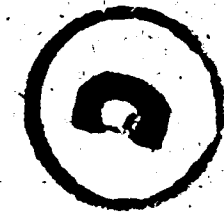


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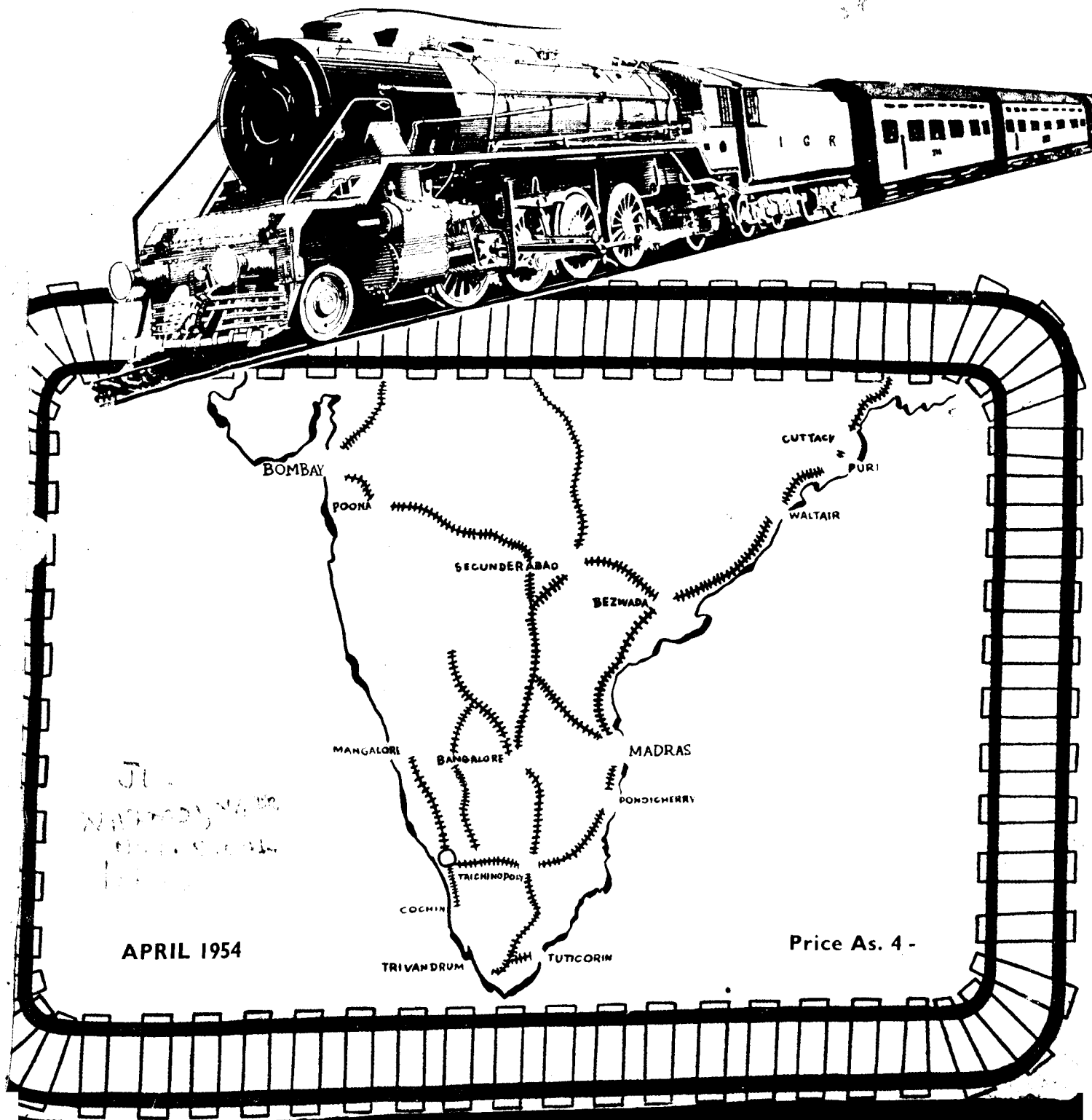
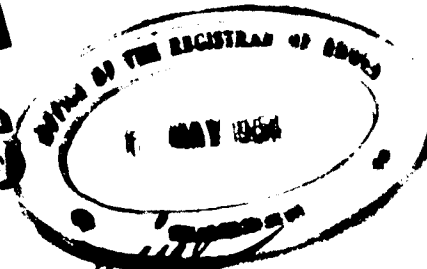


