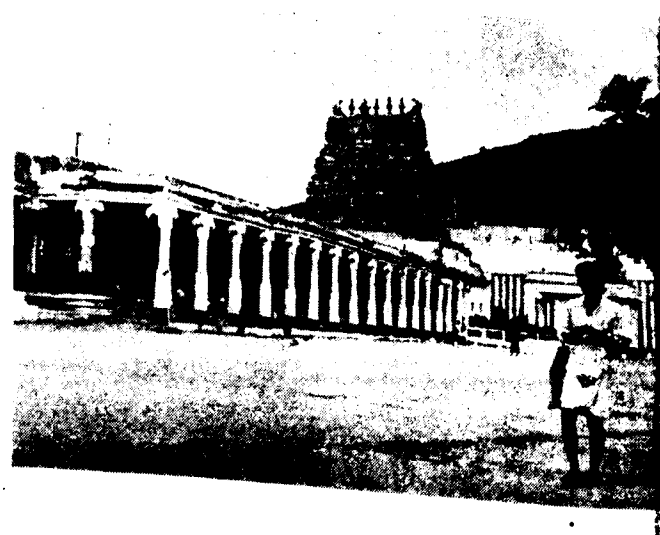
Palani

There are two places of Hindu pilgrimage in South India which account for the unceasing stream of pilgrims that visit them every day and move on to make way for the thousands that follow. One is Tirupati and the other is Palani. At both these places, the deity is highly responsive to the prayers of devotees. Both of them are steeped in mythology. It is sincerely believed by certain devout pilgrims that these two sacred places each contain the Samadhi of a Siddhapurusha, Palani of Sri Bhogar and Tirupati of Sri Konganar.

It is also believed that the image of the deity was installed at Palani by Sri Bhogar and it is also stated to have been made by him of 'navapashana' (nine kinds of poisons of the arsenic group). The devotees, it is believed, get relief from many bodily ailments by drinking the coconut water, milk, honey or sandal paste collected from the abhishekam of the idol.

Lord Subramanya is known in Palani as Balasubramanyam or Dandayuthapani. While Lord Muruga is usually represented in the company of Itcha Sakti and Kriya Sakti (the goddesses known as Valli and Devayanai) in other Murugan temples, he is worshipped at Palani as the infant aspect of Subramanya representing Gnanasakti or Gnana Pazham. Every Hindu shrine has its mythology and folklore and the tradition and history of the temple at Palani are also traceable to the

Alagarkoil



Palani Hill Temple

mythological age. The origin of Kavadi worship is traceable to Palani and the mythological story connected with it is too well known to the people. Idumban, the Asura preceptor, who undertook to bring the two hillocks to sage Agastya in a Kavadi, has a Sannadhi erected for him on the way up the hill. Idumban is the gate-keeper at the temple of the Lord Muruga. The Kavadi worship is resorted to by people who are in difficulties and now it exists in all places where God Subramanya is worshipped.

The Dandayuthapani temple Devasthanam owns a choultry a few furlongs from the temple and the rooms are provided with all modern comforts. Lodging can be had at moderate charges; food and refreshments can be had in the hotel attached to the choultry.

Madura to Palani (via Dindigul) -76 miles.

Fares for I class--Rs. 7-4-0. II class--Rs. 4-6-0 (Express). III class--Rs. 2-8-0 (Express).

Swamimalai

Swamimalai, west of Kumbakonam, has a famous shrine on a hillock. The Puranic version is that God Siva gave an opportunity to Subramanya to explain the significance of 'Pranava Mantra' and there is a sculptural

representation of this incident in the temple. To commemorate this event, the central shrine of Lord Subramanya is situated on the top of the hillock, while in the same temple, the shrine of Siva is placed below, indicating the position in which the master and disciple stand.

Swamimalai



The temple is about a mile from the Swamimalai Railway station, about four miles from Kumbakonam.

Comfortable rooms are available for the accommodation of pilgrims within the precincts of the temple, at moderate charges.

Palani to Swamimalai via Dindigul—144 miles.

Fares for I class—Rs. 13-8-0. II class—Rs. 7-2-0 (ordinary) III class—Rs. 3-15-0 (ordinary).

The pilgrim, on completing the Yatra to these five sacred shrines dedicated to God Subramanya, namely, Tiruchendur, Tiruparankunram, Alagarkoil, Palani and Swamimalai on the metre gauge system of the Southern Railway returns to Madras to pay his homage to God Subramanya at Tiruttani, 51 miles north-west of Madras, on the Madras Raichur section.

Tiruttani

The hill at Tiruttani contains one of the oft-visited temples in South India where the presiding deity is Sri Subramaniaswamy. The temple commands a good view of the surrounding country and is approached by two flights of steps on the east and the west. The temple presents an imposing sight to people from miles around.

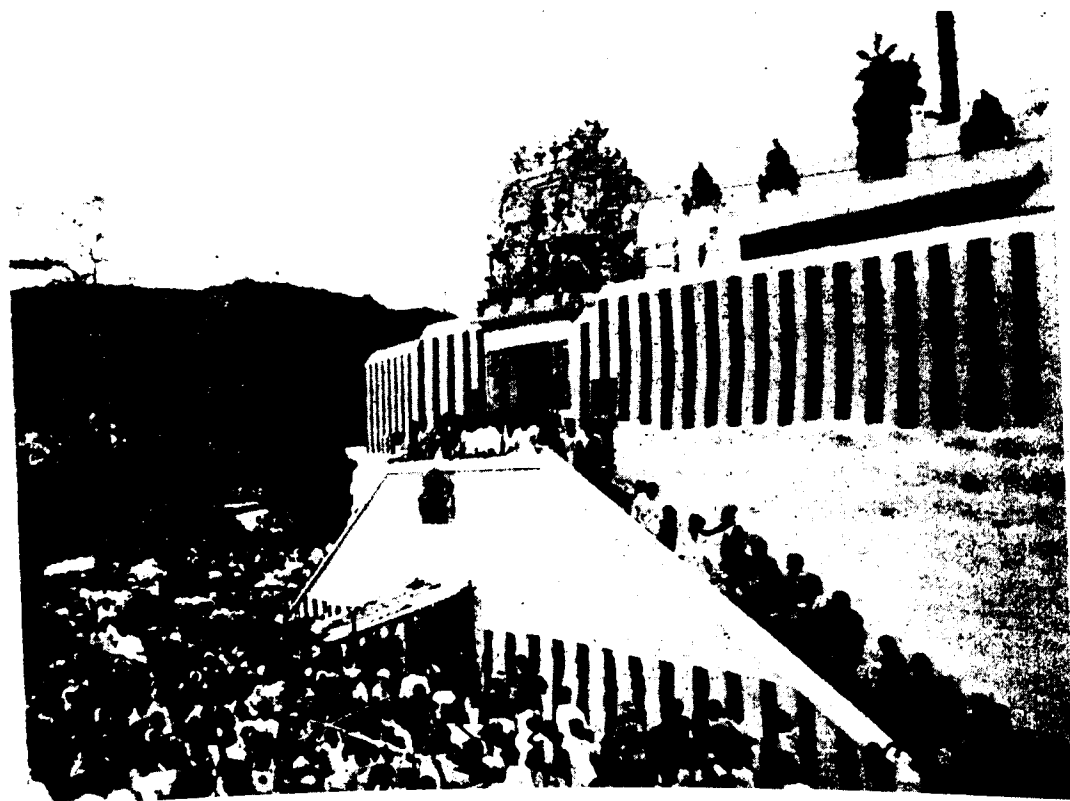
The Lord on the hill at Tiruttani has been the theme of many a song composed by saints particularly of those by Saint Arunagiri called 'Tiruppugazh'.

The temple of the Seven Virgins and Veera-bhadraswamy with pools around them, which can be reached from the foot of the hill, are a beauty spot worth visiting.

The foot of the hill is about 7 furlongs from Tiruttani Railway station. Near the foot of the hill is the sacred temple tank known as

Hill-Temple, Tiruttani

(All Photographs by Author)



"Saravana Poygai" in which pilgrims usually bathe before they ascend the hill. There are 365 steps leading to the shrine on the sacred hill, each of which is meant to represent a day of the year to be spent in peace and happiness.

The hill temple by its very name signifies that devotees worshipping the Deity on the hill will enjoy peace of mind and for this reason, people in thousands gather on the eve of the New Year's Day, ascend the hill in Bajana groups and Sat Sangh parties and worship the Lord on the hill for a happy and prosperous New Year.

A word about the Kavadi is worth mentioning. Palani is well known for the *Paal* (milk) *Kavadi*, while at Tiruttani devotees carry *Pushpa* (flower) *Kavadi*. The Kavadi is carried to the hill shrine at Tiruttani by the devotee who takes a vow (*prarthana*) from his village or residence.

The monthly krithigai festivals and the New Year Day, January 1, draw large crowds from the surrounding country and the Madras City in particular.

Numerous choultries exist in the town where free lodging can be had.

Swamimalai to Madras Egmore—198 miles.

Fares: I class—Rs. 18-4-0. II class (ordinary)—Rs. 9-11-0. III class (ordinary)—Rs. 5-6-0.

Madras Central to Tiruttani—51 miles.

Fares: I class—Rs. 4-13-0. II class (Mail)—Rs. 2-15-0. III class (Mail)—Rs. 1-11-0.

The Yatra of the 'Arupadaivedugal' (six sacred shrines of God Muruga) will be complete after a visit to Tiruttani. God Subramanya is worshipped by Hindus of all persuasions and great sanctity is attached to the pilgrimage outlined above.

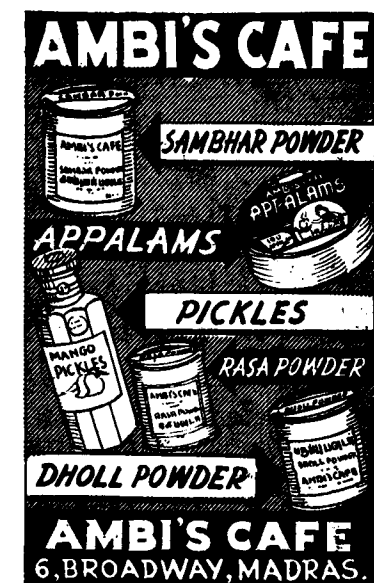


"CLEAR ROAD AHEAD"

The General Electric Co. of India Private Ltd., Calcutta, who are the agents of Permali Ltd., England, presented the film "Clear Road Ahead" at a private viewing, in the Miniature Theatre, Lighthouse Cinema, Calcutta, to officials of the Eastern Railway and South-Eastern Railway on the evening of Thursday the 6th September.

The film "Clear Road Ahead" has been produced by Permali Ltd. to depict the meticulous care taken during the manufacture of the Permali Insulated Rail Joint which is used to insulate sections of the railway track, where track circuits are employed, and also to illustrate how widely this joint is used on Railways in India, Great Britain, Australia, Canada, France, Norway and Sweden. The track circuit is a vital link in electrical signalling on Railways and the film illustrates how well the Permali Insulated Rail Joint stood up to the most arduous service and climatic conditions.

Mr. V. C. Eagleton, the G.E.C. Sales Manager, addressed the gathering and emphasised the world wide use of Permali Joints.



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WOMEN'S PAGE

SHARING FAMILY RESPONSIBILITIES

V. S. SHANTHALAKSHMI

MANAGING a home is a co-operative enterprise. Every individual living as a member of a family group has a shared responsibility for seeing that the day to day tasks are executed and that the long-term goals are achieved.

Wise use of family labour may increase the real income of the family. Since the amount of money available to most families is limited, home production may make it possible for them to have goods and services which they cannot afford to buy. That is by sharing the various work of the house and making at home the things that individuals are able to make, money will be released for the purchase of goods which do not lend themselves readily to home production. If the family does not count the cost of its labour, significant savings may result from making things at home. For example one may be able to buy dress material for less than Rs. 10 ; but if a garment of like quality were to be purchased ready-made, it might cost more than twice that amount. Consequently the choice may be between two dresses made at home or one dress made at home or one dress bought at the shop. If Mrs. Iyengar is busy doing the tailoring of the house, Miss Iyengar (the eldest of the house), can spare a few hours from her College studies and do the cooking while her younger sister can help with the washing and the youngest may be entrusted with the marketing. Thus, sharing home activities has a definite educational value too. The home is the most satisfactory laboratory we have for learning skills and techniques in home-making. Here each separate activity is seen as a part of the whole enterprise. An awareness of the complexity of the situation and the need for planning and organisation may be developed. There are endless opportunities calling for imagination and creative ability to function in a constructive way. Through a variety of activities children may get to develop special aptitudes and abilities that will determine their lifetime occupations and hobbies.

Important attitudes may develop from sharing household activities with all members.

