



SOUTH RAIL NEWS

VII

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(Published by the Southern Railway)

VOL. VII

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No. 12

K. SRINIVASAN, Editor

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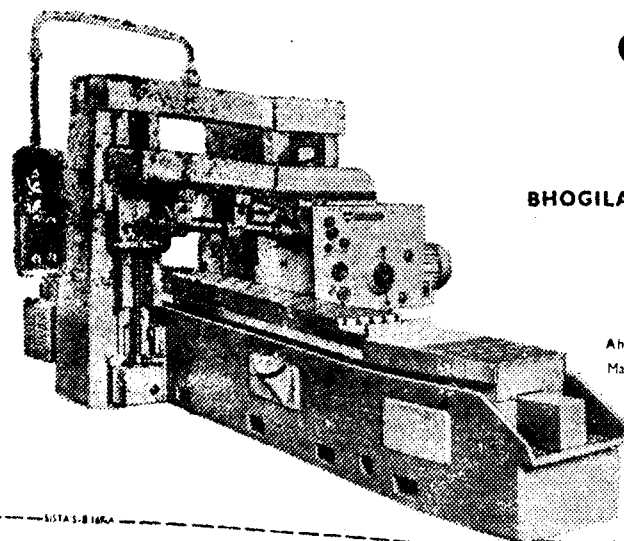
THE EDITOR

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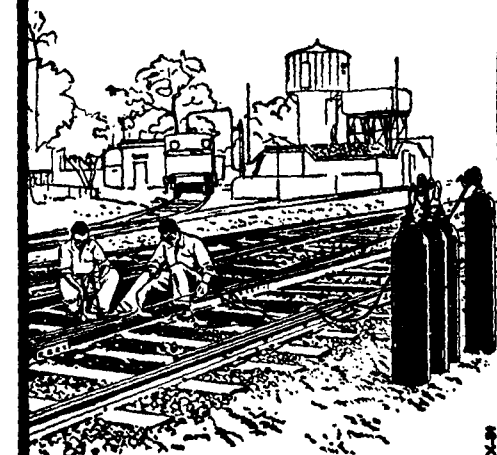


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(Published by the Southern Railway)

VOL. VII

MARCH 1961

No. 12

REVIEW OF RAILWAYS ACHIEVEMENTS

SUSTAINED efforts have been made in the last few years to make travel increasingly comfortable, keeping in view particularly the needs of Third Class passengers. The allocation of Rs. 15 crores provided for the Railway Users' amenities in the Second Plan is expected to be fully utilised. The problem of overcrowding is being tackled resolutely within the available resources. The Railway Administrations have spared no efforts in the matter of augmenting passenger transport capacity, by keeping older coaches in service with intensive repairs, strengthening passenger trains and introducing new passenger trains to the extent possible.

The facility of providing three-tier sleeper coaches with equal number of berths and seats in the Third Class, has been extended to the metre gauge on trains having runs of over 450 kilometres.

In pursuance of the accepted policy of electrifying as many stations as possible, where power is available at

reasonable rates or is likely to be available, 779 stations were electrified in the first four years of the Second Plan as a whole. About 380 more stations are expected to be electrified during the current year.

Improving the quality of service provided by the Railways has been receiving continued attention. More out-agencies and city booking agencies have been opened, street collection and delivery services have been introduced in bigger towns and cities, quick transit and express goods services have been expanded and reduction made in the minimum weight for charge in the case of certain commodities. All these measures have been generally well received by the Trading community.

OVERALL OPERATING CUM EFFICIENCY INDEX :

A comparison is made below of operating performance in 1959-60 with that in 1950-51 and 1955-56, the years preceding the first and the Second Plans respectively.

	Broad Gauge			Metre Gauge		
	1950-51	1955-56	1959-60	1950-51	1955-56	1959-60
Wagon miles per wagon day ..	38.7	46.3	47.6	31.2	28.5	30.3
Net ton miles per wagon day ..	434	541	593	186	203	230
Punctuality of passenger trains ..	79.79	77.99	84.73	71.43	75.14	81.95



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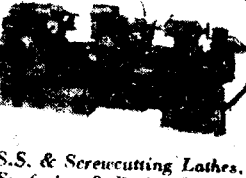
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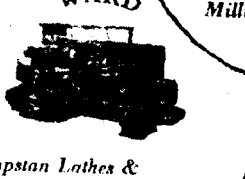
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Wagon miles per wagon day on broad gauge rose from 45.6 miles in 1958-59 to 47.6 miles in 1959-60. The net ton miles per wagon day on B.G. during 1959-60 was 593, against 573 of the previous year. On the M.G. also, there has been an improvement in both these indices; wagon miles per wagon day increased from 28.8 in 1958-59 to 30.3 in 1959-60, while net ton miles per wagon day increased from 211 in 1958-59 to 230 during 1959-60.

The overall average speeds of goods trains improved from 9.42 on broad gauge and 8.07 on metre gauge in 1958-59, to 10 to 8.49, respectively in 1959-60. This represents an improvement of 6.16 per cent on broad gauge and 5.20 per cent on the metre gauge.

All this has been possible through concerted and special measures—by utilising all available resources—by continued supervision of important junctions and difficult routes and by execution of line capacity works, wherever necessary, to deal with the volume of traffic offering. The Railways have made use of every wagon which can at all be kept in service after essential

reconditioning even by deferring periodic overhauls by a few months. Wagon-chasing has been intensified. Crack-specials, express goods trains, etc., have been introduced in increasing number on all the Railways. In the matter of operational efficiency and utilisation of rolling stock generally the Indian Railways compare favourably with the major Railway systems of the world.

Besides, the World Bank loan of \$ 50 million (Rs. 23.81 crores) has been fully utilised within the period of loan. The other loans amounting to \$ 40 million (Rs. 19.04 crores) and \$ 35 million (Rs. 16.66 crores) respectively or equivalent in other currencies from the United States of America Development Loan Fund were also availed of during the year. In addition, spares for Diesel rail cars worth (A) \$ 23,821 (Rs. 2.54 lakhs) from Australia and wooden sleepers valued at Canadian \$ 3.9 million (Rs. 18.57 lakhs) from Canada were received under Colombo Plan. Bearing plate bars and trough bars worth \$ 6.4 million (Rs. 304.76 lakhs) were also received under the Technical Co-operation Mission aid of U.S.A.

The Union Minister for Railways, Shri Jagjivan Ram is seen giving final touches to the Railway Budget



RAILWAY FREIGHT RATES

V. K. STHANUNATHAN

X

IN complaint No. 2 of 1952 *Engineering Supplies Company, Bombay v. Southern Railway and Central Railway*, we saw that the Madras High Court held that the Tribunal had no jurisdiction to make any declaration for a period prior to the date of the filing of the complaint but they have powers to decide what the reasonable rates should be from the date of the complaint.

Another point which arose in this case was in regard to the relief which the Intervener, the Hindustan Materials, Bombay, was entitled to. The date of the original complaint was 15th February 1952. The interveners intervened in the complaint on 18th June 1953. The question arose as to what rates should be charged as far as the bookings of the interveners were concerned. The Railways held that based on the High Court judgment, the interveners were not entitled to relief from the date of the original complaint because the High Court in the body of its judgment had said that "the rate would have effect from the date of the application with reference only to the particular complaint and that as far as others are concerned, the ordinary Tribunal would only operate from the date of the order". The Railways therefore held that so far as the interveners were concerned, they will be given at best only relief from the date of the intervention. Not satisfied with this interpretation of the High Court judgment, the *Engineering Supplies Co.* and the

Hindustan Materials filed a Miscellaneous application before the Railway Rates Tribunal requesting that the order of the Tribunal as amended by the High Court in its Writ Appeal should be transmitted to a Civil Court in Bombay for execution.

In the application, apart from the relief to be given to the interveners, the petitioners had also raised certain points about the quantum of the rates. The Tribunal, however, did not agree to the transmission of the order to a Civil Court because they held that the Railways' interpretation of the High Court judgment was substantially correct and that the intervener would get relief only from the date of intervention while the particular complainant, viz., *Engineering Supplies Co.*, would get relief from the date of the original complaint.

Not satisfied with this decision of the Tribunal, the parties again filed a further Writ Application before the Madras High Court. This was heard as Writ Petition Nos. 503 and 504 of 1955. In the Writ Application, apart from the date from which the special rate should be quoted by the Railways, the parties had also requested for certain reliefs with regard to the quantum of these station-to-station rates. While the High Court did not accept the contention of the petitioners with regard to the quantum of the rates, it held that any order of the Tribunal should be made applicable to all bookings between the stations

concerned and the benefit of the rate could not be given only to one party. They accepted, however, that the original judgment did give room for the inference that a distinction was sought to be drawn between the particular complainant and other users of the Railways. The High Court's final judgment is important and is therefore quoted *in extenso*:

"It is the other question that has given us considerable difficulty in deciding. We have set out the order of the Tribunal as it would read after giving effect to the modification in the operative portion of the order of this Court in W.P. No. 961 of 1953. If that stood without modification there could be no room for the argument that it drew any distinction between the Hindustan Materials, Bombay, the present petitioners and the Engineering Supplies Co. (the original petitioners in Complaint No. 2 of 1952). In the course of the judgment of this Court, however (reported in *Southern Railway v. Railway Rates Tribunal* (1) which was delivered by the learned Chief Justice, and to which one of us was a party, there are some passages which undoubtedly drew such a distinction between the particular complainants (the Engineering Supplies Co.) and other users of the Railways. It is therefore necessary to consider the previous judgment of this Court in some detail and determine precisely the exact point decided by this Court."