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SOUTHERN RAILWAYS

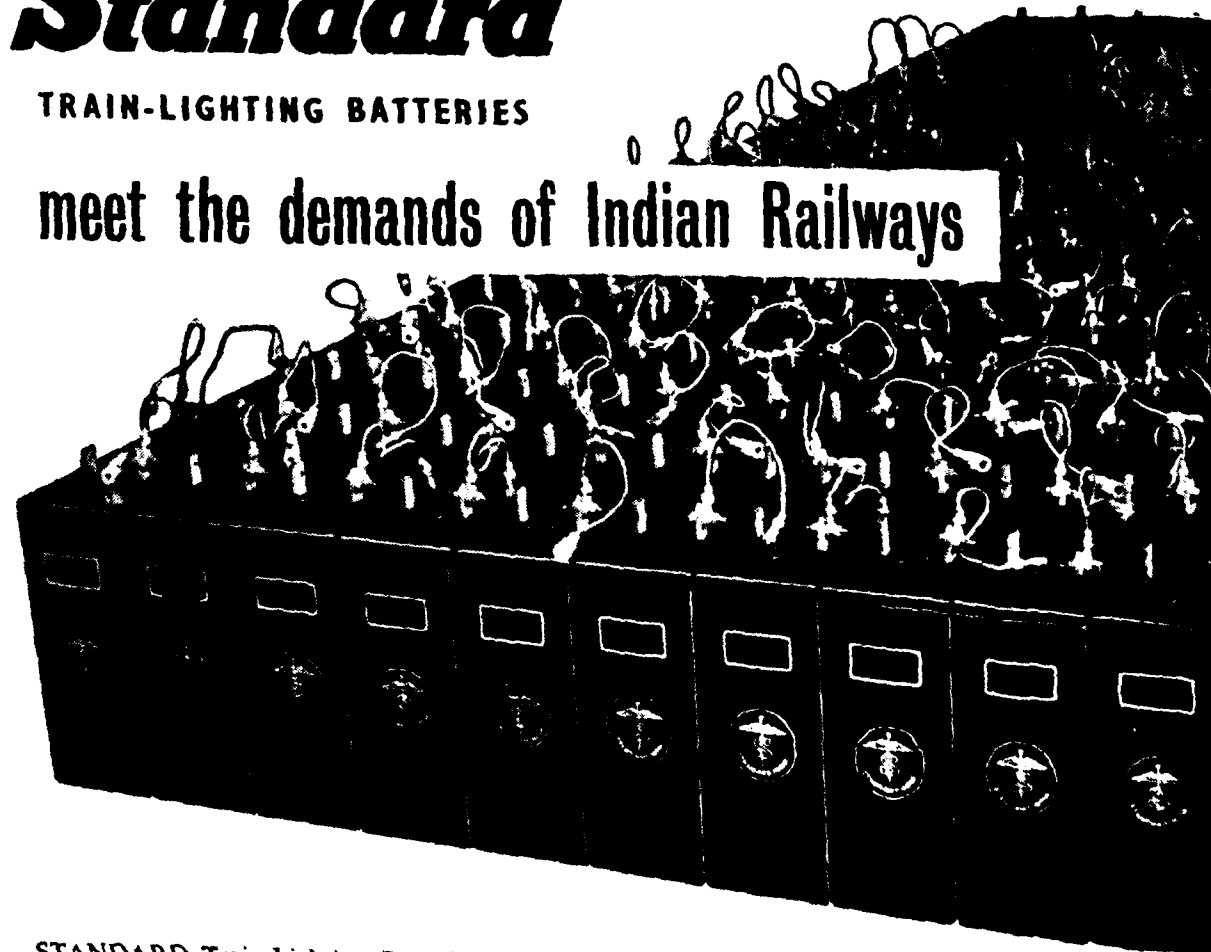
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Editorial Notice

The Editor invites contributions to the Magazine on a variety of topics—short stories, technical features written in simple English understandable to the laymen, Aspects of Railway Working, places of tourist interest, News from home line, activities on Railway Institutes etc. All copy should be brief and typed as far as possible.