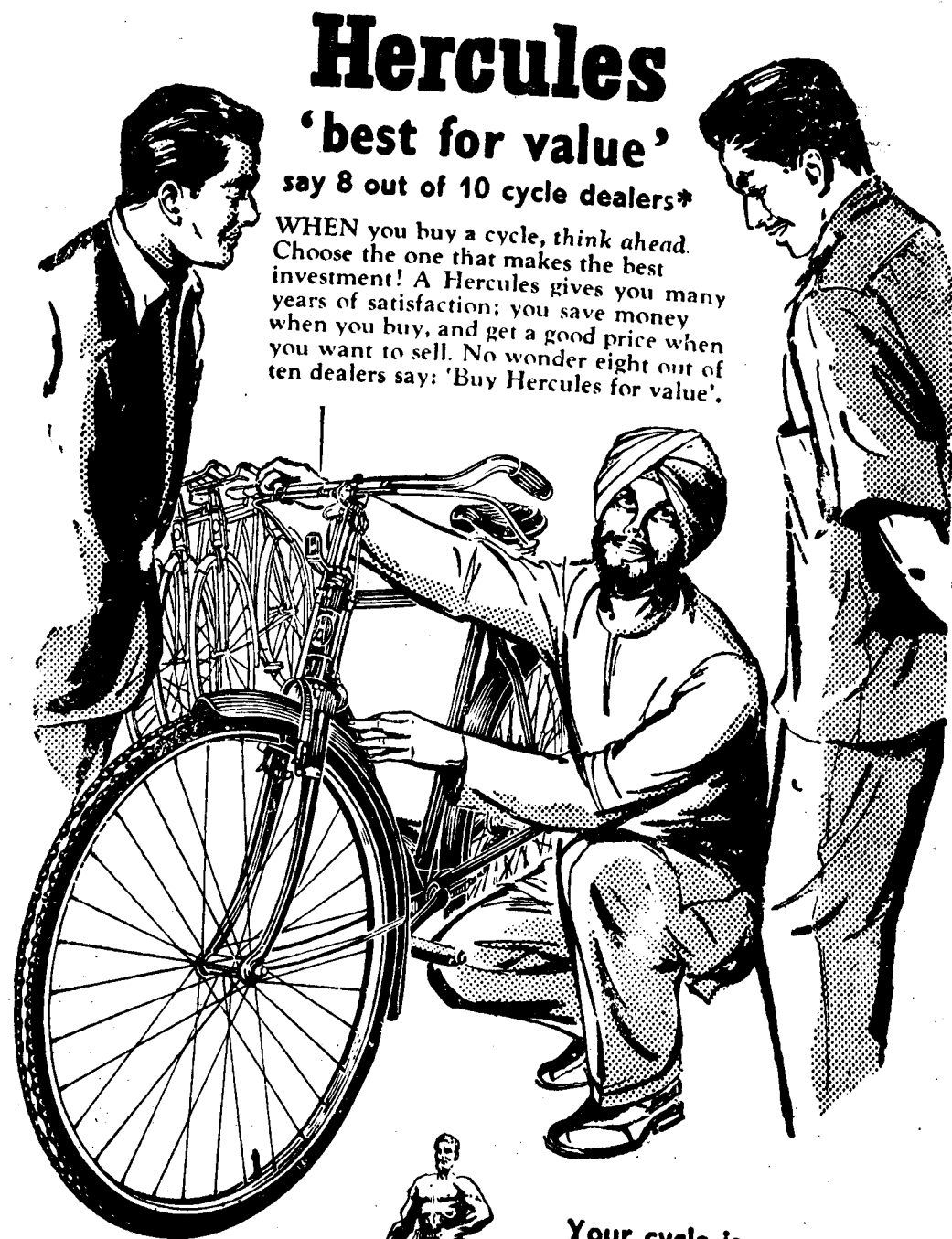
It is important that all children and adults recognise the principle that every physically or mentally able individual should be economically self-sustaining. This does not mean that one must be employed outside the home, because home-making activities may be as important economically as those of the worker in business or industry. It does mean that the home-maker, or anyone working within the home, must use time constructively, guarding against the tendency to set house-keeping standards higher than necessary for healthful and happy-living, simply to keep occupied.

Shared work tends towards shared recreation and leisure. If all do not share in the sum of work, there will be an inequality in the individuals' time available for other activities. Those who have never really had an opportunity to do some of the household tasks may frequently be critical of the time another takes doing them. There may be a willingness to accept somewhat different house-keeping standards if there is a realisation that the present standard can be maintained only at the expense of other and more desired activities. A clear understanding of the need for balance between work and leisure is important.

Participation in and understanding of group activities should help to make a person tolerant of other people's ideas. As a result Mummy may not object to Sushila's desire to try a new recipe for a Halwa even though sugar may be scarce and ghee selling at high price.

Some individuals mature without acquiring the ability to see significant problems, because they have never had to think about the problems of the family was obliged to face. Someone else did all the thinking for them. If the family responsibilities are shared, then all become sensitive to conditions about them, recognising that life does not always flow along smoothly, and that it is therefore important to develop techniques for meeting problems. With added experience we tend to develop more effective ways of solving problems.

(Continued on page 85)



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*Established by an independent survey

ETHICS OF GANDHIJI

G. S. RAJU

AT a time when we were living uncomfortably, like living on a volcano. Gandhiji came to us as a simple guide and showed us the wonderful way of 'Truth and Non-violence'. We found that his idea had an irresistible faith which soon gripped the nation. It gave a new philosophy, a new passion and a new plan to change our history and it created the force in people to do it.

TRUTH. In a wider sense, truth means not speaking a falsehood. But real truthfulness consists not merely speaking the truth, but thinking and acting truthfully. A man, who is really truthful, says, what he means and acts as he says. He will never utter a lie, even though it be in jest, and will not think of things which are untrue. He always appears before others, just as he really is. If he is poor, he is content to show himself as such, and does not attempt to give others, the impression that he is rich; if he is without learning, he does not try to make others believe that he is learned.

Truthfulness, not only in the moral and spiritual life of man, but also in the practical concerns of life, is of inestimable value. It is one of the essential virtues which is necessary to build the character of man, without which, one cannot be said to be, a man of character. It is also the basis upon which, the human society rests. In a society where there is truthfulness, the members live in mutual trust, friendship and goodwill.

The industrial and commercial sides of such a Society develop by leaps and bounds, for truthfulness is the essential factor of all business. Apart from all these, a truthfultman contributes to his own well-being in different ways. Truthfulness brings honour and reverence. It strengthens the mind and gives courage to the heart, so that a truthfultman is able to face any danger, even if it be of such a nature as to threaten him with death, without flinching. It also brings him near to God, for God loves truth more than anything else, and above all gives him peace and comfort of mind, because he has a pure conscience.

If truthfulness is such a noble virtue, then it follows that untruthfulness must be an evil. In fact, untruthfulness or lying is a vice; it is

a sin against God and man. One who is in the habit of telling lies is never believed by any man and he is hated by his own fellowmen. A lie cannot be kept concealed for a long time. A liar may escape detection once or twice, but he is sure to be exposed in the long run and shame and dishonour will be his lot. A liar with constant fear of detection and anxiety leads a miserable life and knows no peace and happiness. He receives no sympathy or co-operation from others when he is in distress or difficulty and he slowly goes corrupt and debased, for one falsehood leads to another to conceal the one already uttered. Chaos reigns in a society where truthfulness is wanting. The members of such a society live in mutual suspicion, for no one can believe another. The commerce and industry of such a society can never flourish. In short lying brings misery, ruin and even death. Everyone knows the fate of the shepherd boy who was in the habit of falsely crying "Wolf" "Wolf" just for the fun of deceiving people.

Truthfulness was highly prized by the ancient Hindus, the Greeks and Romans and in fact by every religionists. The Hindu scriptures prescribe severe punishments in hell for the sin of lying and Hindu religious books abound in examples of the noble virtue. Yudhistar, the eldest of the five pandavas, was famous for his truthfulness. King Dasaratha rather than break a promise he made to queen Kaikaye, sent his beloved son, Rama, into exile for 14 years. To be true to his promise, King Harischandra gave away his whole kingdom, his wife, his only son and at last sold himself.

Truthfulness is so very important in everyday human life. It should be our duty to cultivate this habit from our childhood. It does not require much effort to speak the truth. It "Sits on our lips and drops out before we are aware." On the other hand to utter a lie, much deliberation and effort are required. Having seen the harmful consequences of lying and the immense benefit of truthfulness, our motto in life should be as Gandhiji said "Truthful in Thought, Speech and Deed."

Let us see what he said about Non-violence.



Gandhiji collecting Funds for Harijans on his way to Poona from Bombay after he was released from Agha Khan Palace in 1945



Mahatma Gandhi signing autographs, in return for donation to the Harijan Fund. This happy picture of Mahatmaji was taken at Juhu, seaside resort in Bombay where Gandhiji spent an occasional holiday



Mahatma Gandhi photographed at evening prayer in Simla

Non-violence consists in controlling our temper and restraining our anger at the erroneous and unjust actions of our fellowbeings and in showing mercy to those who harm and injure us and in refraining from taking revenge upon them. To deal with the failings and weaknesses of our brethren sympathetically and with patience and to forget injuries, pardon those who offend us and love them in return—these are the very essence of the qualities of non-violence.

This world is peopled by human beings and not by angels. No human being is perfect and so it is no wonder that men will have faults and commit errors and also injure others. "To err is human" and as such, we should always bear in mind, that just as another man may have his shortcomings and be liable to commit wrong so we too, on our part, may not be free from defects and be guilty of injuring our fellowmen, however careful we might be. So it is absolutely necessary that everyman should exercise non-violence. If we were to take exception to every error committed and revenge ourselves on those who happened to injure us in any way, then it would not be possible for us to exist in society in peace and harmony. In fact it is non-violence which form the basis of human society and its want would bring the whole social fabric to the ground.

Non-violence is far reaching in its effect. Every religion impresses upon its followers the necessity and value of this quality. A man who gets irritated and cannot bear to see faults in others, in other words, one who is wanting in non-violence, cannot command the love of his fellow-beings and grows unpopular. Such a man is never happy in life, but is always uneasy and uncomfortable. We should, therefore, always try to keep our anger within reasonable limits and not allow it to lead us commit a rash act. One who has the spirit of non-violence in him is universally loved and respected. Non-violence is a Divine quality, "it blesses him that gives and him that receives it." A man who is of non-

violent disposition comes very near to God, for God himself in non-violence incarnate. He is every moment forgiving the thousands of sins of violent nature committed upon this earth. To take revenge upon one who has injured us, only betrays the grossness of our souls. We make those upon whom we take our revenge, our bitterest enemies and the sympathy and love which we would have got, had we been noble enough to forgive our enemy naturally pass to the victim of our revenge. But non-violence which is the noblest revenge, would yield place to profound love. This sort of revenge would at once raise us in the estimation of the public and the offence of the person forgiven would appear in their eyes in the blackest of colours. To take revenge upon a wrong-doer is easy, but to forgive him is extremely difficult. A man who can do this is certainly far superior to the common run of men.

Lord Gauranga the apostle of universal love, was noted for his non-violence. While he preached the doctrines of his new faith of Vaishnavism and was winning over numerous disciples, two notorious characters, named Jagai and Madhai turned against him and determined to hurt him. One day, the two threw a pitcher at Gauranga and cut his head. Though his head began to bleed profusely, yet he ran forward and embracing the two said "Though you have beaten me, shall I not give you the name of Hari! my brothers?" Christ was also celebrated for his non-violent spirit. He prayed to God "Father forgive them; they know not what they do."

Non-violence, therefore, should be our motto in life and if this maxim is followed, we shall find that we have risen above the level of ordinary men and that life, after all is not so unbearable as it is generally found to be. The consciousness that we are able to love our enemies and to be non-violent elevates our souls and takes us nearer to God, while a violent spirit only demoralises and drags us down.



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SOUTHERN RAILWAY

TENDER NOTICE

Quilon-Ernakulam Railway Construction—Section I—Quilon to Mavelikara. Construction of Passenger Platforms, Passenger and Goods approach roads and Goods loading Banks at Stations.

The Engineer-in-Chief, Southern Railway, Egmore, Madras-8, invites sealed tenders for the above work upto 12-00 hours on Thursday the 18th October, 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, Quilon-Ernakulam Railway Construction, Ernakulam South on production of a receipt for the sum of Rs. 10 (Rupees ten only) paid to the Chief Cashier, Southern Railway, Madras-3 or the Station Master, Ernakulam South or Quilon 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 Monday the 15th October, 1956.

An earnest money Rs. 6,000 should be paid in advance to the Chief Cashier, Southern Railway, Madras-3 not later than 12-00 hours on 15-10-1956 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 12-00 hours on Friday the 19th October, 1956 at the Office of the Engineer-in-Chief, 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.