After setting out the proceedings which preceded the filing of the writ petitions and the order of the Tribunal, it was there stated:

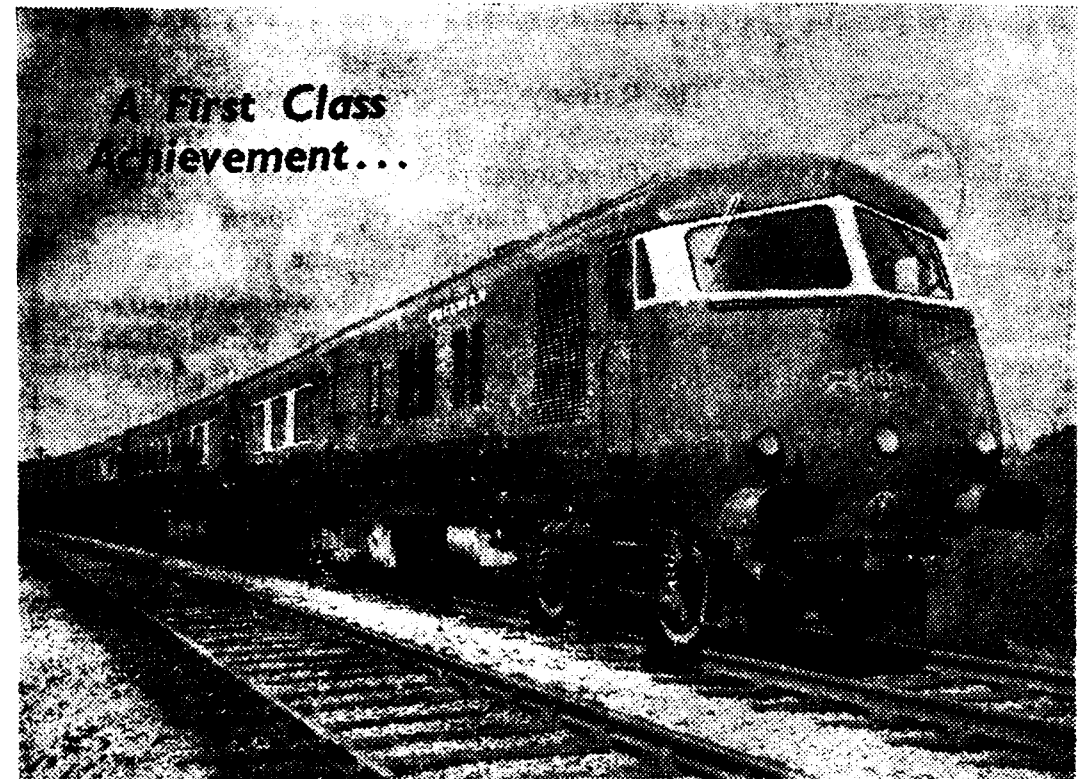
"In W.P. No. 961 of 1953 filed by the Southern Railways and the Central Railways they seek to have the said order of the Tribunal quashed in so far as they granted a declaration from January

1951 and directed the charge of rates fixed by them from a period prior to 9th October 1953, that is, the date of the order... the main contention of the learned Advocate-General is that any order of the Tribunal passed on a complaint can take effect and be operative only from the date of such order. They (the Railways) take objection to the order in so far as it refers to dates earlier than the date of the order, namely, January, 1951 and the date of the complaint, i.e., 15th February 1952. A further contention is that the Tribunal having held by a majority that they had no jurisdiction to order a refund of any excess freight which might have been collected by the railways, had no jurisdiction to make an order declaring that prior to the date of the order a certain rate should have been charged. Such a kind of declaration would, it was submitted, lead to further claims based on it. The learned Advocate-General, apart from relying on the provisions of the Act also mentioned the complications and problems which might result by a retrospective readjustment of rates if the order of the Tribunal were to take effect during and relate to a period anterior to the date of the order. We do not think it, however, proper to take these factors into consideration in deciding what, after all, is a pure question of law depending on the construction of the material provisions of the Act."

This analysis of the arguments focuses attention upon two points raised (1) as regards the declaration as to the propriety of a rate charged prior to the date of the complaint and (2) the operative portion of the Tribunal's order which directed the Railways to quote a rate from the date of the complaint, though that date was anterior to the date of the Tribunal's order. After setting out the relevant provisions of the Railway Act the Judgment proceeded:

"The question raised by the learned Advocate-General on behalf of the Railways as to the competency of the Tribunal to make any declarations or grant any relief in respect of a period anterior to their final order has to be decided entirely on the implications of the language of the material provisions of the Act."

The judgment then proceeded to point out that these provisions including the tense used in Section 41 made it clear "that though the railway administration might have contravened the provisions of Section 28 or charged or levied unreasonable rates or charges,



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The Railways are continuously extending the facilities which they give to the trading public. They are at present running collection services at a number of stations where packages are picked up from the residence or godown and arranged to be booked. Similarly, at destination the packages are delivered at the door of the consignee if the full address is given. With a combination of a collection service at the booking end and the street delivery service at the destination end, Railways are practically giving to the trading public a 'door to door' service. The trading public are requested to make use of these facilities offered by the Railways.

Names of stations where such services are provided at present on the Southern Railway are given below :—

STREET DELIVERIES

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Gadag	Mangalore	Coimbatore	Vellore
Hubli	Trichur	Dindigul	
		Kumbakonam	Madras City
		Vijayawada	

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Madras City	Trichur (Parcels only)

Issued by **SOUTHERN RAILWAY**

March 1961

RAILWAY FREIGHT RATES

11

during some period before the complaint, yet if on the date of the complaint they have ceased to do so, no complaint can be made under Section 41 (1). The question then is whether in a case in which there has been a charging of unreasonable rates from a time, long or short, before the date of the complaint and such charging has continued upto the date of the complaint, the Tribunal can grant a declaration relating to a period before the date of its order. In our opinion, this circumstance itself rather goes to show that it could not have been contemplated that the Tribunal can grant declarations of the unreasonableness of any rate in respect of periods, in any event, before the date of the filing of the complaint. . . . He (the learned Advocate-General) submitted that it cannot be said that the Railway administration has been charging rates unlawfully or without due authority. It is only when the Tribunal found a particular rate is unreasonable or that a particular rate contravenes the provisions of Section 28 that the railway administration is obliged to refrain from charging such a rate. Till then, there is no legal impediment to the charging of such rates. We see considerable force in this argument of the learned Advocate-General". The judgment continued :

"We however do not agree with him on one point namely that the order of the Tribunal can only operate in future that is from and after the date of the order. In our opinion, the order of the Tribunal can well become effective from the date of the complaint."

If the relevant portion of the judgment had stopped with this sentence the result would be (1) that the declaration contained in the first part of the order that the rates charged by the Railways from January 1951 upto the

date of the complaint were unreasonable was beyond the jurisdiction of the Tribunal and (2) that the order of the Tribunal comprised in its second part directing the Railways to quote a rate from 15th February, 1952 would have been within their jurisdiction and proper. The judgment of this Court did not stop with that sentence and proceeded to give reasons why it was being held that the Tribunal had jurisdiction to direct a rate to be quoted from the date of the complaint. That reasoning is to be found in the following passage :

"The finding of the Tribunal if it is in favour of the complainant would mean that the complainant was entitled to relief on the day on which he made the complaint. The fact that for reasons beyond the complainant's control, the Tribunal takes time to hear and decide the complaint and pass final orders thereon, should not adversely affect him. The learned Advocate-General described to us some inconvenient consequences of this view. He said that the railways may have to refund the excess over and above the rates fixed by the Tribunal. We are not now dealing with the question whether the Tribunal itself can order such a refund, or whether a refund becomes incumbent in any other manner. We fail to see how this circumstance can prevent the application of the general rule that the final order or judgment in a case should relate back to the date of the filing of the plaint or complaint."

Even this passage would not be sufficient to support an argument that this Court had expressly decided that the order of the Tribunal would have effect as and from the date of the complaint only in the case of the complainant, but that it would be effective only from the date of the order in the case of other users of the Railways. We take leave to doubt whether even the Tribunal would have the right to give any such general direction for in our opinion that would be a contravention of Section 28 of the Railways Act which prohibits undue preference or discrimination between the users of Railways, and which

forms one of the matters on which a complaint can be lodged before the Tribunal under Section 41 (1) of the Act. It is the sentences which follow the passage last extracted that have given rise to the controversy in the present proceedings. That passage runs as follows :

"In practice, we can well imagine the Tribunal making an interim order that the railways may continue to charge the rates in force, subject to an undertaking to refund to the complainant the excess, if any, which might be collected from him after the final determination by the Tribunal. All this of course would only arise with reference to the particular complainant. So far as others are concerned, the order of the Tribunal would only operate from the date of the order. This is because under Section 39 it is the duty of the Central Government or State Government to carry out any obligation imposed by any order of the Tribunal."

Possibly this passage is susceptible of more than one interpretation. So far as the present case is concerned, there was no interim order of the Tribunal of the kind envisaged in the above extract and so far as the final order of the Tribunal was concerned, it was perfectly general and applied to every user of the Railways. That final order which directed the Railways to quote the reduced station to station rates from 15th February 1952 was upheld to be within their jurisdiction by this Court in W.P. 961 of 1953. In our opinion, the sentence "So far as others are concerned, the order of the Tribunal would only operate from the date of the order" refers to a case where the operative order is so framed, though by reason of interim undertakings by Railways or directions to them the complainants are given the benefit of a reduced rate even before the date, when according to the order of the Tribunal, it comes into operation. The case now before us is far removed from this category. As we have already pointed out more

than once, the operative order of the Tribunal in so far as it directed the Railways to quote station-to-station rates from 15th February 1952 onwards, was held to be a proper order and within the jurisdiction of the Tribunal, and if this were conceded the contention that a distinction could be drawn between the particular complainant and the other users of the Railways should be held to be without substance. We are satisfied that this situation was not contemplated by the sentence we have extracted above which refers to cases where special interim orders are passed, and the present is not such a one.

Mr. Venkatasubramania Ayyar, the learned counsel for the petitioners, urged before us that as the complaint was treated as a public proceeding within rule 17 of the Railway Rates Tribunal Rules, and as every user of the Railways would be bound by the order passed by such Tribunal, it would follow that the petitioners would also be entitled to be treated as if it were a party to the proceeding from the date of the plaint or at least from the date of the order of the Tribunal treating the complaint as a public proceeding, so that it would be entitled to the benefit of the order as a constructive party to the proceedings. In view of the conclusion we have reached in favour of the petitioners on what we might term the merits of the case, we do not find it necessary to deal with this argument.

The result is that the rule issued in W.P. 503/55 is made absolute to this extent namely that the rate directed to be fixed by the Tribunal in their order dated 9th October 1953 would apply as much to the petitioners,

Hindustan Materials, Bombay and that they would have the benefit of that rate in regard to goods transported by them from 15th February 1952 onwards. In view of our order in W.P. 503 no orders are necessary in W.P. 504/55 which will be formally dismissed. There will be no order as to costs in either W.P."

The final position in regard to the powers of the Tribunal is, therefore, that it has powers to order quotation of "reasonable" rates from the date of the complaint, if considered necessary. They have, however, no powers to give any relief with regard to any period prior to the date of the complaint. The rates thus quoted by the Railways will be applicable to all parties.

One other case which is important from the point of view of powers and jurisdiction of the Tribunal is Complaint No. 4 of 1954—*The All India Reporter Ltd. v. Central, Western, Eastern, Southern, Northern and North-Eastern Railways*. Under Section 45 of the Indian Railways Act, the Tribunal has no powers in regard to the scale of charges levied by a Railway administration for the carriage of passengers and their luggage, parcels, military traffic and traffic in railway materials and stores and demurrage charges except on a reference made by the Central Government.