FOREIGN EXCHANGE RESOURCES OF SECOND PLAN

WITH
SPECIAL REFERENCE TO RAILWAYS

K. S.

THE Second Plan, with its large investment outlay and accent on the development of basic industries will need about Rs. 1,100 crore worth of foreign exchange resources. This demand is proposed to be met by :

- Withdrawal of Rs. 200 crores out of accumulated sterling balances.
- Expected inflow of private capital of about Rs. 100 crores.
- Expected external aid towards the balance of Rs. 800 crores.

If foreign resources of the order required are not forthcoming, it would be necessary to

restrict the growth in consumption to a correspondingly greater extent.

Foreign exchange resources present a problem to which special attention has to be given. An utmost conservation of foreign exchange resources is necessary in a country which starts on industrialisation and has necessarily to import the required machinery and equipment from abroad in the early stages. As supplemental resources from abroad will still be necessary on a considerable scale even after economy of imports there must be an active promotion of export policy.

The following table gives the details of estimated balances of payment for the Second Plan period :

INDIA'S BALANCE OF PAYMENTS ON CURRENT ACCOUNT (Rupees in Crores.)

	1956-57	1957-58	1958-59	1959-60	1960-61	Average for 5 years ending 1960-61	Total of 5 years ending 1960-61
1. Exports (f.o.b.)	573	583	592	602	615	593	2,965
2. Imports (c.i.f.)	783	886	990	895	786	868	4,340
3. Trade balance (1-2)	-210	-303	-398	-293	-171	-275	-1,375
4. Invisibles (excluding official donations)	62	55	51	46	41	51	255
5. Total current account balance (3+4)	-148	-248	-347	-247	-130	-224	-1,120

The total deficit in the Five Years=Rs. 1,100 crores. The above deficit has to be matched by a net outlay of foreign resources of that order on Government or private account.

Part of this deficit can be financed by drawing down the foreign exchange reserves of the country. In this context about Rs. 200 crores or so of the sterling balances to India's credit could be safely utilised to meet part of the foreign exchange requirements of the plan. The balance of Rs. 900 crores can be filled :

- by floating public issues in foreign money market ;

- by arranging for banker's credits and export credits for supply of goods from foreign countries ;

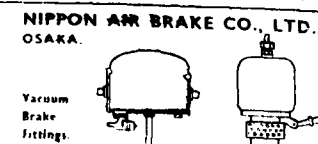
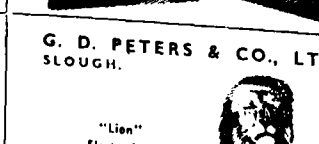
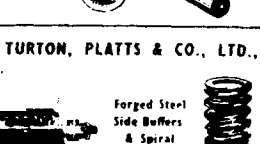
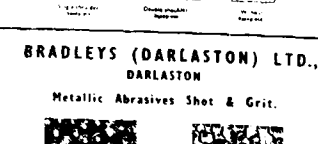
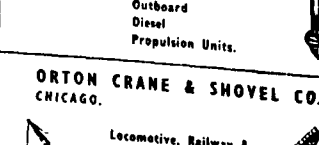
- by borrowing from agencies like the international Bank for Reconstruction and Development and the International Finance Corporation ;

- by loans and grants from international institutions ;

- through private foreign investment ; and

- through loans and grants from foreign Governments.

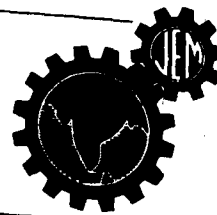
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For the requirements of the public sector, there is an unutilized balance of Rs. 94 crores from the past authorisations.

Arrangements have been made for a credit of Rs. 63 crores from the USSR for the Bhilai Steel plant working to a net accretion of Rs. 43 crores (after allowing for part payment towards the credit).

Credit for finances from British sources for the Durgapur Steel.

	Rs. in crores
British sources both State and from Private sources	0.33
Total of resources already assured	170.00
Balance 800 - 170	630.00

Out of the sum of Rs. 100 crores of foreign exchange postulated for the private sector Rs. 22 crores is available already as the undisbursed portion of the loan made by the International Bank for Reconstruction and Development to IISCO, Tatas and the Industrial Credit and Investment Corporation of India.

OUTLAY UNDER THE SECOND PLAN

The railway plan now provides for doubling of 1607 miles of track, conversion of 265 miles of metre gauge lines into broad gauge, electrification over sections totalling 826 miles and dieselisation over 1,293 miles, construction of 842 miles of new lines, renewal of 8,000

miles of obsolete track and procurement of 2,258 locomotives, 107,247 wagons and 11,364 coaches.

Of the total outlay for Railways, approximately Rs. 425 crores will be required in terms of foreign exchange. The foreign exchange requirements for different programmes are shown below:

	Rs. in crores
Locomotives	81
Other Rolling Stock	82
Other Equipment	125
Steel	137
Total	425

The foreign exchange requirements are mainly for special types of stock like electric and diesel locomotives and special wagons. Efforts will continue to be made to attain as large a measure as possible of self-sufficiency in respect of rolling stock.

THE ROLLING STOCK PROGRAMMES

The provision of Rs. 380 crores of rolling stock includes Rs. 183 crores for development and Rs. 197 crores for rehabilitation. In all, it is proposed to secure 2,258 locomotives, 11,364 coaches and 107,247 wagons. In the table below details of the rehabilitation programme and the additional requirements for development are given separately:

	Locomotives			Wagons			Coaches		
	Broad gauge	Metre gauge	Narrow gauge	Broad gauge	Metre gauge	Narrow gauge	Broad gauge	Metre gauge	Narrow gauge
Development	533	373	..	66,575	16,820	..	2,149	2,768	..
Rehabilitation	1,062	209	81	14,879	4,952	4,021	4,392	1,422	633
Total	1,595	582	81	81,454	21,772	4,021	6,541	4,190	633

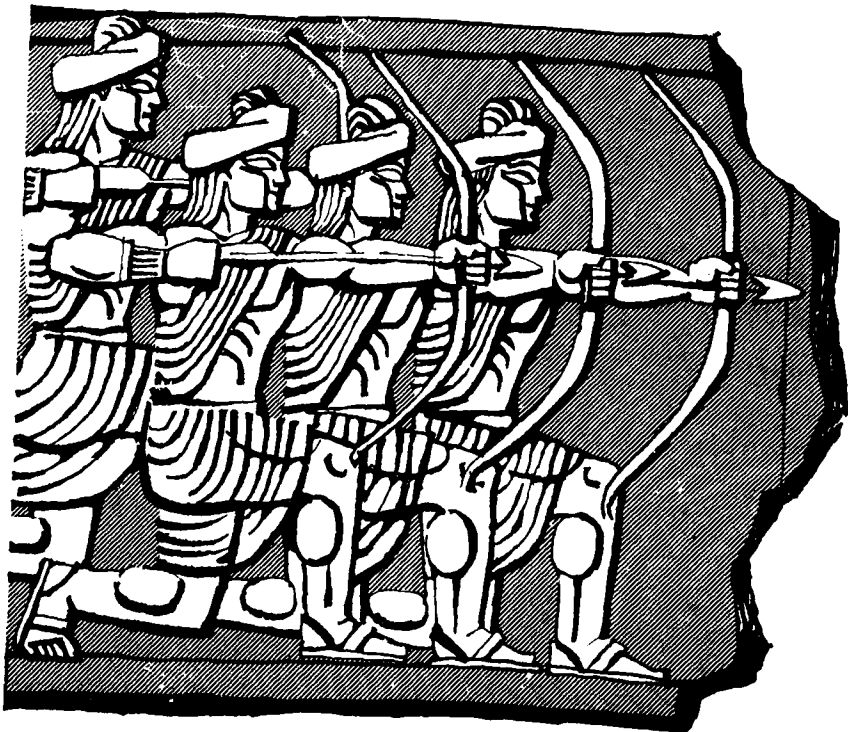
Agreement for supply of U.S. foodgrains to India and the value provided for in the agreement is for 360 millions (Rs. 172 crores).

As it is planned to import foodgrains to the value of Rs. 240 crores during the plan period, there is now a saving of Rs. 172 crores by this agreement.

The Government of India will credit a U.S. Government account in India with the equivalent in dollars for the purchase of surplus agricultural commodities in the U.S. from time to time.

Surprise at Thermopylae

When Xerxes, the mighty Persian emperor, invaded Greece in 480 B.C. he had with him a company of Indian archers. These Indian archers used a new weapon—a steel-tipped arrow which had been brought all the way from India. History records that the Greek army was surprised by the superior arms of Xerxes and was defeated in the battle of Thermopylae.



Today, once again, steel is very much to the fore in the nation's thinking, but with a different intent. The country's steel-making capacity is being rapidly enlarged, not for purposes of war, but for peace and development.

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CHILDREN'S CORNER

The Farmer who was a Cheat

IF you steal something that does not belong to you it means that you are a thief and dishonest.

But there are other ways of stealing, commonly known as cheating. For instance, someone may sell you a camera and say that it will take good pictures; but when you try it out you find it does not do so. Or somebody has a number of people working for him, and to whom he has promised to pay a certain sum every month as their wages. But when pay-day comes along the master will pay his servants less than what he had agreed upon. So the master is a cheat.

Well, a time will come when nobody will work for such a master, because he is so dishonest. Now, let me tell you a little story about a master who was also a dirty cheat.

Once upon a time there was a farmer who had quite a large piece of land and farm on which he grew wheat. This farmer would get people to work for him on the farm, but when the time for payment came each month, he would always pay his servants less than what he had promised; he also give them very little to eat. A time soon came when nobody wanted to work for this greedy and dishonest farmer, and his labourers would often leave and so lose the wages they had earned.

One day, during the time of harvest, the farmer was alone in his fields of ripe wheat. As he had no hired men he was trying to cut the wheat himself. There was quite a lot of wheat to be cut down and gather into bundles, and the weather was quite warm too; so the farmer soon found that he had a lot of hard work to do. While he was cutting his wheat stalks in the fields he suddenly saw a little man standing in front of him, wrinkling up his face with a big grin.

"Quite a big job you have on hand Mr. Farmer," said the little man. "How would you like some help?"

The farmer looked down at the little man and laughed. "What help could you give me, little midget? What, you won't even be able to lift this cutting knife."

The dwarf smiled and said, "But, Mr. Farmer, I'm really very strong. Why don't you try me out and see what I can do?"

The farmer who was hot and bothered with his hard work agreed and said, "Right you are. Here take this cutter and get started."

The little man gripped the heavy cutter and then started swinging it amongst the wheat stalks. As he cut he sang merrily, and down came the stalks with a swish and a swash, so fast that the farmer looked on with wonder.

"I must say, you can cut fast, and I'll take you on as a field-hand."

The dwarf stopped cutting and asked, "Now what will you give me if I cut all your wheat by tomorrow morning?"

The farmer replied, "I'll give you the wages of three men."

The little man smiled. "I don't want any money, I want wheat."

"How much?" asked the farmer. The dwarf answered, "As many bundles as I can carry away on my back."

The farmer now grinned. This was better than paying the little man the wages of three men. After all, such a small fellow could not carry away much wheat on his back. So he agreed.

The dwarf and the farmer now continued with their cutting. The little man sang happily as he worked and he cut so fast that he left the farmer far behind. For every three bundles cut and tied by the farmer, the dwarf cut and tied eighteen bundles.

The farmer could not keep up this terrific pace and before long he was so tired that he fell asleep. When he awoke he found it was the morning of the next day, and when he looked over his field, behold not a stalk of wheat remained. The dwarf had cut down the whole field and tied up the stalks into bundles. The farmer was really pleased. This was better than employing even a dozen servants.

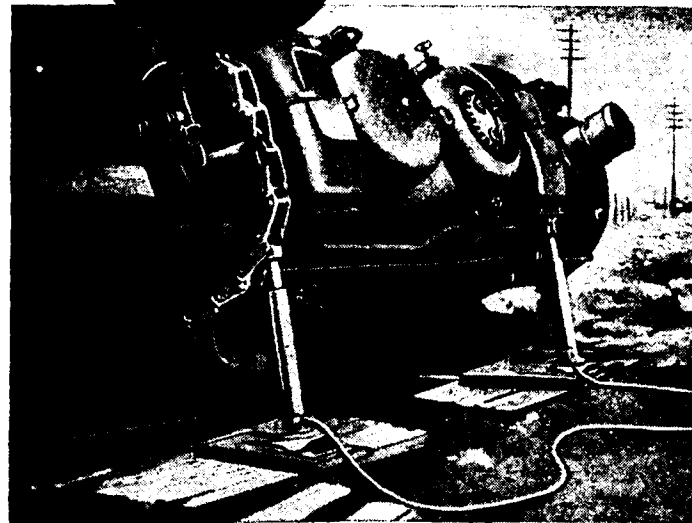
When the dwarf saw that the farmer was awake he said, "Now, that I have kept my part of the bargain and cut down your whole field of wheat, I will now claim my wages—all the bundles I can carry away on my back."