The All India Reporter Ltd. made a complaint before the Tribunal regarding the charges levied for the All India Reporter when booked as parcels. While general magazines, current or old, are being charged at half parcels rate, registered law-journals, law-reporters and law-magazines current or

old are charged at full parcels rate. The complainant alleged that the action of the Railway Administrations in charging full parcels rate to law-journals, law-reporters and law-magazines and half-parcels rate to non-legal magazines and journals amounted to an undue preference and offended against the provisions of Section 28 of the Indian Railways Act and also against Article 14 of the Constitution of India. They wanted that the half-parcels rate should also be made applicable to them. The Tribunal held that it had no jurisdiction to redress the grievance, if any, of the party as it had no jurisdiction to hear complaints about the case of parcels rate. Sri Lokur, President observed in his judgment :

"This Tribunal having been constituted by a statute, it can exercise only such powers as are conferred upon it by the statute. Section 34 of the Act by which this Tribunal was constituted says expressly that it is to discharge the functions specified in Chapter V, that is to say Sections 35 to 46 (c). This is a complaint against the Railway Administration and Section 41 (1) states categorically the subject matters in respect of which such complaints can be made. This complaint says specifically that it is made under Section 41 of the Railways Act read with Section 28 of the Act, i.e., under Section 41 (1) (a). The alleged contravention of Section 28 in this case is in respect of the scale of charges levied for the carriage of parcels of registered law-journals, law-reporters and law-magazines. Section 45 of the Act provides that :

"Nothing in this Chapter shall confer jurisdiction on the Tribunal in respect of scales of charges levied by a Railway administration for the

carriage of passengers and their luggage, parcels, military traffic and traffic in railway materials and stores and demurrage charges except on a reference made to the Tribunal by the Central Government."

It is urged on behalf of the complainant that what is challenged is not the scale of charges, but the discrimination between law magazines and other magazines. But assuming that the discrimination offends against Section 28, yet Section 45 takes away the jurisdiction of this Tribunal to go into any matter dealt with in Chapter V, so far as scales of charges levied by Railway administrations for the carriage of parcels are concerned, and it is not open to this Tribunal even to consider whether the alleged discrimination contravenes the provisions in Chapter V. The relief asked for is evidently in respect of scales of charges levied for the carriage of parcels; and

this Tribunal has no jurisdiction to grant it except on a reference made to it by the Central Government. The proper course for the applicant was to move the Central Government to make such reference and in the absence of such a reference the complaint must be held to be barred under Section 45 of the Act."

The Tribunal also held that it can only hear and decide cases coming specifically under the matters which it has been entitled to hear under Section 41 (1) and therefore it cannot hear and decide complaints under Article 14 of the Constitution of India. A Tribunal like the Rates Tribunal has only powers specifically conferred on it under the provisions of the Act.

(To be continued.)

The Cultural Delegation from Nepal met the Union Minister for Railways, Shri Jagjivan Ram, at New Delhi recently. The Minister is seen wearing the cap and dagger presented to him by the members of the delegation



African Safari No. 6 STANLEYVILLE, Belgian Congo

Mrs. A. R. HYDARI

HERE we are in Stanleyville, one of the principal cities of Belgian Congo. After the five hundred mile drive from Bogoro, through dark jungles that might have stood so from the beginning of time, we reach our destination at midnight.

A good rest and we wake up in the morning to find ourselves by the banks of the great River Congo. From the terrace of our daughter's villa can be seen this mighty river grey and turbulent flowing between palm-fringed shores. Fishermen have built scaffolding over the rapids that occur here, far into the river, and are busily engaged casting their nets. The sound of their humming comes to us across the water. These fisherfolk spend their entire lives in their canoes alongside the Congo. In a clearing in the jungle here nestles a village, and side by side with the pagan tribals live the Mungwana, the Congolese Muslims, who have their own mosque. As the wanderers over the landscape, Congolese women in gaily coloured "kitengès", their heads bound in bright scarves can be seen. Some are just promenading, while others have bannanas, papayas or pine-apples for sale in baskets on their heads. These fruits are all giant-sized compared to their Indian counterparts, and the Congo pine-apple particularly is juicy, sweet, tender-fleshed and heavenly to taste. Other fruits that grow in abundance are passion fruits, avocados and machunga oranges. Among articles for sale are palm olives, fruit of the oil palm which grows profusely in the Congo. This fruit when boiled gives

out a thick oil which is used as a cooking medium, and fish and chicken cooked in it are delicious.

The palm olive is one of Congo's chief articles of export, and several million francs worth of palm olives are exported to Italy and other countries, for soap making and other uses. Other exports are diamonds, copper, timber, coffee, ivory and many other products. Now with trouble following in the wake of independence, all business must be at a standstill. Stanleyville, heart of equatorial Africa is a city of contrasts. On one side is the River Congo with its Wagenia, or fisherfolk and other tribals with their quaint jewellery and fascinating ornaments; and on the other side is the modern city with storeyed buildings, boulevards, cafes, hotels, cinemas, schools and churches. Well-stocked shops with merchandise from all over the world carry on a brisk trade, and fruit and vegetables from Europe can be had from cold-storage depots. Sleek and shining automobiles are seen on the roads.

An open market selling maize, fruit, vegetables and other foodstuffs for the natives is a busy and colourful spot. Near this area are also shops dealing in draperies with bold patterns and in bright shades so dear to the feminine heart. The natives have their own colonies which are kept fairly neat and clean.

Specially worth mentioning are residential colonies where Europeans have built for themselves beautiful villas with gardens ablaze with flowers. The

best among these is a well-planned colony on highground near the Stanley Falls three miles out of the city. As the car moves along the bridge over the Tshopo, a tributary of the Congo *en route* to the falls, a breath-taking view of the city and the sweep of the great river can be seen. By the falls are a huge power station, breweries and factories. Describing the city in a nutshell, John Gunther says in his chapter on Belgian Congo in *Inside Africa*. "Nothing could be more quintessentially the heart of tropical Africa than Stanleyville, but it has the liveliness and efficiency of a miniature Antwerp."

The River Congo is navigable up to Stanleyville and steamers from Leopoldville threading their way to the

docks are a familiar sight. Cargo is transported from Stanleyville to Matadi at the mouth of the river. Ferries ply across the Congo taking passengers to the Railway terminus which is on the other side.

After six o'clock in the evening many Congolese can be seen using these ferries to go to their villages across the river.

At sundown, and throughout the night is invariably heard the distant throb of drums.

This instrument of music is used as a form of signalling by tribals, as well as for dancing. It is a common sight when passing by a native village to see animated dancing to the rhythmic sounds of drums.



WOLF 350
GENERAL DUTY DRILL
TYPE SD4c

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Switch on—and it is immediately evident that here is a tool correctly balanced for fast, high-powered drilling penetration of up to 1" capacity in steel and 1" in hard wood. Full load spindle speed of 475 r.p.m. and a net weight of only 10 lbs. make the SD4c accurate and effortless in use. Bench Stand type SS14 converts to sturdy drill press.

Wolf assures spares and prompt service

BENEFITS IN FULL

There's more to the SD4c than we've space to tell you here. If you would like more information, please write for details.

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HOW TO RUN A RAILROAD IN YOUR OWN BACKYARD

(Sealed down to fit your plot and pocket-book, but big enough to carry grownups, midget trains offer fun for the whole family.)

GIVE the children a train they can ride, and you'll share in the fun. Backyard railroading is a man-sized hobby for all the family. Once you handle the throttle of a midget engine and feel the thrust of drivers on rails, ordinary model railroading becomes a spectacular sport.

A passenger-carrying pike costs less than you may think. It can give you scope for as much or as little time and skill as you care to invest. Like its tin-plate cousins, it can grow up along with children from year to year.

You don't need a big plot. One type of tract can be laid in a circle as small as 12' across. Here's what it takes:

- * A reasonably level space, preferably at least 30' by 40'.
- * As much cash as a modest electric-train layout would cost.
- * Or a garden and hand tools.
- * One or more children so that you can claim that you're doing it for them.

You have a choice of using gas or ingenuity for many of these improvements. Gas or electric locomotives can be bought all ready to highball. Or you can buy only the parts you can't machine, and build your own engine with nothing but hand tools. If you can machine some parts from castings, the cost will be less.

Which Gauge is best?—Live-steam enthusiasts barrel along behind cinder-spitting little engines on 3½" track.

Amusement-park roads run up to 15" gauge. For home use, 7½" gauge is a good compromise; it's big enough for even grownups to ride comfortably, and the cost is reasonable. Here is what you can use to lay 7½" track.

Dural Scale Rail.—De luxe track can be made with this, spiked to wooden ties and joined with fish-plates. It's light and rustproof but comes to 25 cents a foot in 100' lots, *plus* shipping costs. Even so, you can lay 50' of track, build a car from an unmachined truck kit (which you can machine on a drill press) and still keep the expenses below Rs. 250.

Wooden Rail.—Rs. 25 (Twenty-five) will buy new lumber for about 40' of track, and second-hand wood, if available, will halve even this very modest cost.

Unpowered cars will roll nicely on wooden track, but powered wheels may tend to climb the soft edge corner. You can improve this by covering the rails with strap iron when you have a locomotive.

Other Rail.—With a small welder, you can make low-cost rail out of strap iron by welding on foot plates, spacing them like ties. Track has also been made of angle iron, pipe and conduit.

How about Rolling Stock?—You have several choices, from buying ready-made cars to building your own. You can, for instance:

- * Get a casting kit to make realistic 1½" scale car trucks. Mount these

on a plywood floor and you have a play push car that can later be converted into a caboose, box, tank or cattle car. Unfinished castings (they need only holes drilled in them) cost about Rs. 75 ready to assemble, the kit is about Rs. 100.

* Buy castings for the wheels only, and make the truck sides and bolsters out of steel plate, angle iron or hardwood.

Motive Power.—This is the most thrilling part of railroading, and you're limited only by your budget at one end or your ingenuity at the other. There's plenty of room in between.

For upwards of Rs. 950 you can buy a gas or electric engine ready to run.

A switch-engine chassis, fitted with electric drive, can be had for Rs. 700. You build the body yourself. By adding a trailer unit later, you can convert this into a super streamliner.

Machined power trucks, transmission and clutch assemblies, cast body parts, and so forth are available individually or as package deals. You can buy what you cannot make or improvise yourself.