The farmer smiled. "Certainly, little man, take as many bundles as you can carry."

"Thanks, Mr. Farmer," said the dwarf. He now made a long straw rope, and stretched it across the field. It was so long that it went



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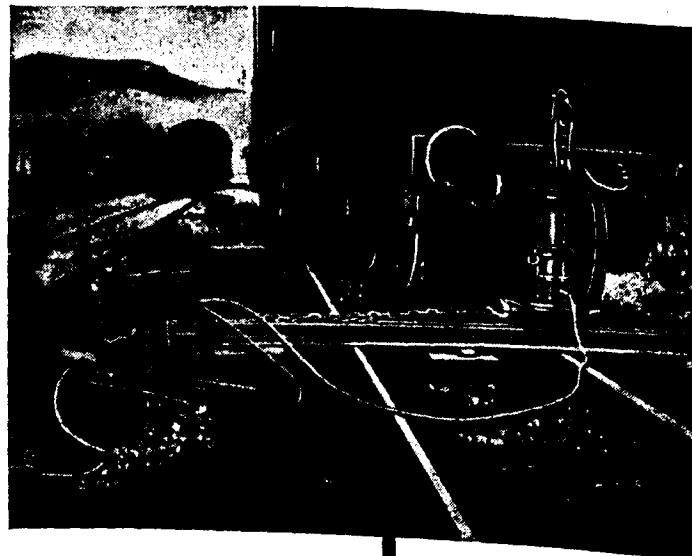
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half way across. Then he collected the wheat bundles and placed them on the rope.

The farmer looking on, started laughing out aloud. The dwarf asked, "What are you so merry about, Mr. Farmer?"

"Well, just look, you have collected every bundle of wheat and put it on your rope. You'll never be able to carry so much away."

The dwarf replied, "Well, if I cannot carry all these bundles, I'll leave them for you."

The farmer kept watching and then suddenly he laughed no more. The little man had tied up every bundle and hoisted the whole load on to his back.

"Hey, you little man. What do you think you're doing. You can't take away all my wheat." The farmer just could not believe what he saw.

"Sorry, Mr. Farmer. You made the bargain and said I could take all I could carry on my back, and I'm taking the lot."

"But, but" the farmer spluttered. "I didn't know you were so strong. And if you take away all my wheat harvest, I'll be ruined."

The dwarf was stern. "You made a bargain with me, and you must stick to it, so I'm off." He hoisted all the bundles tied in the rope on to his back and walked away.

The farmer shouted after him. "Hey, little man, come back. Please come back."

I'll give you gold. Yes, gold, if you will give me back my harvest."

The dwarf stopped and put the bundle down. "How much gold will you give me?" he asked.

The farmer replied, "Come into my house." The two went in and from a secret hiding place the farmer took out a bag full of gold and silver coins.

"Here take this. It's all the money I have saved up."

The dwarf laughed. "Yes, you mean old farmer. I know just how you saved all the money. By cheating your servants and paying them short wages. So now count out all the money you kept back from your servants for the last seven years, and you will get back your wheat."

The farmer knew he was beaten. He counted out the money and paid it to the dwarf, who took it, and as he left said, "If ever you cheat a servant of yours again, I'll be back to teach you another lesson, you dirty crook."

The same evening the dwarf went through the town and found all the farmer's old servants and paid to each of them all the wages that the mean farmer owed them.

The farmer never cheated his servants again, as he knew that the strong little man would be back, if he did.

UNCLE TELLATALE.

WOMEN'S PAGE

(Continued from page 71)

Group experience in the home provides opportunities for personality fulfilment. At home a person is given recognition for what he can do. He is important to his group. He has security. With increased understanding of the immediate environment, a greater appreciation of the part the family must play in the larger social group will result.

It should be obvious that there are a great many outside forces which determine family

policies. Ways to bring about change will grow from more complete understanding. Such understanding will gradually increase as the child's comprehension increases, until he will see the relationship between personal behaviour and broader social and economic problems. This interest will ultimately expand far beyond the home, the community, or the state to include the entire world.

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BOOK REVIEW

"THE MARCH OF INDIA"

*Monthly Magazine published by the
Publications Division, Government of India,
New Delhi.*

This is an interesting monthly brought out by Government of India, Publications Division. A monthly, catering to all needs, tastes, covering many fields, art, literature, history, regional languages and definitely not missing in bringing near to us the life and faith of our own brethren, the Adivasis. In its omnibus service it excels every magazine and bulletin and it is a lively record told in a pleasing manner. It is as loyal to its title, "India in life and art". Well contributed by eminent writers and men of importance, it is a valuable asset to every home. The present review covers three issues—May, June and July.

The May issue bears two fine articles on Buddhism. Buddhist Pilgrimage takes us not only to 249 B.C. but also pull our minds through the places and events so nicely described by the author. The National Metallurgical Laboratory is another informative record about our technical assets and tasks. With the Plan ahead and industrialisation in our minds it is very interesting to recall the various details of this Laboratory. "The modern artist is always striving to achieve something significant in his own manner and is keen on freeing himself from the hallowed fetters of a past, appropriate to a society essentially conservative, rural, and static, for he is primarily a man of the town caught up in the whirlpool of restless and often purposeless activity. This phase of India's life is now much to the fore and the painter is grappling with intricate problems of pure form and rhythm". This quotation is requested in Sudhir R. Khastgir's Post-Independence Indian Art. It marks the period of revival of modern Indian art as the time of Abanindra Nath Tagore. But, of course, Indian art is age old. It is more traditional and cannot be easily dated in antiquity for the beginning. But, however there are, as there have to be changes, turning points in that process, many healthy interruptions and piercing of ideas and ideals into it. Art of India is now receiving due attention from the State. We can also hope with the Author that Indian Art will have a distinct contribution to make to the Art of the World.

The Ganga bridge is a record of progress. Two and half miles wide Ganga near Patna is to have over her a rail cum road bridge. It is going to cost Rs. 150 millions, but its accomplishment will be a great pride for the Indian Engineering skill. The slow and obsolete system of carrying passengers and goods has to be replaced and hence the Ganga Bridge. The author gives a detailed report of the bridge in his article. It is a fact still we don't have a full knowledge of our Adivasis. Turis are a listed Adivasis scheduled caste. Even though they number only in thousands yet they form an important part of our society. It is interesting to know their customs; with the advent of freedom the necessity has come to be in the know of all these facts, for the progress of our nation lies in the progress of Indian masses in entirety. These offshoot from Mundas live in a four divisioned caste system and the author asserts that they speak Hindi and are akin to the Doms of North Bihar. Indian influence in the Javanese Architecture is an interesting article. Indian cultural boundary was never a settled fact. It was always growing and crossing the frontiers and here we find a specimen of our influence enriching the Javanese architecture.

The North-East Frontier Agency is well covered in the June issue. The life and problem of the people of the area are well depicted. With the Five-Year Plan in his perspective the author has made a healthy contribution. Kashmir the arresting beauty of India again arrests our attention. To an Indian Kashmir means beauty. This paradise on earth is the nice subject titled as KASHMIR—A Study in Cultural Synthesis.

"Welcome to the Happy Valley where the

World comes to an end and Paradise begins.

Who has not heard of the Vale of Kashmir

With its roses the brightest that earth
ever gave,

Its temples and grottos and fountains clear

As the love-lighted eyes that hang over
their wave."

This is an appreciation of beauty retold. The author gives a beautiful picture of the

cultural synthesis. The origin of the Valley once known as the Valley of the Virtuous woman has a mythological story behind. The author rightly points out the cordial co-operation between Hinduism and Buddhism then prevailing during the period of 631-633 A.D. The impacts of Islam on Hinduism and Hinduism on Islam are well argued as the turning points in Kashmir culture. Today, Kashmir is vibrating with a new life and enthusiasm and it provides the best answer to man's eternal craving for beauty; hence it is valuable to know the cultural synthesis of this crown of India. Jews of India, the Excavations at Sengamedu, Glimpses of the Arts and Crafts of Orissa, India in the Oil World, and the Nepa Mills are the other articles that illuminate this issue.

The one for July too has two articles on Buddhism. Of course, Mr. B. P. Kirthisinghe views an old philosophy in a new angle. But he could have well avoided a comment on Indian Socialistic pattern of society, that in no way will affect the importance of the work. The article on Rukmani Arundale is a good piece. We hope to learn the life of many an artist through these columns. But, the highlights of this issue are Kashmir Folklore and Concept of Indian Literature. The creative aspect of the popular mind is always in the folklore. This is a period of Indian literary renaissance, so it is imperative to unearth these treasures in various regional languages and add to our literature. The simplicity and familiarity they enjoy give them life and encouragement. The pain and feelings of sorrow and happiness are universal. This Kashmir Folklore proves the oneness of Indian soul and breaks all regional and linguistic boundaries.

The concept of Indian literature is a timely and a bold attempt. It is no exaggeration to state that Sardar K. M. Panicker has answered the question of many literary men. He has given the clue to the problem facing many modern writers. "Literature today like our society itself has the atmosphere of a camp where contending parties are shouting their war cries and coteries their slogans".

He again adds that when the conflict is resolved, the concept of Indian literature that emerges will be something characteristically Indian, for our scenery, climate, geography, colour and contours which provide the raw material of literature and our social structure emotional reactions and moral values which go to make up its contents, will remain Indian. His conclusion is perfectly right when he says "Literature today reflects the conflict of a tormented age, its uncertainty, its frustrations and its conflict of ideals". But, we can definitely be optimistic in hoping to see the literary renaissance of India wherein the uncertainty, frustrations and conflicts are supplanted by hope, confidence and creative thought. It is curious fact that some of the finest palaces dating from the period of Muslim rule in India were built by comparatively unimportant Hindu Chieftains. They are impressive examples of architecture, but they do not share the popular reputation of the palaces at Agra, Fatehpur, Sikri and Delhi, perhaps on account of their less significant history and greater inaccessibility. The article "A Quarter of Hindu Palaces" brings before us the palaces of Datia, Gwalior Fort, Bharatpur, etc. Though these palaces were built in times of extreme political instability yet as examples of architecture, they rival the great imperial buildings of their time in magnificence and artistic excellence.

Cultural Heritage of Manipur, Marriage Among Chenchu Aborigines, Early Plastic Art of Rajasthan, Puri Car Festival are the other interesting features. The Savaras and their songs, and Harsi are informative articles. "Central Road Research Institute" is also very interesting.

On the whole, these issues give a great hope and make us to expect a continued service of this calibre. This March of India definitely marches with time, and hope it will not only illumine the literary world but also India as a whole. We may join with the innumerable readers in awaiting the next issue.

S. VEDANTAM



S. R. NEWS

GENERAL MANAGER INAUGURATES THE DIVISIONAL HEADQUARTERS AT OLAVAKKOT

"The main object of dividing the Southern Railway into Divisions is to remove the existing departmental rigidity and feeling of exclusiveness. And these divisions would function as self-contained units, excepting for matters of general policy and the like, with the Divisional Superintendents practically as General Managers," observed Shri T. A. Joseph, General Manager, while inaugurating the Railway Divisional Headquarters at Olavakkot on the 31st August 1956 at 5 p.m. in the gaily decorated spacious hall before a large and distinguished gathering. Shri D. B. Patel, Divisional Superintendent, presided.

On arrival at the dias, the General Manager was garlanded by Shri S. Subramaniam, Divisional Engineer and Shri D. B. Patel, Divisional Superintendent by Shri A. Sukumaran. After prayer the Divisional

Superintendent requested the General Manager to inaugurate the Division.

The General Manager elucidated that there would be no inter-departmental wranglings as in the past and that the new single file system would prove helpful to make the Administrative Machinery efficient. He also referred to the vital role that the Indian Railways have to play in making the Second Five-Year Plan a success.

The General Manager added that a suitable site has been selected for constructing a Railway Colony and that the work would be commenced soon. He wished that a model Railway Colony would spring up and on his part he assured all possible help.