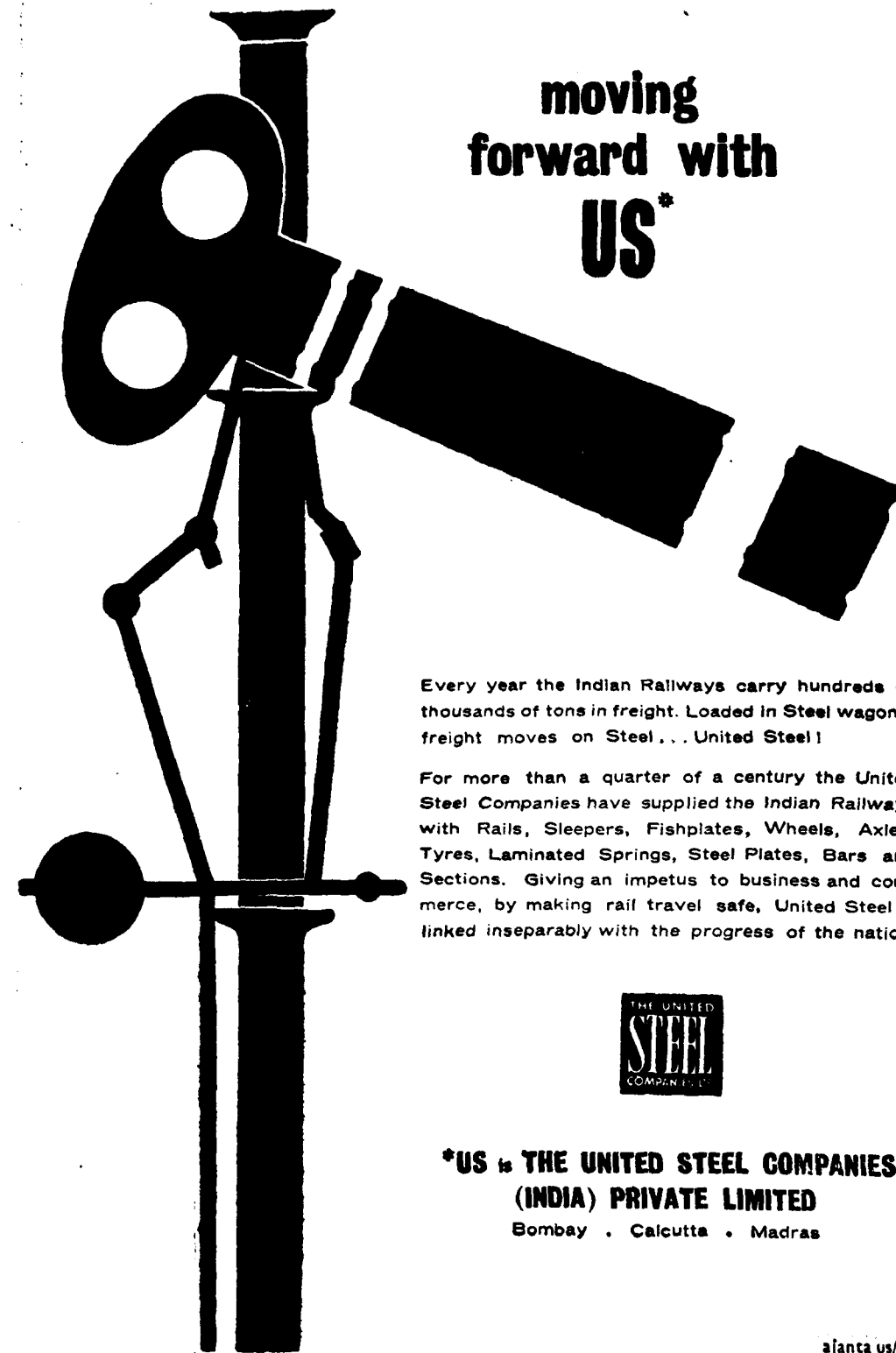
The little handcar made for strap rail could be powered with a lawn-mower engine or a battery and auto starter. If the power plant leaves no room to ride, the engineer can perch on a trailer car.

One of the car trucks described can be fitted with sprockets or pulleys for locomotive use. A centrifugal clutch or a belt-tightening arrangement, plus one or more jackshafts, will gear down a gas engine to drive it.

Battery Power.—Ford starter motors are widely used for electric drive. A battery charge gives several hours' run because the motor is cut in only at intervals, while the locomotive coasts between boosts. A home charger is, of course, a must. Electric power is popular because children can safely operate it unsupervised. Starter solenoids, controlled by a spring-toggle switch that snaps to off if not held, carry the heavy motor current.

If you go for steam locomotives, you can buy 8" driving wheels, side rods and other parts in the form of castings, but be prepared to machine them yourself. Really Y's steam-type engines have been made from food cans, sheet metal and hardboard.

Shri D. B. Patel, officiating CE took over charge as officiating SDGM with effect from 13th February 1961



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SOUTHERN RAILWAY

TENDER NOTICE

The Divisional Superintendent (Works), Southern Railway, Tiruchchirappalli, invites separate sealed tenders in connection with the following works:—

Serial No.	NAME OF WORK	Approximate cash value	Earnest money
		Rs.	Rs.
1	Improvements to watering arrangements at Tiruchchirappalli area	80,000	2,000
2	Collection and training out of stone ballast in connection with the proposed complete track renewal for 24½ miles at miles M. 230/11½ to 242/0, 242/12½ to 247/12, 257/16 to 258/0 and 268 to 276 in Tiruvarur-Karaikkudi Section.	4,84,000	12,100

Last date for the issue of Tender Forms .. 15 hours on 10-4-1961.

Last date for remittance of earnest money to the Divisional Paymaster, Tiruchchirappalli .. 12 hours on 11-4-1961.

Last date for the receipt of Tenders .. 16 hours on 12-4-1961.

Date of opening of Tenders .. 11 hours on 14-4-1961.

Tender forms (not transferable) can be obtained from the office of the Divisional Superintendent (Works), Tiruchchirappalli, on production of a receipt for Rs. 10 paid to the Divisional Paymaster, Tiruchchirappalli or to any Station Master on this Railway towards the cost of Tender form for each Tender. Further particulars can be seen in the Tender Form. No refund of Rs. 10 paid towards the cost of the Tender forms will be made under any circumstances.



BILIGIRIRANGANS

Mrs. R. LAKSHMI

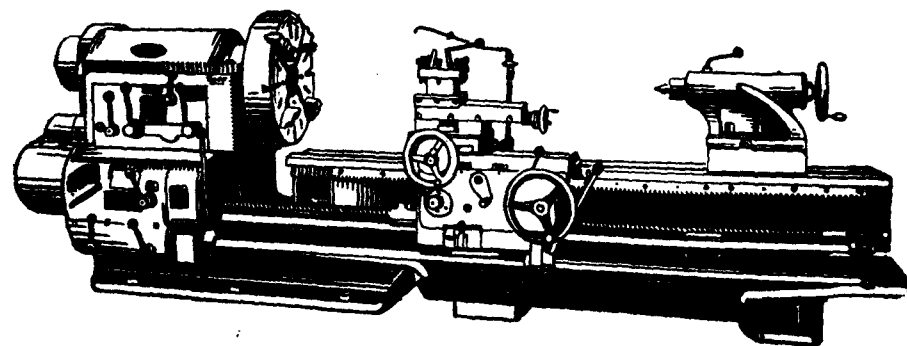
SPRAWLING like a colossal green caterpillar, forest-cald and ever-green, few hill ranges in South India are as charming and as isolated from crowded cities as the Biligirirangan range of hills, to the south-east of the state. The range, which extends in a chain of big hills for a distance of about a hundred miles, lie on the boundary that separates the Mysore State from the Coimbatore District of the Madras State.

The Biligirirangan range is thickly forested and its interior slopes are

covered with trees that have grown so dense that the forest is comparable to any in Africa or South America. Trees, huge at the trunk and gigantic in height and foliage, grow out of its ever moist soil, while creepers, writhing and twisting, join them together into a mass of confused greenery. These forests are the home of wild elephant and bison. Bears and deer are also met with in its lower slopes, while tigers, panthers and leopards are its occasional visitors from the shrub jungle in the adjoining plains. Of birds, the range has an innumerable

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March 1961

BILIGIRIRANGANS

23

variety and birds of brilliant plumage are as common in it as those that sing beautifully.

Puranic legends, quite a number of them, abound surround the hills. Its Sanskrit name is Svetadri or the White Mountain and it is by this pretty name that its legendary history has been sung in the *stala purana* (a record, compiled by the pundit of the place, describing the traditions and legends of the locality).

According to the *stala purana*, the range is celebrated as the spot chosen by Bhargava (or Parasurama) the great sage, to perform his penance of twelve million years. Bhargava performed the penance in order to atone his matricidal sin, he being forced to kill his mother according to the orders of his father who suspected her fidelity. It was in the interior of its untrodden forest that Bhargava finished his penance and was granted pardon by no less a person than God Vishnu himself. The river wherein the sage bathed during the penance is known even today as Bhargavi.

The Biligirirangan range, according to the *stala purana*, was also the place where the great demon, Bhasmasura was enticed and killed by Vishnu. Bhasmasura, a demon of wonderful prowess, was granted a boon by Shiva, who was enthralled by his ardent devotion. The boon was terrible in its power, for it granted Bhasmasura the energy to burn to ashes any being, human or divine, on whom he placed his hand.

Bhasmasura placed his hand of death over many an unfortunate person and one day, drunk with his power, came over to Mount Kailas itself to try his power over the giver of the boon, Shiva himself. Vishnu was called to the rescue and incarnating in the form of Mohini, a woman of alluring beauty, attracted Bhasmasura from Kailas to Svetadri. Unable to withstand the beauty of Mohini, Bhasmasura fell an easy prey to her. Mohini sported with him for a while and in the end began a dance which Bhasmasura willingly began to imitate. In one of the *mudras* of the dance, Mohini gently placed her hand upon



her head. The demon, forgetting the terrible power of his hand, did likewise and was burnt down to ashes immediately.

The Biligirirangan range can be conveniently reached either by a bridle path, eight miles long or a small hill road, fifteen miles long, from Yelandur, the nearest town. Yelandur is famous because it was given as *juhgir* to Purniah, the famous Brahmin minister of Tippu Sultan. This little town is set beautifully amidst fertile green fields and as it is removed from the busier cities of the state, is remarkably quiet and small.

The bridle path to the topmost point on the range—5,100 feet above sea level—is a well worn out route, for thousands of pilgrims trek along it during the annual festival of the hill range. The motorable road was made recently. Travelling on it to the top is quite a charming experience, allowing the visitor to view at leisure the glorious scenery to be found all along it and the experience often turns out to be exciting too, for wild elephants and bison move right across the road occasionally.

There is a large temple at the top dedicated to Ranganatha. The temple, except for its great sanctity and a curious legend attached to it, presents no other points of interest, either architectural or sculptural.

The legend of the temple concerns its god, Ranganatha and a girl of the

Soligas, an aboriginal tribe living on the hills. It seems that the god, in one of his wanderings in the forest of the Biligirirangan Hills, fell in love with a Soliga girl of the place, a maiden of bewitching beauty. The god wooed her and married her on the spot in the Gandharva style. When the Soliga tribe knew of this, they considered it an outrage for no Soliga maiden was allowed to marry out of her tribe. The elders of the tribe gathered together and would have put the couple to death and where preparing for it, when the Soliga bride came to know that her groom was none other than God Ranganatha himself. She pacified her tribe and entreated her divine husband to live with her and her tribe in her hut alone. From that day onwards, Ranganatha and his Soliga wife have been the "eternal dwellers of the happy forestland".

In the temple, the two images that are worshipped are of Ranganatha and his Soliga wife. To the Soligas, the god of the temple is simply *bhava*, which means a brother-in-law.

Excepting for a couple of forest-bungalows, a tiny village around the temple, there is undisturbed peace in the Biligirirangan range. The Soligas live in their tiny hamlets called *podu*—each *podu* being a collection of half a dozen huts and housing a couple of related families under one old headman. The Soligas are one of the few tribes of South India who yet retain their tribal characteristics.



THE LITTLE MOSQUITO

YOU are tucked up in bed and just dozing off into a sound sleep when there is a faint humming noise. Suddenly, you feel something tickling the skin of your cheek. Smack! What have you done? Tried to squash a little mosquito who is bent on annoying you and refusing to let you sleep. Most of us take the mosquito to be a nuisance as it buzzes around us at night and so keeping us from sound sleep, and quite often alighting on cheek or forehead and having a good feed on our blood. Quite often, after such a feed, the mosquito leaves a germ and we get malaria. But what do we know about this little rascal of an insect? Let us learn something about his ways and habits.