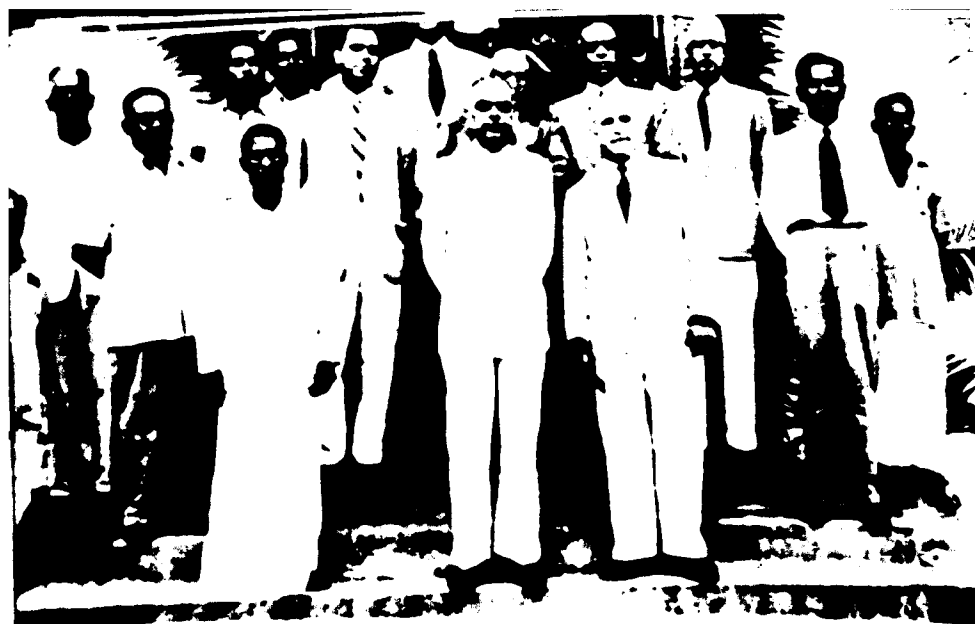
The function was attended by staff from Podanur Offices as well.

Shri S. Subramaniam, Divisional Engineer, proposed a vote of thanks.

With the singing of the National Anthem, the function came to a close at about 6 p.m.

Shri D. B. Patel requesting Shri T. A. Joseph to inaugurate the division





Shri E. A. Laxmi, Shri D. B. Patil and others. Men who attended the function at Olavakkal



The Madras Division of the S. R. V. was formed on 31st August 1956. Photo shows Shri N. Kandaswami Rao, S.D.G.M., inaugurating the division

Officers working in progress, 22-8-56, in G.M. meeting room in New General Offices
[Photo - P. S. Vedachandran]



Shri N. Kandaswami Rao inaugurating the division





A section of the gathering who attended the inauguration of the Madras Division

The Southern Railway Social Association, Madras

The Southern Railway Social Association held a grand public function on the 14th August 1956 on the eve of the Independence Day to celebrate the 9th anniversary of the Indian Independence in the New General Offices, Southern Railway, Park Town. A record gathering of over three thousand staff participated.

Mr. N. Kamalakara Rao, Senior Deputy General Manager, was in the chair.

Mr. P. Swaminathan, the President of the Association, welcomed the gathering.

Mr. B. Vishvanath, the Secretary, in his speech said that the hard won freedom of the country by our leaders should be preserved by selfless work of the present generation so that posterity will be proud of the heritage. He said that it is easy to destroy but constructive work calls for all the sober faculties of man and only in order that people will be better fitted to render selfless service to Railwaymen in particular and the public in general the Southern Railway Social Association was formed and a spirit of co-operation and selfless service mark all their activities and on that day, the ninth anniversary of the country's Independence, they are pledging for greater humanitarian work in all spheres. He further said that energetic men among them have formed the Southern Railway Employees Co-operative Building Society under the



presidentship of Mr. Govindarajulu Mudaliar. The society would start building construction in the Nungambakkam Colony very shortly, and thus the greatest need for shelter by the middle class is being fulfilled.

He called upon the thousands of staff that took part in the celebration to co-operate with the Association in all their endeavours and spread the gospel of selfless service to one and all.

The General Manager, Mr. T. A. Joseph, had sent the following message to the Association: "I am glad to find that the Southern Railway Social Association, Madras, which was formed a few months ago, is today celebrating the Independence Day. The primary object of this Association is to create a feeling of oneness amongst all ranks of Railwaymen and organisation of functions of this nature helps to promote this object. I have no doubt that this new Association, apart from organising social Functions, will do constructive social work both amongst Railwaymen as well as outside.

I wish the Association success in today's function and also in their future activities."

Then Diwan Bahadur Ramaswamy Sastri, Retired District and Sessions Judge, addressing the audience reminded them of the advices of our leaders on the previous Independence Day celebrations. He said that those principles for which we fought and won our country's freedom must be followed in our daily lives.



Chi. S. Vaman Rao, GM's Personnel Branch, S. Rly. Madras and Sow. Rukmtani were married on 8th August 1956



Shri N. Mahalingam who won the First Prize in the essay competition held in connection with the celebration of the Railway Week. His essay was published in our August issue



He eulogised the wonderful achievements made by our leaders both socially, industrially and in other spheres. He further stressed the great need that our country should play in the unity of the world for the betterment of the human race.

Mr. P. V. Rajagopal, the District Engineer, Rayapuram, Southern Railway, spoke next. He said that India is on the road to great world fame. She has already contributed much towards world peace. She is now one of the world powers to be reckoned in all matters of importance. Speaking on the internal situation of our country, he emphasized the urgent need to fight poverty and ignorance. A disciplined intelligent society is a great national asset.

Shri N. Kamalakara Rao, in his Presidential address, spoke in very appreciative terms of the aims and objects of the Association. He made an appeal to the thousands of staff present on the occasion to become members of the Association and stressed that every one of them should do real and constructive social work. He wished that the Association will ever grow in strength and become a vital organisation. He said that the celebration of the Independence Day is to remind every one of us of the great sacrifices that our leaders and others have made and the great tasks that we have in future. In conclusion he blessed the Association prosperity and long service.

Mr. R. L. Rajabather, Vice-President, gave the vote of thanks.

The Public Relations Officer screened films of topical and current interest. The gathering very much appreciated and enjoyed the films.

The Southern Railway Band was in attendance.

INDEPENDENCE DAY CELEBRATIONS, BEZWADA

Independence Day was celebrated at the Divisional Office at Bezwada on Wednesday, 15th August 1956, with great enthusiasm. The quadrangle of the Divisional Office was gaily decorated and bore a festive appearance. There was a large and distinguished gathering of local officials and non-officials present to witness the celebrations.

After Prayer by Kumari Vedaya Kumari, Shri M. S. Murthy, Divisional Superintendent, Bezwada, hoisted the National Flag. Led by Shri R. N. Patnaik, Inspector, Railway Protection Force, Shri M. S. Murthy inspected the Guard of Honour presented by a contingent of the Railway Protection Force and later on took the Salute at a March Past conducted by them. The local Police Band was in attendance throughout.

Speaking on the occasion, Shri M. S. Murthy said that he was confident that the Railway-men on the Bezwada Division fully realised

A section of the guests who attended the celebrations at Bezwada



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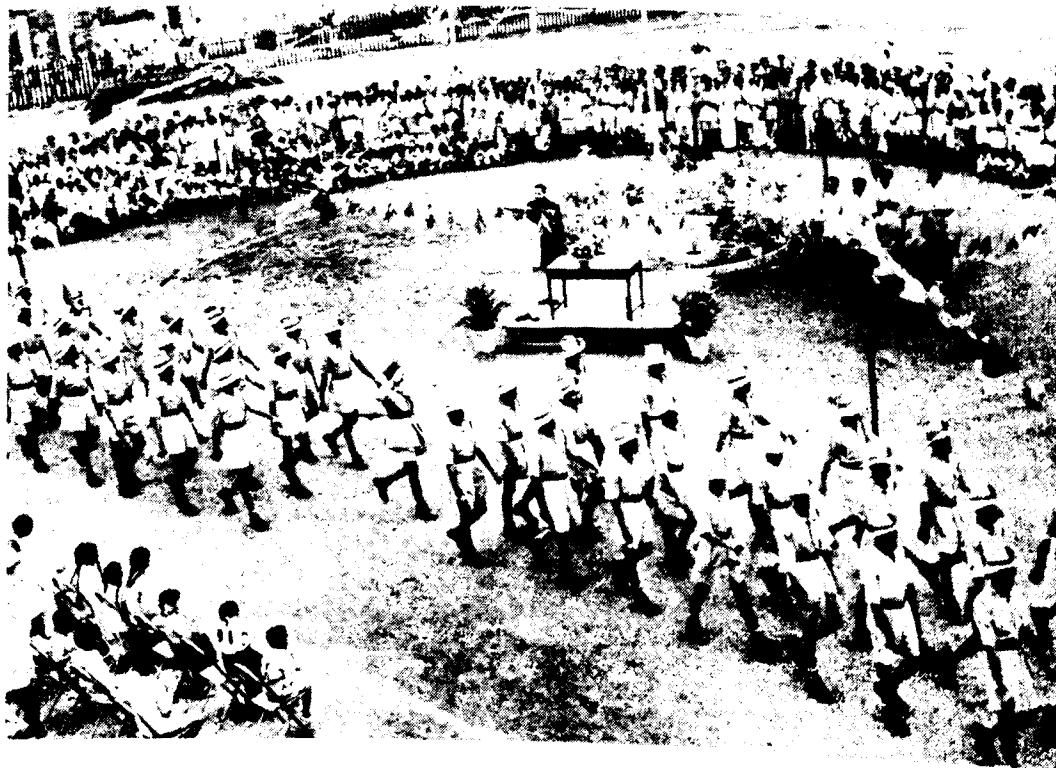
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October 1956



Shri M. S. Murthy, DS/BZA, taking the salute during the March Past by the Rly. Protection Force

"SOUTHRAILNEWS" UNESCO NUMBER

The 9th General Conference of Unesco is to be held in New Delhi this year. This is the first time that a General Conference of an important body of the United Nations is being held in India. It will also mark the 10th anniversary of Unesco. The Conference will open on November 5 and will continue for about a month. Over 700 delegates from 75 Member States of Unesco are expected to attend the Conference.

To mark this occasion the November issue of the 'Southrailnews' will be brought out on the 5th November 1956, the opening day of the Conference. Important aspects of Unesco work and a few articles on educational, scientific and cultural subjects with particular reference to India will be published in this Number.

October 1956

S. R. NEWS

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the tasks that lay ahead of them during the Second Five-Year Plan and that they would certainly render a good account of themselves in discharging the heavy responsibilities that devolved upon them. He thanked the members of the public for responding to the invitation and turning up in such large numbers to make the function a success.

Two students of 'Bala Bharati', Vijayawada, performed a very interesting item of 'Community Dance'. Two disciples of 'Kaladhar Manoharan' also gave a well-appreciated dance recital.

Shri D. Satyanarayana, P.W.I., Bezwada, proposed a vote of thanks. Sweets were thereafter distributed to about 500 children and the function terminated with the singing of JANA GANA MANA.

GOLDEN ROCK

Celebration of Independence Day on the 15th August 1956 was conducted at the Reading Room of the Southern Railway Institute, Golden Rock, after cutting the ribbon by Shri M. M. Parthasarathy, Works Manager and President of the Institute thus declaring open the Reading Room which was under repairs.

It was followed by a Musical entertainment by Srimathi Pattammal Ramamurthy and party. Sweets were distributed to all. The function was largely attended by residents of the colony.

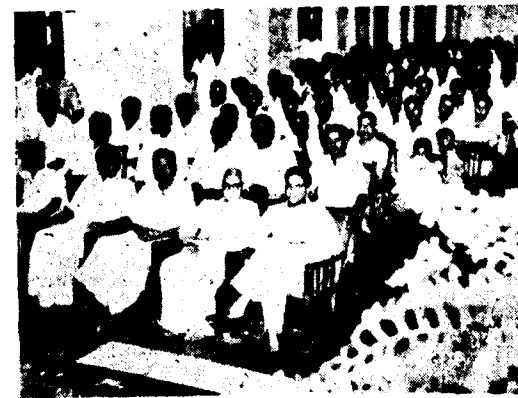
Before closing of the function the President in a short speech congratulated the party and wished them all success.

Under the auspices of the Southern Railway Institute, Golden Rock, the Bharathi Nataka Sabha organised by Railway employees put

on boards a drama 'Cholan Karikalan' on the night of Saturday the 11th August 1956. Shri M. M. Parthasarathy, Works Manager and President of the Institute, presided over the function. Shri K. Viswanathan, Mechanical Engineer, Progress and Secretary of the SRAA/TPJ-Region/Golden Rock was also present. The President after a short speech congratulating the actors, presented a cup to the Sabha before the closing of the drama which ended at 12 P.M.



The Vivekananda Scout Group, 3rd Perambur—Southern Railway Bharat Scouts and Guides



The Independence Day was celebrated at the Gopalswamy Nagar Colony at 10 A.M. on 15th August 1956. Shri B. G. Balakrishnan, S.A.O., Finance Branch, Madras and Chairman, Executive Committee, Central District, presided over the function and unfurled the National Flag with the singing of "Thayin Manikkodi Pareer" by the lady guests. Cubs gave a grand "Howl." Cubs, Scouts and all the officers of the above colony attended the function. Sarvasri B. G. Balakrishnan, P. A. Subramania Iyer, Principal, Egmore



A drama in Kannada entitled "Sathanga" was put on boards at the S. Rly. Institute, Bangalore City, on Independence Day. Photo shows the artists who took part in the drama.