First, we ask the question; why do mosquitoes sting us? It is only the female mosquito who does the stinging. The male is not made by nature to sting. It seems that the female mosquito needs an occasional drink of human or animal blood to keep her in good health, just as we humans need such things as vitamins and tonics. But luckily for us humans and animals, blood is not the only food for female mosquitoes. As a matter of fact, her main type of food is plant nectar.

How do these tiny insects find their way to human or animal feeding-grounds? Like some other insects they are given by nature a combined

sense of smell and a radar-like sense of feeling, with which they beam themselves in on to the heat waves and smells given off by human and animal bodies. The nose of these insects is in their long feelers known as antennae, but some also have a sense of smell in their legs.

A mosquito is such a tiny little creature which you can crush with a smack of the hand, and yet that tiny speck has the means of getting a grip on tough human or animal skin and stinging it. How is this done? The female mosquito's feet are provided with tiny friction pads and hooks, which helps her get a grip on the human flesh. In her snout she has a sort of tool chest of sharp needles, probes and drilling machines. Her main instrument is a sort of drill which moves so fast and easily slips into the toughest human flesh.

We often find that a mosquito has already settled on the skin and had its fill of human blood, before we discover it is there. So we do not seem to feel the mosquito as it touches the skin. Why is this? Perhaps she may not alight on a sensitive spot. If she does, we will feel it, but as soon as she digs her sharp probe into the skin, she also gives us a sort of injection which deadens the feeling under the skin. It is like a dentist giving you an injection in the gum before taking out a tooth. You feel a slight sharp prick and then



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CEMENT HOPPER WAGON

March 1961

CHILDREN'S CORNER

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everything round the sore tooth goes dead. By doing this, the mosquito can remain on the skin for a short time until she has taken in at least three to four times her weight in blood.

Now another thing we may have noticed is that unless the mosquito has gorged herself with so much blood that she finds it difficult to fly off, it is not so simple to squash her with a smack of the hand. She always seems to be off before the smack comes. There is a very good reason for this. When we get ready to smack, and although we may not know it, there is a sort of tightening of the skin surface on which the mosquito is probing for blood, and she at once feels the nervous ripple long before the hand smacks. So as soon as she feels the ripple she flies off with our blood inside her tiny body.

When a mosquito comes near enough we seem to hear a singing sound. Actually, this sound comes from the mosquito's wings which are vibrating and beating so fast as to make what appears a singing sound to our ears.

Where do mosquitoes breed mostly? Wherever there are small pools of stagnant water, and even in barrels or other vessels which can hold still water. That is why if we do not keep our house surroundings clean, especially where water from drains may collect, we will have mosquitoes breeding by the thousands. It is in these stagnant pools that the female lays her eggs which, within a fortnight, become full-grown mosquitoes. Within a few

months the eggs laid by just one female mosquito will result in fifteen generations of mosquitoes. So if the mosquito was not destroyed in the stage of life before it could fly, we would have over thirty thousand millions of them in a few months. The best way to get rid of them is just after the eggs become larvæ, when they go and poke their tiny snouts just above the surface of a dirty pool of water where they are being born and bred. By pouring oil on the surface of the pool, a film is formed on the surface and this prevents the mosquito larvæ from breathing the air they need. So they die.

How long does a mosquito live? The life of a male is not more than eight or nine days. The female seems to be more lucky, as her span of life is about thirty days. So within that short time of life she is born, flies around for food, lays her eggs for the next generation and dies.

Mosquitoes do not seem to be of much use to anybody in the world, as to humans and animals they are a nuisance. But this is not the whole story. There are lot of birds and fish who find in mosquitoes good food for themselves, as they are easy to catch. So what is a nuisance to us, is a necessity for insect-eating birds and fish. But perhaps some day some scientist may discover that the mosquito is not always the enemy of man and animal, but a friend also.

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STANDARD RPg batteries are now fitted with 'Mitex' micro-porous latex rubber separators with glass-wool mat reinforcement — made in Standard's Bombay factory under Indian Patent No. 47623. These separators have unique features and have proved themselves in Europe, the U.K. and the U.S.A. as giving maximum life . . . even longer than that of the battery itself!

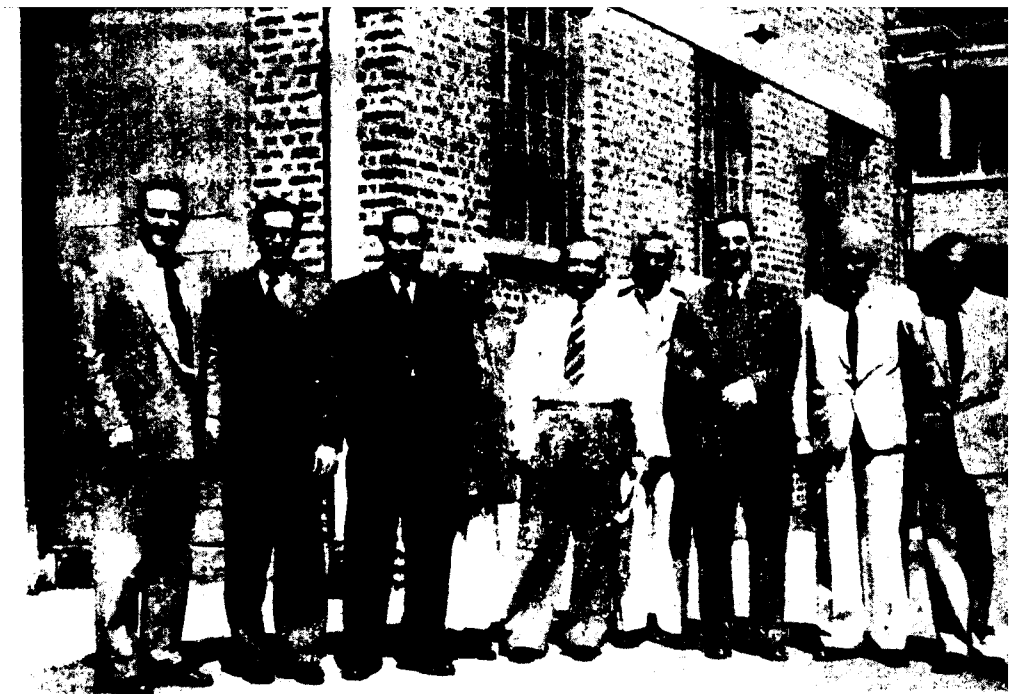
Cross section of the 'Standard' RPg Battery. It is compact and yields ample capacity

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P. V. C. Grid protectors
Spine of hard antimonial lead
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A party of the delegates being shown round the Exide Factory

EXIDE SALES CONFERENCE

The All-India Exide Sales Conference was held in Calcutta on 8th-10th February 1961 inclusive, under the auspices of Chloride & Exide Batteries (Eastern) Private Ltd. Some 40 members of the Exide Sales & Service Organisation attended from all parts of the country. The highlight of the occasion was an extremely interesting day at the Exide Factory of Associated Battery Makers (Eastern) Ltd., at Shamnagar. During a full tour of the Factory the delegates saw for themselves the major developments in implementing new projects which had occurred over the past year or so and were also shown details of future developments.

They saw the full manufacture of Porvic Separators, and also part of the modernisation and development programme of the Factory.



Mr. H. R. Gregson welcoming the delegates to the 4th Exide Conference



At the Business Session, Mr. H. V. Rossell spoke of these various developments, which strengthen the position of this Factory which can be considered the largest self-contained Storage Battery Factory in Asia.

An important factor on the consumer side, he added, was the increased appreciation of the economics of quality-buying by various large transport users throughout India, based on accurate data of recorded mileage and life.

The demand in the general market for Exide Batteries, continued to be strong and the Factory has made great efforts to meet this demand. In fact, during the tour of the Factory, the various production departments quite proudly displayed notices showing improved man-output performance in each department.

The impressive targets of the Automobile Industry, viz., a total of 100,000 motor vehicles by the end of the Third Five-Year Plan, was mentioned and in this respect Exide Batteries have been selected for many years past as original equipment by all leading manufacturers.

A full and useful discussion on Sales and Service matter was held and this included an interesting address by one of the delegates, Mr. E. C. Eduljee, on his recent visit to the impressive new Research and Development Establishment near Manchester, of the U.K. Technical Consultants, the Chloride Electrical Storage Co., Ltd.

(Issued by: Chloride & Exide Batteries (Eastern) Private Ltd., Barlow House, 59-C, Chowringhee, Calcutta.)



NATURE'S WARNING

N. NAGARAJAN

Nature I am ; Power I am ; Air I am ;
World dawned ; Plants grown ; People came up ;
Life began ; Life slept ; Death was named ;
Nature as I am, seeing, Not only seeing ;
I laughed ; I frowned ; I fretted ; I grieved ;
Grave I am when I am cool with heat ;
I subside with virtue ; live, smooth and on ;
But frown I when vice terrains ;
I have seen beasts' ways ; men's actions ;
Animal passions ; Good people's deed ;
And I abide by their command ;
But not ever I abide ; for I see the limitations ;
When the margin is crossed ;
When the rule is broken ;
When the system is not cared ;
When the methods are not minded ;
When the Power is misused ;
When actions belie truth ;
When arts become misnamed ;
When lands war for Power ;
When the humble is trodden ;
Sway I them ; Sweep them ; Blast them .
Bury them ; fire them ; gale them ; quake them ;
And that is my duty, governed and commanded ;
Slow I am to open my eye ;
Decades fade to raise me ;
Patience governs me and fidelity ;
Faith enthralled in sincerity and real love ;
But quickened to raise,
My power atoms ; rivers swell, mountains shake ;
Hills slide ; cyclone frequents ; forests fire ;
It rains continuous ; jungles mumble ;
And fume I every thing on my way ;

For the power was not raised by my act ;
But by folly, you, of Men, balanceless ;
And stopping me is in you ;
My sons who aim good ; and say ;
Do not say ; act to it ; mere say loses use ;
Hold the virtue, handle the care, soft ;
And not enter any unnatural amin,
Adamantine yield ; devastating game ;
And warm I thee, to waste not my power ;
Naturally live ye ; naturally I protect ;
You tilled me as Earth ; watered me ;
Fertile I remained ; Left me uncared ; became lazy ;
Easy fed ; avenues downed ; strength tottered ;
Barren I seemed ; fed me, I feed you all,
Lead my way ; I lead you all, safe ;
Abide by, and allow not ruin ;
I see you speak of Peace ;
But every century in, there is scene of war ;
One part of the Globe preaches ;
In another part War reigns ; massacres mount ;
Preparations plod ; your actions are, mind you,
Only mine ; Gave I them, the powers, to test you ;
See you, its use to construction ; But developing its
Use to killing mean,
I am certain the Universe submerges ;
Allow me not do it, my sons, Live me naturally allow ;
Live me see a century ; live me see a warless century ;
Let me see a full Peace Century ; and I do not say it ;
Your histories are enough for their warnings ;
Postings ; and guidance ; Indications for use ;
So take the lessons boys, safe ;
Take me Nature's Warning Timely and in time.

Children's Holiday Camp—Trichy Division Party in the Zoo at Trivandrum



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PHILLIPS CYCLES are beautiful to look at, smooth and effortless to ride. It is a cycle specially built to suit the needs of today's active young men. It is made of true-temper steel to withstand the roughest use.

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MODERN TRACK IN FRENCH RAILWAY

M. SADASIVAPPA

INTRODUCTION :

French Railways has the standard gauge of 1.437m and is about 40,000 km. long. Out of which about 6,000 km. is electrified. Lines are divided into three categories depending on their importance. Rail section used varies from 30 kg to 60 kg/m of the most modern steel. Generally on main lines rails of 46 kg to 60 kg/m are used. 18m. long rails are commonly used and in many places barres longues (long welded rails) with "un-appareil de dilatation" (expansion joints). Sleepers of wooden, steel, beton Arme (RCC sleepers) and beton precontrainte (prestressed concrete) are used. Generally 1722 Nos. are provided per km. The fastenings are provided in two ways either direct fixing or indirect fixing. Maximum permissible speed of 140 km. per hour is permitted on main lines and the average works out to 100 km. per hour. "Le Mistral" the fastest train of France which runs from Paris to Marseilles has a speed of 180 km. per hour.

TRADITIONAL TYPE—THEIR CHARACTER AND WEAKNESS :

French Railways originally had the rigid fastenings of the rails to the sleepers irrespective of the type of sleeper. They were fastened either by screws or bolts and the arrangement consisted of either direct fixing or indirect fixing.

DIRECT FIXING :

Where the rails were held by screws or bolts in the timber sleepers or were bolted down in steel or concrete

sleepers without other accessories such as rail clips or metal base plates or chains.

INDIRECT FIXING :

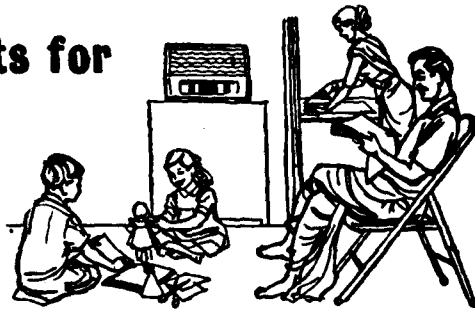
Where the rails were held by clips to metal base plates or in chains with the base plates or chains being separately screwed or bolted to the sleepers.

The rails varied from 8m to 36m and the joints were held by fish-plates, of course giving some freedom to the rails to expand and contract under thermal stress. But such tracks always exhibited certain weakness due to inevitable movement of the track under heavy traffic and high speeds. The rigid rail-to-sleeper fastenings showed up deterioration under high speeds.

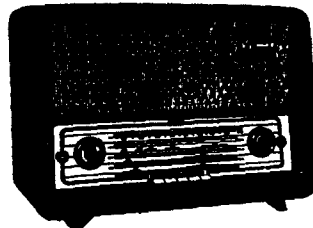
Investigation was made by the French Railway into the phenomena of fatigue and established the existence of high frequency vibration of the rail when under load which are not effectively dampened-out by the fastenings and this high-frequency vibration set up rapid reaction in the fastening assembly and its effect are cumulative. This results in deterioration of the track materials from one to the other. The rail or the base plates, bites into the sleeper, if it is timber or if the sleepers are of steel or concrete they become cracked or split from fatigue. The sleeper fastenings are progressively loosened and the consequent hammering of the sleepers is transmitted to the ballast, which is broken up by this pounding action and reduced to a sludge, and consequently the

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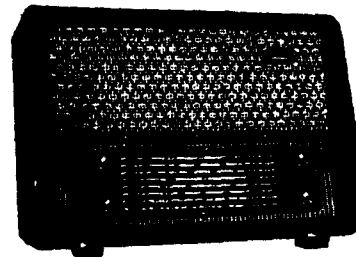
FAMOUS for their quality and performance, NATIONAL-EKCO radios and KLEERTONE Products offer you a wonderful selection to choose from!



NATIONAL EKCO RADIOS



NATIONAL-EKCO Model A-744: 6 novel valves with 9 functions, 4-band AC radio in elegant moulded cabinet. Piano-key band selection; special output for tape recorder. 'MONSOONIZED' Rs. 415.00 nett



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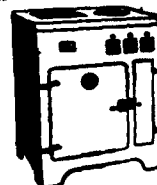
KLEERTONE LAMPS AND APPLIANCES

KLEERTONE Water Boiler Gives hot water quickly. Sizes: 3.5 & 8 gallons. For AC operation



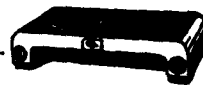
KLEERTONE Domestic Iron Weight 7 lb. 230 volts, 450 watts, AC/DC. Bakelite Handle and special button grooves

KLEERTONE Cooking Range Has two hot plates and oven, each with separate control. Maximum load 3,500 watts



KLEERTONE Electric Kettle Capacity 3 pints. Chromium-plated. 230 volts, 750 watts. For AC/DC

KLEERTONE Twin Hot Plates For cooking. The two hot plates have separate controls. 230 volts AC/DC. Maximum loading 3,500 watts



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MT-69A 111

track soon deteriorates in alignment and level, etc.

It is needless to mention the evil effects of joints apart from its being uncomfortable for travelling public. There are further source of active displacement and their continual maintenance and frequent repairs are very expensive.

MODERN TRACK—THEIR CHARACTER AND ADVANTAGES :

All the above points were thoroughly examined by experts of French Railways and finally by about the end of the last war gave birth to the modern track which is little different from the traditional old track.

The Modern track has solved mainly two problems. Firstly avoided the rail joints by using the long welded rails and secondly provided an elastic rail-to-sleeper assembly which effectively dampens-out the high frequency vibrations of the rail so that they are not transmitted to the sleeper and the ballast.

The welding of rails of course eliminate the menace of the joints but the thermal stress are thereby constrained within the rails themselves which may well cause one to think. Does this interference with the free movements of the rails create conditions which may lead to vertical or lateral buckling? But after great scientific investigation by experts into the question of track levelling based on a wide experience it was decided that the stability of track with long welded rails depends on the following factors :—

(1) The range of temperature at the time of installation compared with eventual temperature.

(2) The importance of the extent of ballasting its compactness and its quality.

(3) The weight of the track which is known as "factor of instability"; this factor varies lineally according to the weight of the rail and in inverse ratio to the sq. of the weight of the track as a whole.

(4) The curvature of the rails relates to the original alignment and subsequent irregularities in alignment level and ballasting.

(5) The strength of the fastenings and the constancy of the restraint exerted by the rail-to-sleeper assembly.

The last is most important of all because with expansion and contraction stresses assumed uniformly throughout the whole length of the welded rail, if any deficiencies in the fastening assembly allows the rail to creep, this would result in an accumulation of unbalanced force which would reach dangerous limits when constrained at some rigid features like, a level-crossing or a points and crossing, etc.

Therefore the fundamental problem of fastening assembly are effectively obtained by the following arrangement :—

(a) Placing of a special rubber sole pad between rail and sleeper as shown in the sketch (Chevron type) which has a co-efficient of friction against the foot of the rail reaching to unity.

(b) Securing of rail, laterally to maintain a constant firm contact with the rubber sole plate by

March 1961

means of a special double-sprung steel rail clips (RN Griffon (single leaf type) sketch 1 or RN Crapaud (double leaf type) sketch 2.)

Thus the rail is held by double elastic basis so as to effectively dampen-out all vibrations and ensures permanency of fixing and the long welded rails remain securely fixed on the sleepers without any possibility of longitudinal displacement. Therefore this double-sprung fastening made it possible to weld rails into unlimited lengths.

The other two factors 1 and 2 are achieved by the following:—

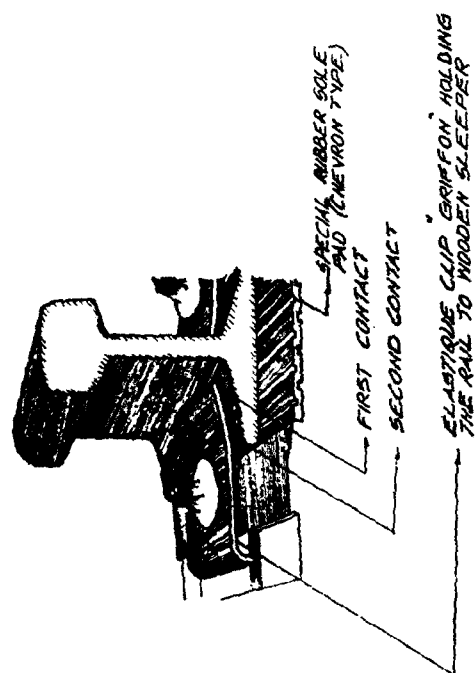
(1) The final securing of the fastenings is effected where the temperature is within the limits of a specified range, based on the normally prevalent temperature limits for example in France where recorded rail temperatures vary from minus 20°C to plus 60°C

the limiting "fixing" range is specified as between *plus* 14°C and *plus* 36°C.

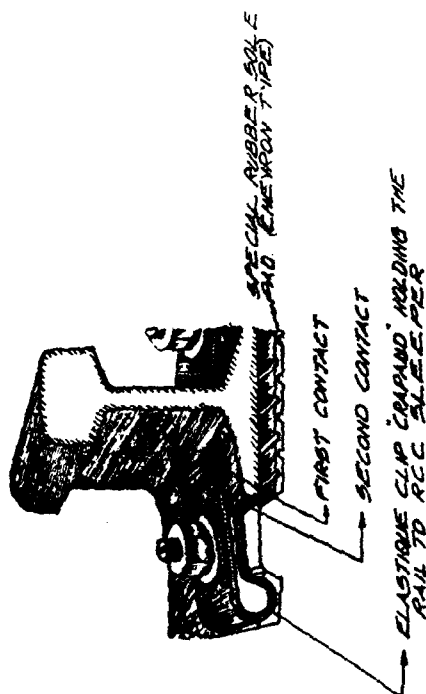
(2) The ballast must be adequate, well packed and consolidated. The required quantity depends largely upon the type of sleeper and will be minimum if R.S. sleepers (twin blocks with steel bar spacer) are used as these resists better any transverse movement of the track.

Therefore from the above it follows that the stability of the track will be greater if there is an increase in the weight of the sleeper and fastenings per linear unit of track.

It is this which finally guarantees complete stability of the long welded rails of Modern Track in French Railways when supported on RS type sleepers, held by double sprung steel rail clips and seated on special rubber sole pads.