Sanskrit School and A. V. Subramaniam, R.P.O./R.P.M., A. V. Krishna Rao, Secretary, Central District, spoke to the children on the occasion and gave many valuable advices. They also explained to them how they are to become very useful to citizen of the country and stressed they should keep up doing on good turns and said they are responsible in building up the country in their own way. Sweets were distributed to those present and the function came to an end with the singing of National Anthem.

The Independence Day was celebrated also at Perambur Railway Colony under the presidentship of Shri N. M. K. Swamy, Group Leader. The Cubs, Scouts, Rovers and the Group Scouters were present. After flag hoisting ceremony by Shri G. Audikesavan, Rover Scout Leader, short and inspiring talks on Independence Day were delivered by some of the members and Group Scouters.

The Scout promise was renewed on the occasion. Sweets were distributed to the children.

The function came to an end with the singing of National Anthem.

The Indian Railway Institute, Arkonam

Independence Day Celebrations were conducted at the Indian Railway Institute premises, Arkonam at 8 A.M.

Shri M. Kannan Menon, Chairman of the Institute and A.E.N./A.J.J. presided over the day's function.

A March Past was held by the Security Force of the Arkonam Unit and the Chairman reviewed the Units and also took the salute.

Welcoming the gathering, the Chairman expressed that it was his proud privilege to participate in the function and dwelt on the significance of the Day's celebrations. He exhorted the employees that it was their patriotic obligation to put forth their best in whatever capacity and field they served and add to the nation's progress, marching ahead with the times like well-disciplined soldiers.

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

Sweets were distributed to the children and later in the evening a physical culture programme was arranged for the benefit of the Members of the Institute.

SOUTHERN RAILWAY WORKSHOP SPORTS AUGUST 15, 1956

The Workshop Sports of the Southern Railway, Mysore, was held on 15th August 1956. It was presided over by Shri M. Cheluve Urs and the prizes for winners were given away by Mrs. Cheluve Urs.

11 events of sports had been conducted.

About 500 employees participated in the events. Shri Nataraja Pillai, Carr. Building, was declared as Champion in the Sports events.

The Convener of the Sports Shri T. K. Venkatachalliah, Senior Foreman of Shops, read the Report of the Function. He pointed out therein that SRAA has given liberal grants this year for conducting the sports, hence more number of events were conducted.

The function in the morning was completed after distributing sweets to children, prepared by the Workshop Canteen, free of cost and also singing of National Anthem by Railway Workshop Orchestra. In the evening a Tamil Drama titled "NANBHAN" was played by the Dramatic Association attached to the Railway Institute, Mysore South.

The Railway Workshop Orchestra also gave a performance before the commencement of the Drama.

SOUTHERN RAILWAY BHARAT SCOUTS AND GUIDES, CENTRAL DISTRICT

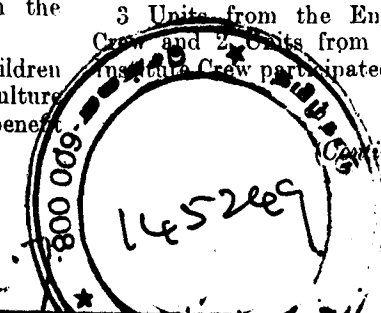
Area Rally of the Arkonam Units

An Area Rally of the Arkonam Units belonging to the Central District of the Southern Railway Bharat Scouts and Guides was held on Sunday the 26th August 1956 at 5 P.M. at the Winterpet Grounds, Arkonam.

Shri M. Ranganathan, Assistant District Commissioner (Rovers), Central District, presided over the function and also took the salute.

3 Units from the Engineering Workshop Crew and 2 Units from the Indian Railway Institute Crew participated in the Rally.

Continued on page 101



"A.D."

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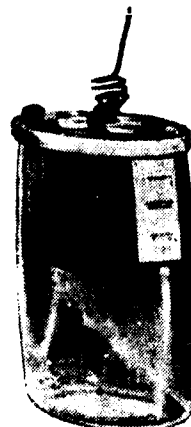
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RAILWAY PROTECTION FORCE TRAINING SCHOOL

THE Training School of the Southern Railway Protection Force was inaugurated by Shri O. V. Alagesan, Dy. Minister for Railways and Transport, at Kimber Gardens on 1st September 1956.

The opportunity was availed of by the Chief Security Officer to put the Armed Wing under training in the institution through its paces and a 'Tattoo' was arranged that night. It included mass physical training to the accompaniment of music by about 200 men, a physical display with torch lights and coloured torch lights and a Fire Rescue Demonstration. The entire programme was very much appreciated by the Railway and Police Officers, who were present and by the general public.

In a message sent on the occasion, Shri Lal Bahadur Sastri, Minister for Railways and Transport, said that "the re-organised working of what was previously known as the Watch & Ward Department is a new experiment that we are making and it has already borne fruit. If the men of the Force are properly trained, they will not only serve the Railways, but if so required, they can function in a wider field as well."

It could be said that the training imparted to the men of the Force at the Training Centre at Kimber Gardens would make them live up to the expectations of the Railway Minister.

The Training establishment caters to the needs of recruits both in the Southern Railway and the Integral Coach Factory and conducts refresher courses for all employees, who joined the Force under the old order. There are over 5,000 of such men on the Southern Railway, into whom new ideas have to be inculcated.

The decision to locate the school at Kimber Gardens was taken by the General Manager of the Southern Railway who discussed the matter with the Inspector-General, Railway Protection Force, and it did not take long to bring the school into existence with some buildings already available. The over-all building programme is almost nearing completion.

The cost of the establishment is in the region of 7.5 lakhs. It has been found necessary to keep the establishment in charge of a Gazetted Officer and proposals are on hand in that regard.

The school is also intended to train the Armed Unit of the Railway Protection Force, which has been found necessary with the taking over of the Cash Escorts and the Escort of trains in centres, which are vulnerable to attack by organised gangs.

[Pictures overleaf]

(Continued from page 99)

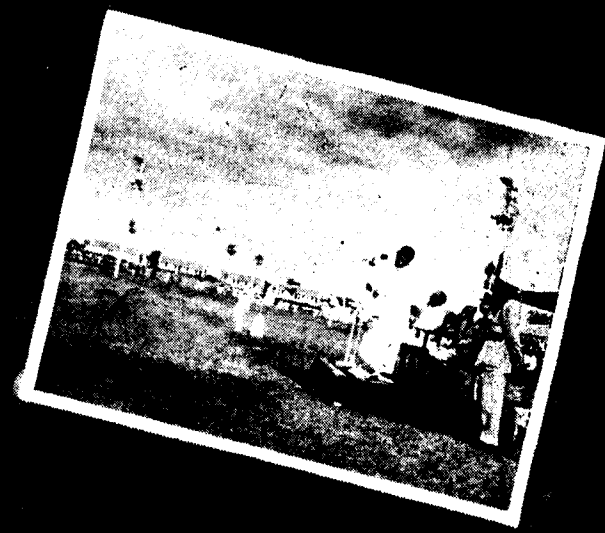
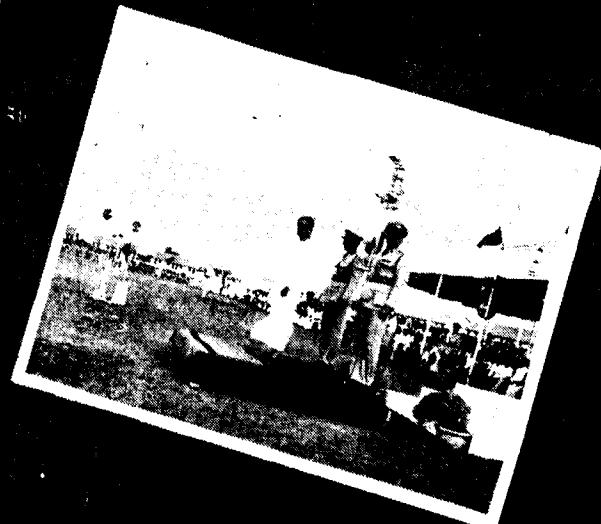
Shri P. Krishnaraju, Chairman of the Southern Railway Bharat Scouts and Guides, E. W. S. Crew, and Works Manager reviewed the Units.

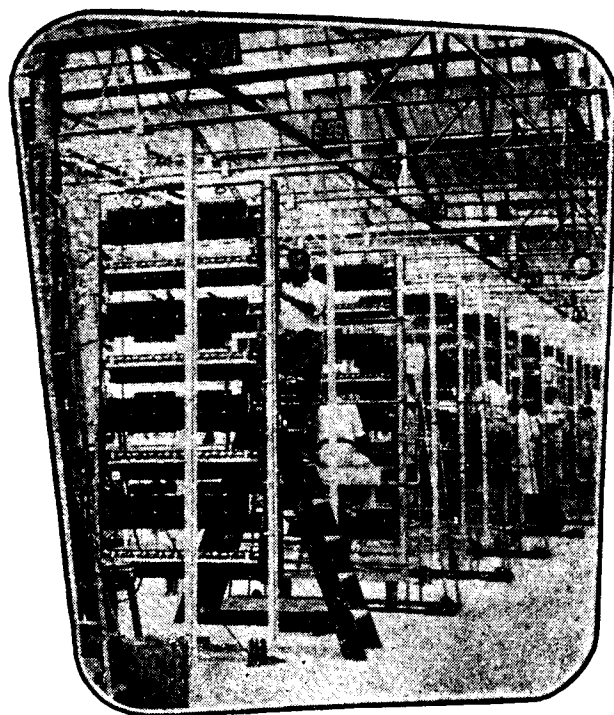
A March Past was then held and the Assistant District Commissioner took the salute.

In the course of his speech, the Assistant Dist. Commissioner dwelt at length on the life of Lord Baden Powell and explained the values of scouting.

Welcoming the A.D.C., the Chairman said that it was a privilege for him to be able to participate in the day's rally. The annual report of the E.W.S. Crew and the I.R.I./Crew was presented by Shri B. K. Srinivasa Rao, Group Leader and A.G.F. and Shri M. Narasimhan, R.S.L. respectively. Fancy dress and other activities by scouts, formed an interesting feature of the Area Rally.

With a vote of thanks by Shri M. Narasimhan the Rally came to a close.





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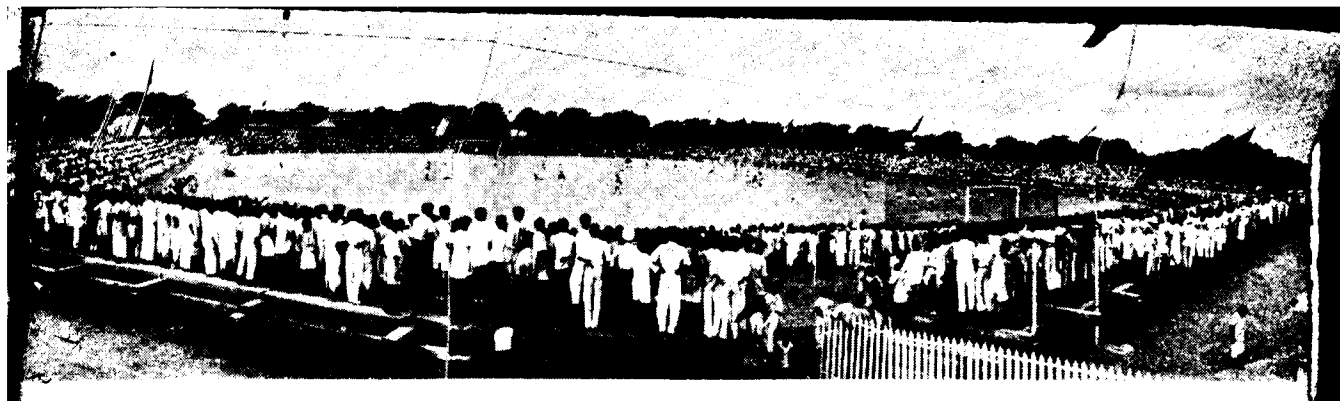
INTERCOMMUNICATION SETS