SKETCH NO. 1



SKETCH NO. 2

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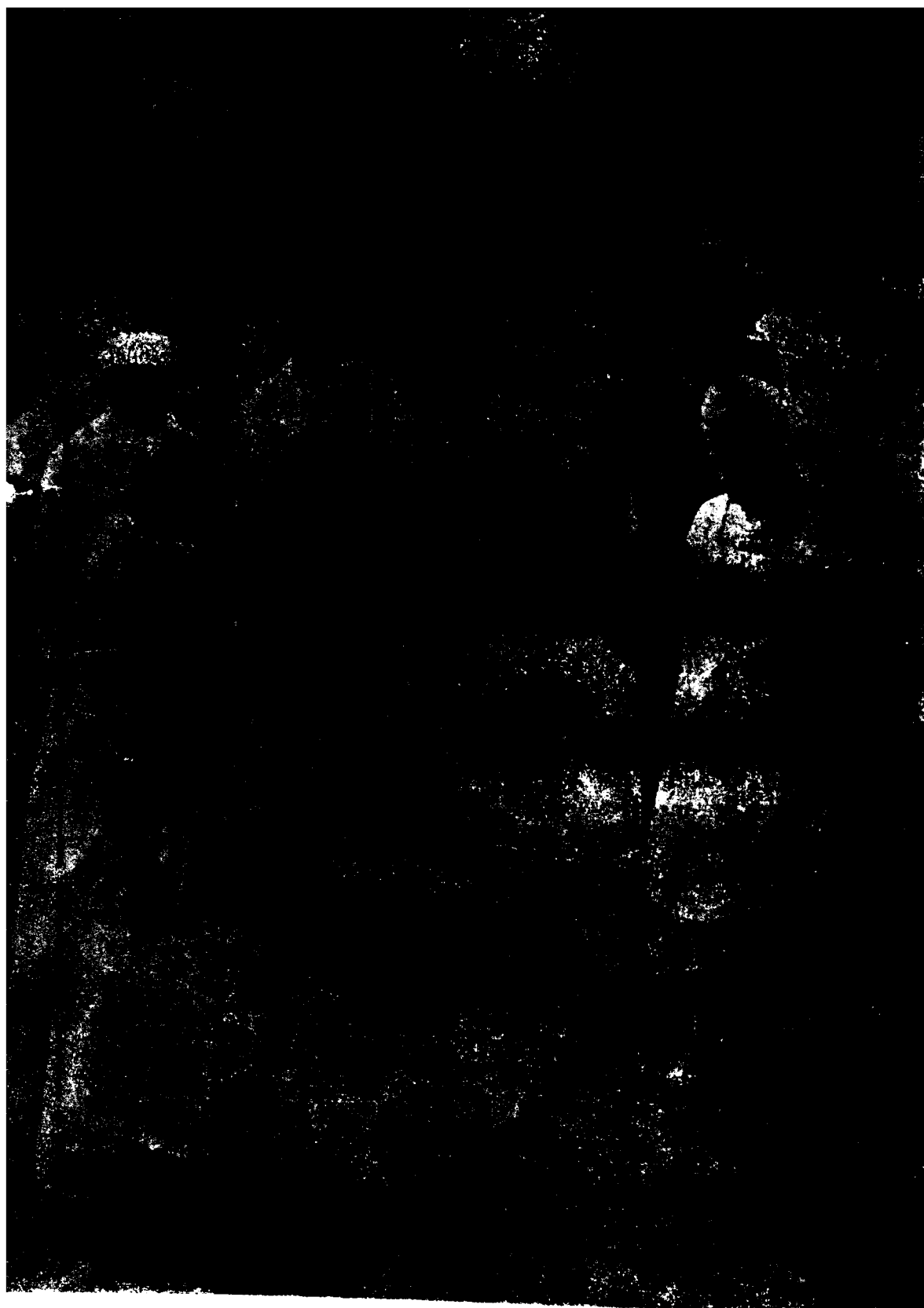
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AM & FM



“WELCOME TO THE QUEEN”

“Welcome to the Queen”, came from the lips of everyone in the city when Her Majesty Queen Elizabeth II and the Duke of Edinburgh, paid a two-day visit to Madras, and the departure of the Royal visitors has brought to an end one of the most remarkable events in the history of Madras. Wherever she went it was no hieratic image of abstract royalty that moved among the people, but a human being to be honoured and loved for her own qualities. Her dignity, her grace, her instant sympathy with all sorts of conditions, but most of all the sense of joy that radiated from her, the joy that comes out of a consciousness of a great mission worthily performed at whatever cost in exhaustion.

The Royal Visitors carried the affections of the citizens by storm. Their serene dignity and informality rose above stiff protocol, which drew them nearer to the people. Many said that the Queen was a gentle lady and the Duke, a debonair gentleman. The Royal Party met with different sorts of receptions all over the country. She is the exquisite symbol of her gracious country. When the Nation welcomes the Queen she attempts to repay a debt, which, in fact, can never be repaid.

When we recollect history today in tranquillity without rancour, hate, suspicion or strife, to the Queen, memories of Madras history are now in the limbo of legends. If we are today an integrated nation, we owe a lot to the virtues of democracy and knowledge of the English Language, that has kept the nation together.

Four centuries divide the era between Elizabeth I and Elizabeth II. In contrast with this forceful, fascinating, colourful and controversial Tudor Monarch, Elizabeth II is a sweet and gracious royal figure above controversy and beyond the breath of scandal. The temper of the Tudor era allowed for ample scope for exercise of personal power by the sovereign. The temper of the time and the tradition of politics today have no scope at all for any effective power by the sovereign. The British Monarch reigns but does not rule. This traditional formula is regarded by many as a paradox. They think that the British people are deluded by words, who have kept the outward forms of monarchy without substance and live under a republic in which the wearer of the Crown is a mere image emptied of the authority that gives meaning to the royal name.

As head of the Commonwealth Her position is unique in history. She is not happy in the erratic and violent age, in which her lot is cast. But she is happy in the honours to which her position entitles her, in the affection of the people, in her marriage and her children.

The Madras Government rolled out the Red Carpet for the distinguished Royal Visitors. They had made elaborate preparations to accord them a fitting reception. A member of the royal party stated that the reception which the Queen received in the city was one of the best they had ever seen, because the reception was so subdued and cheering was quiet.

The Queen also visited the Integral Coach Factory one of the biggest Coach building plants in the world and run directly by the Union Railway Ministry. Mr. Jagjivan Ram, Minister for Railways, Government of India, had specially flown from Delhi to welcome the Queen to the Factory. The salient features and working of the factory were explained to the Royal Visitors by Mr. K. Swarup,

Chief Administrative Officer of the Factory.

The Queen also visited the Fort St. George, where every inch of the ground is connected with some great moment or other of British history in India. Her visit to the Fort came exactly 55 years and 3 weeks after her grandfather George V visited India as Prince of Wales in 1906.



Deputy Minister for Railways, Shri S. V. Ramaswamy in conversation with Shri K. L. Narasimha Rao, M.P.; DCS/BZA and DEN/BZA at RJY on 31-1-61

Shri S. V. Ramaswamy, Deputy Minister for Railways at BZA



INTER-DIVISIONAL ATHLETIC MEET

The Southern Railway Inter-Divisional Athletic Meet was held on February 11. Sri A. C. Mukerji, General Manager, Southern Railway, declared the Meet open.

Sri P. K. Madhava Menon, COPS and Chairman of the Southern Railway Athletic Association, welcomed the gathering.

A. Ramachandran bettered his own National record in Pole Vault by $2\frac{1}{2}$ " when he cleared $13'-3\frac{1}{2}"$.

The Madras Division scored the highest number of points and won the trophy. Seth Govindaraj of Hubli Division was adjudged the best athlete and awarded the General Manager's Cup. Shrimati Mukerji gave away the prizes.



Winners in Officers Race



SOUTHERN RAILWAY

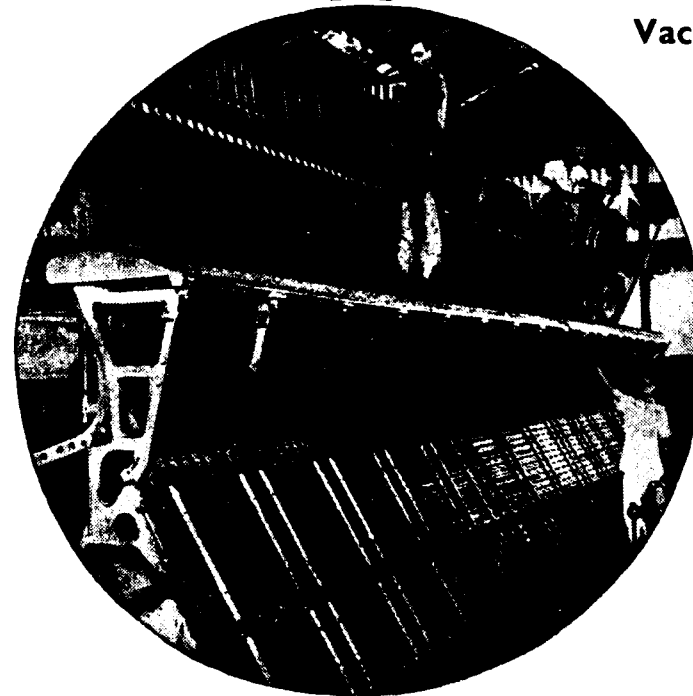
OLAVAKKOT DIVISION

TENDER NOTICE

Sealed tenders will be received by the Divisional Superintendent (Works), Olavakkot, for the work "Totiyapalayam Provision of additional loop" to reach him not later than 16 hours on 1-4-1961. Approximate cash value of the work is Rs. 1,00,700. Earnest money deposit of Rs. 2,550 should be deposited with the Divisional Pay Master, Olavakkot, on or before 15 hours on 30-3-1961. Last date for issue of tender form is 16 hours on 29-3-1961. Tenders will be opened at 11 hours on 3-4-1961. Further particulars and tender forms costing Rs. 10 (not refundable) can be had from the Divisional Superintendent (Works), Olavakkot, on production of a cash receipt obtained from the Divisional Pay Master, Olavakkot or any Station Master on this Railway paid towards the cost of the tender form. Tender forms are not transferable.

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Farewell to Shri A. C. Mukerji :



Shri Mukerji and Smt. Mukerji at Madras Central Station



Farewell to Shri A. C. Mukerji, at Madras Central Station

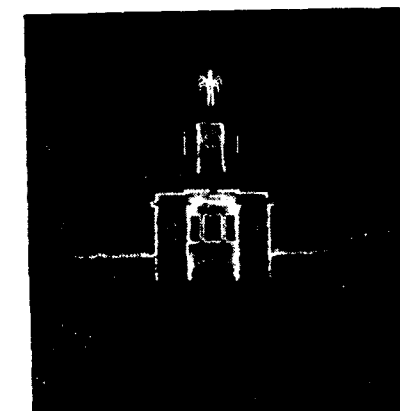
AT DINNER

(More photos next page)



Shri H. D. Singh, GM/S. Rly.