TRANSMISSION EQUIPMENT

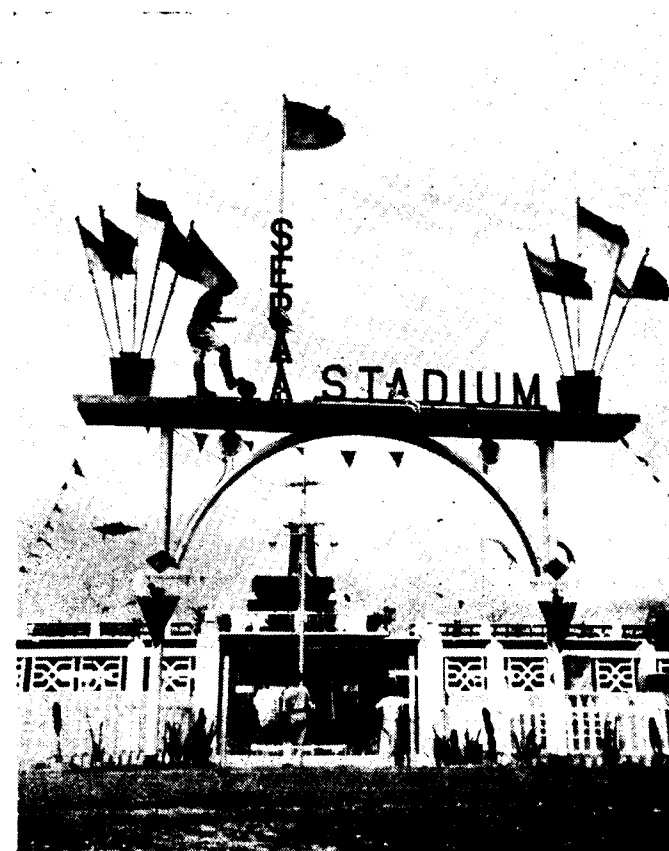
TRAIN CONTROL EQUIPMENT

CONTACT:

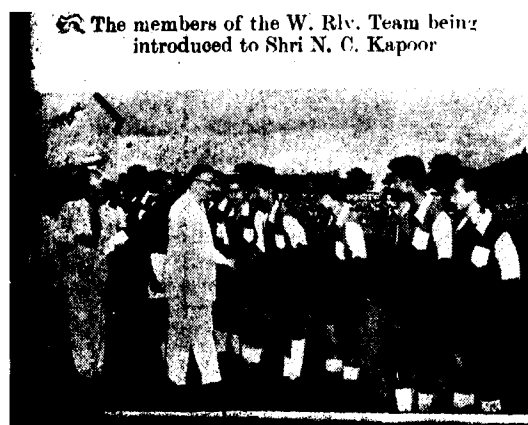
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BRANCHES AT CALCUTTA - BOMBAY - NEW DELHI & MADRAS



The Inter Railway Football Tournament was held at Kharagpur in the SERAA Stadium. The Finals was played between Central and Western Railways on 18th August. W. Rly. won (4 goals to nil). Picture above shows a panoramic view of the football ground



Entrance to the Stadium



The members of the W. Rly. Team being introduced to Shri N. C. Kapoor

Shri N. C. Kapoor, G.M., S.E. Rly., addressing the gathering before distributing the prizes



SOUTHERN RAILWAY

TENDER NOTICE

KALGHATGI OUT-AGENCY

Tenders on the forms prescribed by Southern Railway are invited for Working an Out-Agency at Kalghatgi with Hubli R.S. as the rail-head.

The Out-Agency will be open for dealing with goods and parcels traffic, both Inwards and Outwards, as notified from time to time by the Railway Administration.

Tender forms, which are not transferable, should be obtained from the Office of the Chief Commercial Superintendent, Southern Railway, Park Town, Madras-3, on or before 5-10-1956 (up to 3 P.M.) on payment of Rs. 10 per set, which is not refundable under any circumstances.

Tenders should be accompanied by cash receipt for a deposit of Rs. 1,000 with the Railway towards tender deposit obtained from either the Chief Cashier, Southern Railway, Madras or from the Reserve Bank of India or from any of the branches of the State Bank of India. The tender deposit in cash will be received by this Railway's Chief Cashier at Madras up to 3 P.M. on 15-10-1956. In case the deposit is made in the Reserve Bank of India or in any of the branches of the State Bank of India the receipt granted therefor should be sent to the Chief Cashier so as to reach him not later than 15-10-1956. An Income-tax Clearance Certificate in the form attached to the tender form should also accompany the tender.

Tenders should be submitted in sealed covers superscribed "Tender for Kalghatgi Out-Agency." The last date for receipt of tenders in the Office of the Chief Commercial Superintendent, Madras, is 22-10-1956 (up to 3 P.M.). Tenders received late or tender forms not completely filled in or tenders not submitted in the prescribed form supplied by Southern Railway or tenders unaccompanied by the receipt for tender deposit and the Income-tax Clearance Certificate are liable to be rejected.

Practical experience in the transport of goods by road will be considered an additional qualification.

The selection of the contractor will be made by the General Manager, Southern Railway, Madras, whose decision will be final. The General Manager reserves the right to reject any or all the tenders without assigning any reason.

Full particulars of the services and the general conditions of working will be supplied with tender forms.

MADRAS-3,

Dated 17-9-1956.

Chief Commercial Superintendent.

SOUTHERN RAILWAY

TENDER NOTICE

The Divisional Superintendent, Southern Railway, Bezwada, invites separate sealed percentage schedule tenders for each of the following works to reach him not later than 12 noon on Monday, 8th October 1956.

Serial No.	NAME OF WORK	Earnest money to be paid
1	Rajahmundry—Staff quarters Type I-28 units Raft founds ... Approximate cost Rs. 75,968	Rs. 3,798
2	Mustabada—Proposed Quarry siding ... Approximate cost Rs. 12,500	625
3	Anaparti—Rail level passenger platform ... Approximate cost Rs. 17,876	893
4	Rajahmundry—Staff quarters Type II-7 units ... Approximate cost Rs. 19,330	966

For particulars regarding sale of tender forms, remittance of earnest money, last date for remittance etc. can be had either at the Office of the Divisional Superintendent (Works), Bezwada, or at the Offices of the Assistant Engineers, Southern Railway, at Bitragunta, Guntur, Bezwada (South) Bezwada (North) and Godavari.

SOUTHERN RAILWAY

TENDER NOTICE

The Divisional Superintendent, Southern Railway, Madura, invites separate SEALED TENDERS for each of the following works to reach him NOT LATER THAN 12 noon on 15-10-1956 :—

Serial No.	NAME OF WORK	Total approximate value of the contract	Earnest money to be paid
1	Collection of hard blue granite ballast 1-1/2" ring and training out same at mile Q. 301/6 to Q. 305/9 between Samayanallur and Madura Junction	Rs. 31,000	Rs. 1,550
2	Proposed extension of Third Class Waiting Hall at Manaparai	12,000	600

2. Tenders should be submitted in the prescribed forms obtainable from the Office of the Divisional Superintendent (Works Branch), Southern Railway, Madura, on production of a receipt for the sum of Rs. 10 (Rupees Ten only) for each tender paid to the Divisional Accounts Officer, Southern Railway (Madura) at Trichinopoly or to any Station Master of the Southern Railway towards the cost of each form. In no circumstances will the cost of the tender form be refunded. The tender form is not transferable.

3. The tenders submitted should be clearly addressed to the Divisional Superintendent (Works Branch), Southern Railway, Madura.

4. Tender forms will be issued up to 15-00 hours on 12-10-1956.

5. Earnest money as above should be paid to the Divisional Accounts Officer (Madura) at Trichinopoly or Madura NOT LATER THAN 11-30 hours on 11-10-1956 and the receipt submitted along with the tender. No Cheque or Demand Draft, etc., should be attached to the tender.

6. Tenderers are required to submit INCOME-TAX CLEARANCE CERTIFICATE.

7. The tenders will be opened at 14-00 hours on 15-10-1956 at the Office of the Divisional Superintendent (Works Branch), Southern Railway, Madura.

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

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.

SOUTHERN RAILWAY

NOTICE

Tender No. S. 236/1/EB1/421/PWP/1

Sealed tenders are invited for the supply of 420 Nos. of Draw books for Carriage and Wagon in Class II Steel to Southern Railway Drawing No. CW/Std/149 and to IRS Specn. M. 3 and will be received in the Office of the Controller of Stores, Southern Railway, Ayanavaram, Madras-23 before 15 hours on 23rd October 1956 and opened at 15 hours on 24th October 1956.

2. Tenders should be submitted only in the prescribed form available from the undersigned on payment of Rs. 5 per copy in cash or by M. O. with full name and address of the remitter. Remittance by any other means will not be accepted. Tender forms are not transferable.

Tender forms will not be issued after 12 hours on 19th October 1956.

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

GUARANTEED QUICK TRANSIT OF GOODS

With effect from 1st October 1956, the special scheme for Guaranteed Quick Transit of Goods, both in wagon loads and 'smalls' will be extended to the following routes between the pairs of points mentioned :

BROAD GAUGE	Station From	Station To	Transit Time No. of days
SALT COTTAURS—BANGALORE CITY SERVICE	Salt Cottaurs ..	Bangalore City ..	4
	Bangalore City ..	Salt Cottaurs ..	
	Salt Cottaurs ..	Katpadi ..	3
	Katpadi ..	Salt Cottaurs ..	
	Salt Cottaurs ..	Ambur ..	3
	Ambur ..	Salt Cottaurs ..	
	Katpadi ..	Bangalore City ..	3
	Bangalore City ..	Katpadi ..	
	Ambur ..	Bangalore City ..	3
	Bangalore City ..	Ambur ..	
SALT COTTAURS—COCHIN HARBOUR TERMINUS SERVICE.	Salt Cottaurs ..	Cochin Harbour Terminus ..	5
	Cochin Harbour Terminus ..	Salt Cottaurs ..	
	Salt Cottaurs ..	Calicut ..	5
	Calicut ..	Salt Cottaurs ..	
	Salt Cottaurs ..	Coimbatore ..	5
	Coimbatore ..	Salt Cottaurs ..	
	Salt Cottaurs ..	Salem ..	4
	Salem ..	Salt Cottaurs ..	
	Salem ..	Cochin Harbour Terminus ..	4
	Cochin Harbour Terminus ..	Salem ..	
	Salem ..	Calicut ..	4
	Calicut ..	Salem ..	
	Salem ..	Coimbatore ..	4
	Coimbatore ..	Salem ..	

October 1956

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METRE GAUGE	Station From	Station To	Transit Time No. of days
BANGALORE CITY—POONA SERVICE	Bangalore City ..	Poona ..	6
	Poona ..	Bangalore City ..	
	Bangalore City ..	Belgaum ..	4
	Belgaum ..	Bangalore City ..	
	Bangalore City ..	Hubli ..	4
	Hubli ..	Bangalore City ..	
	Bangalore City ..	Davangere ..	3
	Davangere ..	Bangalore City ..	
	Davangere ..	Poona ..	5
	Poona ..	Davangere ..	
BANGALORE CITY—POONA SERVICE	Davangere ..	Belgaum ..	4
	Belgaum ..	Davangere ..	
	Davangere ..	Hubli ..	4
	Hubli ..	Davangere ..	
	Hubli ..	Poona ..	5
	Poona ..	Hubli ..	
	Hubli ..	Belgaum ..	3
	Belgaum ..	Hubli ..	
	Kolhapur ..	Poona ..	4
	Poona ..	Kolhapur ..	
	Belgaum ..	Poona ..	4
	Poona ..	Belgaum ..	

2. The idea underlying this scheme is to make consignments available for delivery at the destination station within a target time.

3. An extra fee of 6 pies per Rupee on the 'total-freight', subject to a minimum of 4 Annas per consignment, will be levied in respect of every consignment which is booked under this scheme.

4. If the specified transit time is exceeded, the extra fee for quick transit will be refunded.

5. The fact that the booking will be under this scheme, will not bestow any special priority for the allotment of wagons or for the booking in "Smalls."

6. The following days have been nominated for booking under this scheme :

October 1956

SALT COTTAURS BANGALORE CITY SERVICE

Salt Cottaurs ..	Bangalore City ..	Mondays and Thursdays.
" ..	Katpadi ..	" ..
" ..	Ambur ..	" ..
Katpadi ..	Bangalore City ..	Tuesdays and Fridays.
Ambur ..	" ..	" ..
Bangalore City ..	Salt Cottaurs ..	Tuesdays and Saturdays.
" ..	Katpadi ..	" ..
" ..	Ambur ..	" ..
Katpadi ..	Salt Cottaurs ..	" ..
Ambur ..	" ..	" ..

SALT COTTAURS COCHIN HARBOUR TERMINUS SERVICE

Salt Cottaurs ..	Cochin Harbour Terminus ..	Mondays and Thursdays.
" ..	Calicut ..	" ..
" ..	Coimbatore ..	" ..
" ..	Salem ..	" ..
Salem ..	Cochin Harbour Terminus ..	Tuesdays and Fridays.
" ..	Calicut ..	" ..
" ..	Coimbatore ..	" ..
Cochin Harbour Terminus ..	Salt Cottaurs ..	Mondays and Thursdays.
" ..	Salem ..	" ..
Calicut ..	Salt Cottaurs ..	" ..
Coimbatore ..	" ..	" ..
Calicut ..	Salem ..	Tuesdays and Fridays.
Coimbatore ..	" ..	Mondays and Thursdays.
Salem ..	Salt Cottaurs ..	Tuesdays and Fridays.
		Wednesdays and Saturdays.

BANGALORE CITY-POONA SERVICE

Bangalore City ..	Poona ..	Tuesdays and Saturdays.
" ..	Belgaum ..	" ..
" ..	Hubli ..	" ..
" ..	Davangere ..	" ..

October 1956

Davangere ..	Poona ..	Wednesdays and Sundays.
" ..	Belgaum ..	" ..
" ..	Hubli ..	" ..
Hubli ..	Poona ..	" ..
" ..	Belgaum ..	" ..
Kolhapur ..	Poona ..	Mondays and Thursdays.
Belgaum ..	" ..	" ..
Poona ..	Bangalore City ..	Mondays and Fridays.
" ..	Davangere ..	" ..
" ..	Hubli ..	" ..
" ..	Belgaum ..	" ..
" ..	Kolhapur ..	" ..
Belgaum ..	Bangalore City ..	Wednesdays and Sundays.
" ..	Davangere ..	" ..
" ..	Hubli ..	" ..
Hubli ..	Bangalore City ..	Thursdays and Mondays.
" ..	Davangere ..	" ..
Davangere ..	Bangalore City ..	" ..

Details may be obtained from the Goods Agent, Salt Cottaurs, and the Station Masters/ Katpadi, Ambur, Bangalore City, Salem Junction, Coimbatore, Calicut, Cochin Harbour Terminus, Davangere, Hubli, Belgaum, Kolhapur, Poona and the General Manager (Commercial), Southern Railway, Park Town, Madras-3.

Chief Commercial Superintendent.

145249.

SOUTHERN RAILWAY

TENDER NOTICE

TENDERS FOR FABRICATION AND SUPPLY OF STEEL-WORK FOR PROPOSED 50-TON CRANE GIRDERS AND 4-TON JIB CRANE GIRDERS IN LOCO WORKS, PERAMBUR.

The Chief Engineer, Southern Railway, Madras-3, invites Sealed Tenders for the above to reach him not later than 12-00 hours on Friday, the 26th October, 1956.

2. Tenders should be in prescribed forms obtainable from the Chief Engineer, on production of a receipt for the amount of Rs. 27 (Rupees Twenty-seven only) towards the cost of the form with relevant drawings, paid to the Chief Cashier, Southern Railway, Park Town, Madras-3, and in no circumstances will this amount be refunded.

3. Tender forms will not be issued after 12-00 hours on Saturday, the 20th October, 1956.

4. Earnest money of Rs. 10,825 (Rupees Ten Thousand Six Hundred and Twenty-five only) is to be paid in advance to the Chief Cashier, Southern Railway, Madras-3, not later than 12-00 hours on Monday, the 22nd October, 1956 and the receipt issued therefor should be attached to the tender. *No demand draft or cheque should be attached to the tender.*

5. The earnest money has been fixed at 5% of the value of Contractor's portion as per estimate and the Security deposit will be 10% of the value of the accepted tender.

6. Only such of the firms who are on the approved list of the Directorate-General, Supplies and Disposals, New Delhi, and having necessary equipment and personnel to fabricate heavy plate girders to conform to IRS Specification B. 3-49 need submit their tenders.

7. The Railway will issue quota certificates for controlled sections to the successful tenderer who will have to make his own arrangements for decontrolled sections.

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

9. Tenders will be opened by the Chief Engineer, or by his representative at 12-00 hours on Saturday, 27th October, 56.

10. The Chief Engineer reserves to himself the right to reject any or all the tenders without assigning any reason therefor.

M. G. SHAHANI & CO. (Bombay) PRIVATE, LTD.

62 MALAYAPERUMAL STREET
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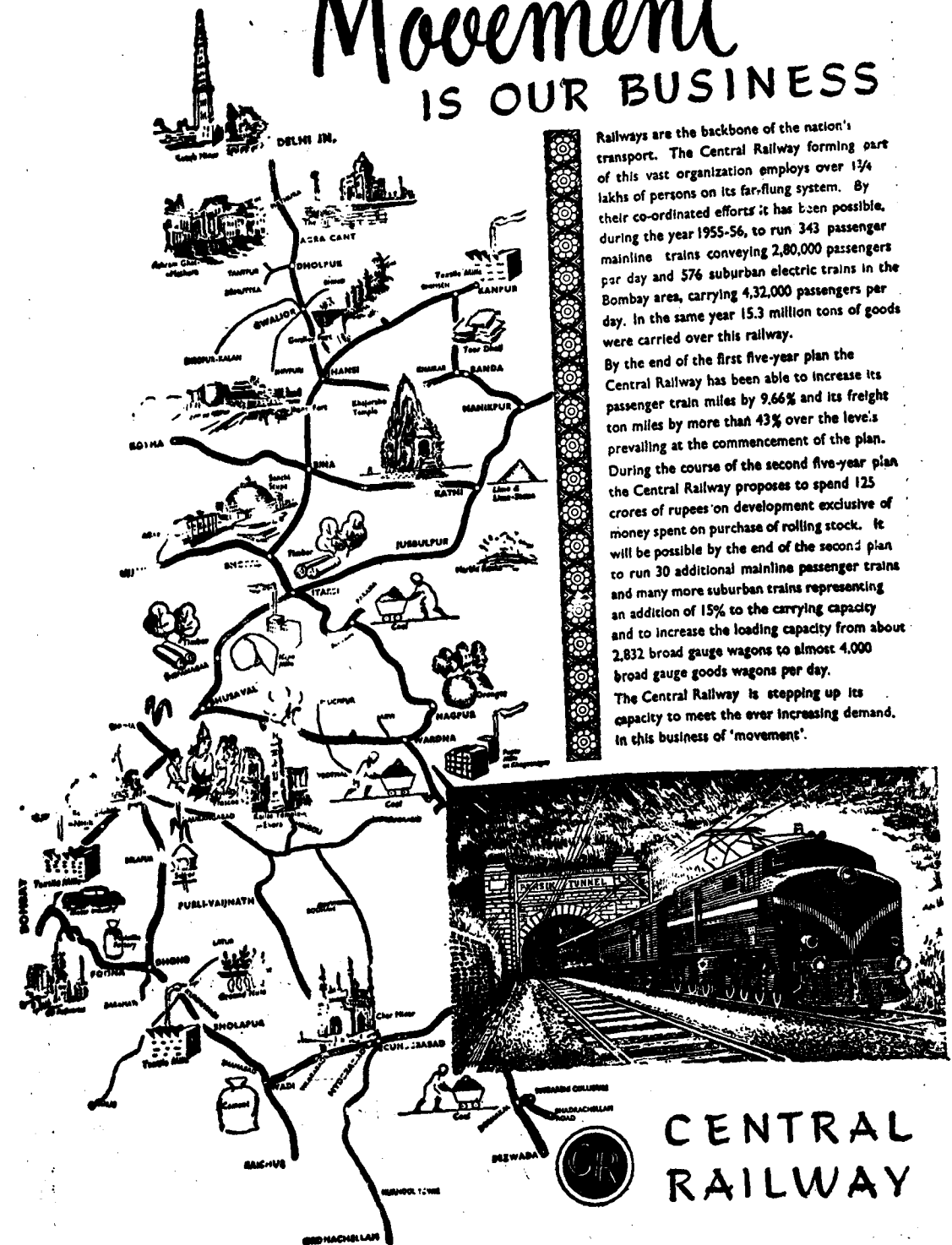
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Tampax, Goya, Mitcham Lavener, 4711 Cologne and toilet goods, Channel Perfumes, Inecto Hair Dye, Utex Sanitary Towels, Fine Tooth Brushes, Culamak Shaving Brushes, Also Stay fast Gents and Ladies Hair Brushes and Sodium Benzoate Naarden for Chemists.

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C. P. G. NAIR, Manager.

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Railways are the backbone of the nation's transport. The Central Railway forming part of this vast organization employs over 1 1/4 lakhs of persons on its far-flung system. By their co-ordinated efforts it has been possible, during the year 1955-56, to run 343 passenger mainline trains conveying 2,80,000 passengers per day and 576 suburban electric trains in the Bombay area, carrying 4,32,000 passengers per day. In the same year 15.3 million tons of goods were carried over this railway.

By the end of the first five-year plan the Central Railway has been able to increase its passenger train miles by 9.66% and its freight ton miles by more than 43% over the levels prevailing at the commencement of the plan. During the course of the second five-year plan the Central Railway proposes to spend 125 crores of rupees on development exclusive of money spent on purchase of rolling stock. It will be possible by the end of the second plan to run 30 additional mainline passenger trains and many more suburban trains representing an addition of 15% to the carrying capacity and to increase the loading capacity from about 2,832 broad gauge wagons to almost 4,000 broad gauge goods wagons per day.

The Central Railway is stepping up its capacity to meet the ever increasing demand. In this business of 'movement'.

CENTRAL
RAILWAY

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The largest circulated Tamil Daily
Published simultaneously from Madras and Madurai

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The largest circulated Telugu Daily from Madras

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Illustrated Tamil Weekly from Madras

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EXPRESS NEWSPAPERS PRIVATE LTD.

MOUNT ROAD

MADRAS 2

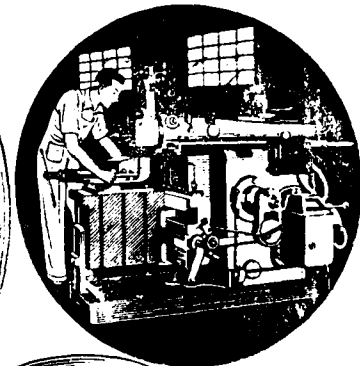
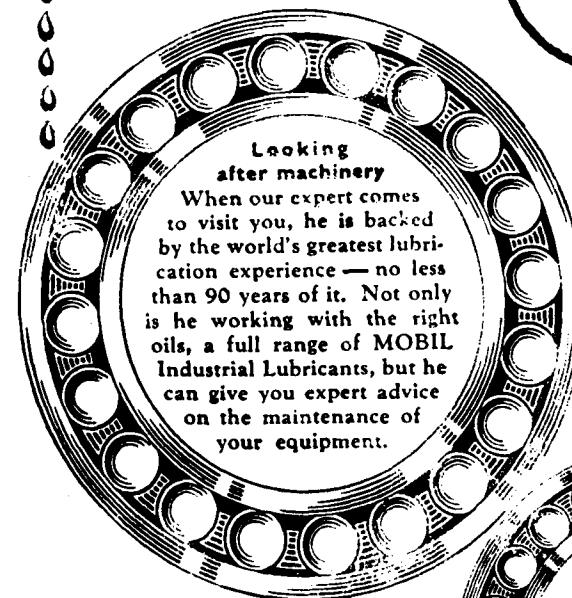
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SOUTHERN RAILWAY

CONCESSION RETURN TICKETS

DURING

DUSSEHRA, DEWALI AND CHRISTMAS HOLIDAYS

CONCESSION RETURN TICKETS will be issued during the ensuing Dussehra, Dewali and Christmas holidays for I, II and III Classes. These Return Tickets will be issued both in Local and Through booking on this Railway with other Indian Railways between stations 150 miles and over apart.

In the case of stations situated short of the specified distance, when two Single Journey Fares are more than the Return Fare for 150 miles, Return Tickets will be issued charging the fare as for 150 miles.

Basis of fare : 1 $\frac{3}{4}$ Single Journey Fares

(Mail/Express or combined Mail/Express-cum-ordinary or Ordinary fares being chargeable as the passenger elects to travel.)

HALF fares for children over 3 and under 12 years of age.

Period of Issue :

For Dussehra holidays	From 1-10-56 to 14-10-56
For Dewali holidays	30-10-56 „ 4-11-56
For Christmas holidays	15-12-56 „ 5-1-57

Period of availability : Available for completion of Return Journey within **15 days** from and including the date of issue or the date of availability for commencement of the outward journey, in the case of tickets issued in advance.

Break of Journey : No break of journey will be permitted on the return journey, but break of journey will be allowed on the Outward Journey as per normal rules for holders of single journey tickets.

RETURN JOURNEY : Passengers must present the return halves of their return tickets at the booking office at the station of commencement of their return journey and have their tickets dated indicating the date of commencement of the return journey. Passengers holding return halves without being so dated will be treated as having travelled without tickets.

Advance Booking and Reservation on these return tickets is permissible in the same way as for ordinary Single Journey Tickets.

For further particulars, enquire at stations.

MADRAS }
19-9-1956 }

Chief Commercial Superintendent