(From a drawing by Shri C. D. K. Murthy)



Republic Day celebrations at GOC

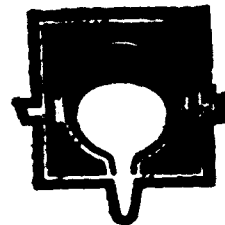
Farewell to Shri D. A. Goodsir,
DME/MDU at ERS



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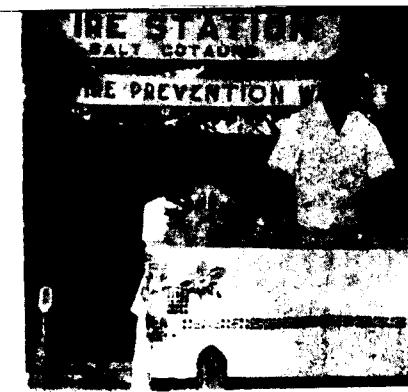
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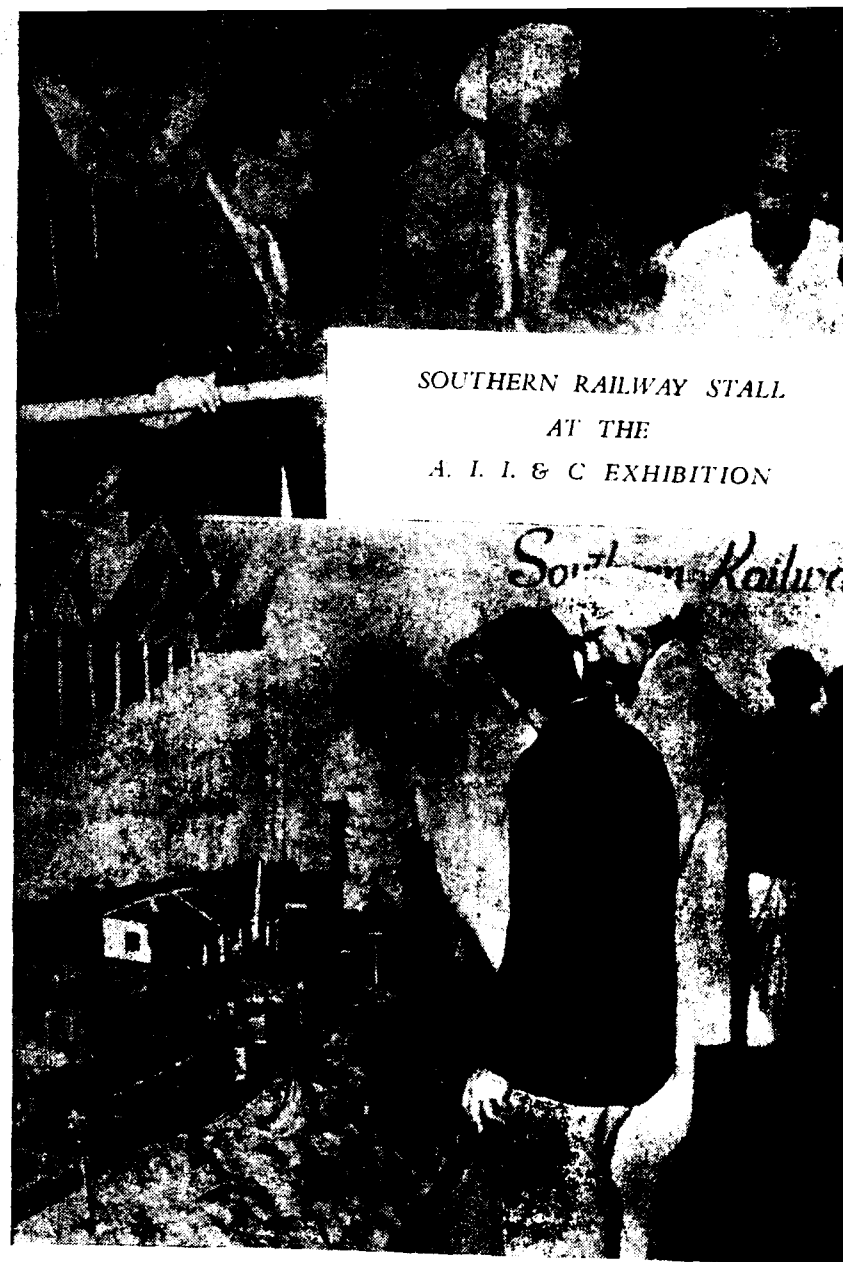


FIRE PREVENTION WEEK



Divisional Engineers Meeting in Session (21-2-61)

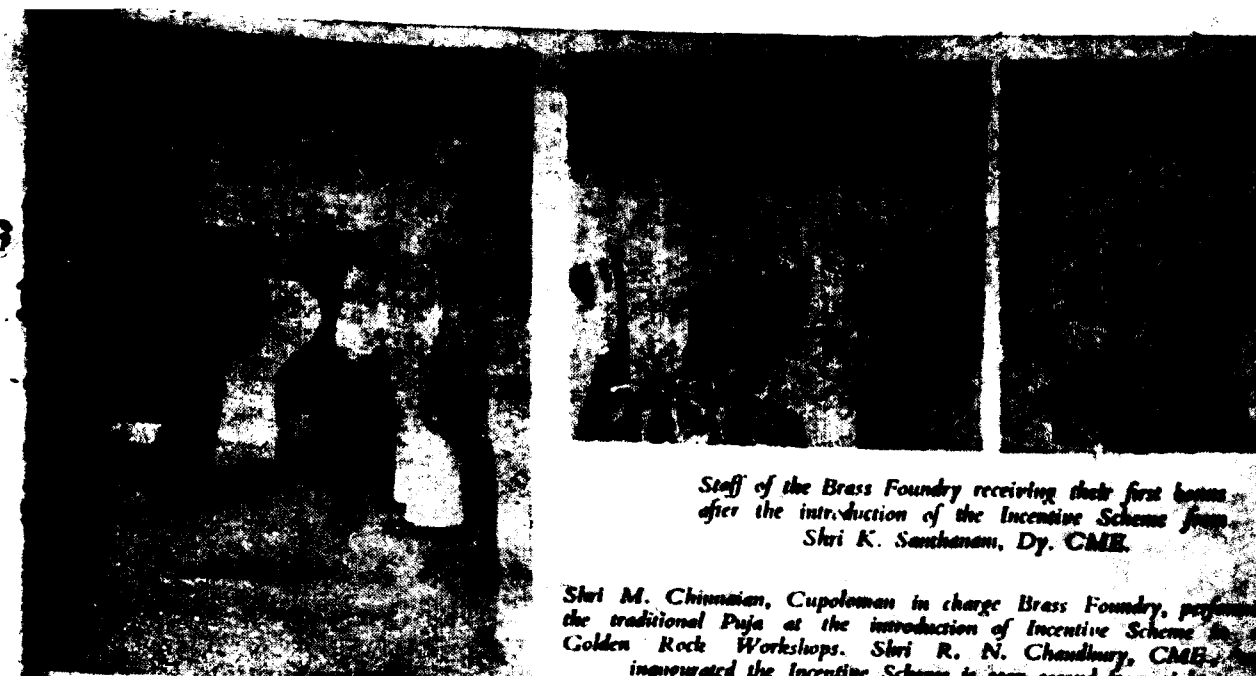




PAYMENT BY RESULTS UNDER INCENTIVE SCHEME AT GOLDEN ROCK WORKSHOPS

There was an air of happiness and eager expectations in the Brass Foundry on the evening of 8-3-1961 as the first 'BONUS' earned by the staff, since the Introduction of the Incentive Scheme on 1-2-61 was paid at the special function arranged. The Dy. CME, Shri K. Santhanam gave away the 'BONUS' to 39 artizans staff of the Brass Foundry.

(Photos next page)



Staff of the Brass Foundry receiving their first bonus after the introduction of the Incentive Scheme from Shri K. Santhanam, Dy. CME.

Shri M. Chinnaiyan, Cupoloman in charge Brass Foundry, performing the traditional Pujan at the introduction of Incentive Scheme in Golden Rock Workshops. Shri R. N. Chaudhary, CME, inaugurated the Incentive Scheme is seen second from right.

Happy Staff of the Brass Foundry of the Golden Rock Workshops, with the Officers, after receiving their first "bonus" under the Incentive Scheme



NOTICE

STARTING WITH OUR APRIL 1961 ISSUE, THE "SOUTHRAIL-NEWS" WILL BE DEMY QUARTO IN SIZE. OUR READERS WOULD BE GLAD TO KNOW THAT OUR SUBSCRIPTION RATES REMAIN THE SAME, i.e., Rs. 4/50 ANNUALLY.

ADVERTISERS ARE REQUESTED TO REFER THE BACK COVER OF THIS ISSUE FOR REVISED ADVERTISEMENT RATES EFFECTIVE 1st APRIL 1961.



Republic Day celebrations at Madurai



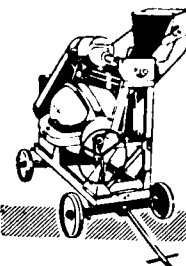
Shri R. N. Chaudhury,
Chief Mechanical Engineer,
Southern Railway,
declaring the Time Booth
open, by cutting the
ribbon. (Incentive
Scheme—Perambur)

Southern Railway Institute, Rajahmundry - Annual celebration



Ask Jacks about it!

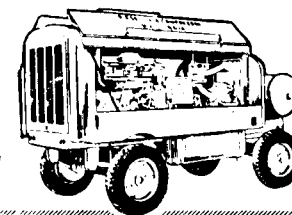
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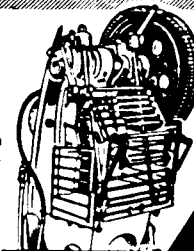
and



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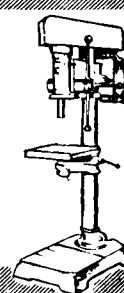
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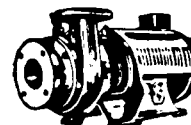
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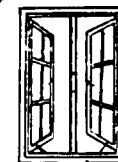
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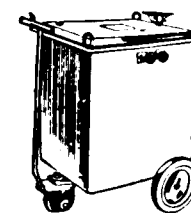
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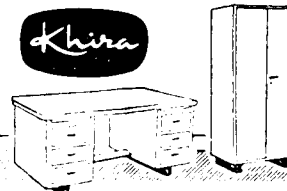
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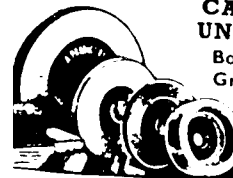
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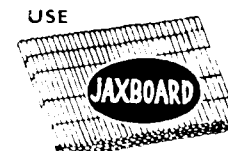
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NOTICE

Starting with the April 1961 issue (7th Annual Number) the size of "Southrailnews" will be changed to **DEMY QUARTO** from the present *Crown Quarto*. I am sure that our Readers, Contributors and Advertisers would welcome this change and would excuse the inconveniences this might cause.

The April 1961 issue will be published during "Railway Week" (10th to 16th April). Advertisers are requested to send Advertisement materials to reach the Editor on or before 25th March.

The revised Tariff and Mechanical Data are given below :

RATES

FULL PAGE	... Rs. 125	BACK COVER	... Rs. 300
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QUARTER PAGE	... Rs. 40	INSIDE FRONT COVER	Rs. 250

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