Photographs illustrating social functions, sports events, scenic sports etc. are also invited. All contributions should reach the Editor not later than 5th of each month. Rejected Mss. will be returned provided sufficient stamps for postage are enclosed. No responsibility will be borne for copy lost in transit.

Views expressed in this Magazine should not be taken as having official authority.

All correspondence should be addressed to The Editor, "Southern Railways Magazine," Post Box No. 17, Tanjore, (South India).



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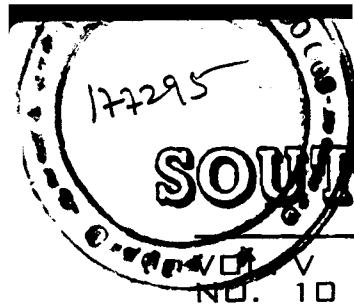
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EXPRESS



SOUTHERN RAILWAYS MAGAZINE

APRIL

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“U. N. Railway Training Centre at Lahore”

LAHORE in West Pakistan has been chosen for the housing of the United Nations Regional Training Centre for Railway Operating and Signalling. This Railway Training Centre was recently opened at a public function performed by Mr. Ghulam Mohammed, Governor-General of Pakistan.

The Centre is jointly sponsored by the United Nations Technical Assistance Administration and the Economic Commission for Asia and the Far East, and its objective is to offer facilities for advanced training in modern transportation and signalling to the railway officials of member and associate member countries of the E. C. A. F. E. region.

The setting-up of a training centre of the nature envisaged is timely. Throughout Asia and the Far East, where the spirit of independence has been surging, and where countries and peoples that were formerly under the domination and control of the West, are now shaping their own destinies, there has been evident a considerable acceleration of the tempo of industrial activity. This stepping-up of industrial production has created a demand for better and more transport facilities, whereas the actual capacities of the railway systems in these countries are found to be more or less unable to move the growing density of traffic, and particularly on single track sections. Thus, the railway systems are up against the problem of exploring ways and means to boost their capacities to enable them to meet the demands more efficiently and economically, without, as far as possible, incurring the heavy expenditure that would be required for converting single into double line systems. It will be one of the tasks of the U. N. Railway Training Centre to study, devise and suggest the best ways and means to help railway systems concerned in providing a solution to their increasingly complex transportation problems.

To help achieve the objective the Centre is being provided with modern demonstration equipment and the services of expert staff. It has been revealed that the Governments of France, Japan, the United Kingdom, the Netherlands and Belgium have made generous offers of equipment. The Government of Pakistan also has provided facilities at considerable cost.

In the course of his welcome speech, Dr. P. S. Lokanathan, Executive Secretary of the E. C. A. F. E. stated that the services of expert teaching staff for the training centre had been obtained. These included three instructors in the three branches of training, namely, operating, signalling and tele-communication, as well as two assistant instructors drawn from countries of the region, who will function for one year, and then will be replaced in rotation by others to provide opportunities to suitable railway officers of the region to familiarise themselves with modern equipment and to qualify for passing on the knowledge gained in their own national training centres.

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Dr. Lokanathan also rightly remarked that the establishing of this United Nations Railway Training Centre was a landmark in the history of both the E. C. A. F. E. and the U. N. T. A. A. This was the first occasion on which the United Nations Technical Assistance Administration had launched out in a big way to develop a regional project in the field of transport involving considerable outlay and covering the region as a whole. Dr. Lokanathan also stated that this Training Centre was a concrete vindication of the faith of the United Nations in co-operation between Governments on a regional basis.

Where India and Pakistan are concerned, the railway systems of these two Governments also have their own training centres both for their railway officers and staff, and it is quite likely that the other nations of Asia and the Far East who are members of the U. N., also have facilities for training their railway officers and personnel. But with the facilities now offered by the U. N. Railway Training Centre at Lahore, railway officers from all the countries in the region will be sent periodically for a period of training, and while undergoing the training will have the unique opportunity not only of an advanced type of training in modern methods of transportation, but of comparing notes with fellow railway officers from other countries, and appreciating how they tackle their transportation problems under the rapidly-changing conditions of the world today.

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NOTES AND COMMENTS

EFFICIENCY BUREAU FOR THE INDIAN
RAILWAYS

SINCE we commented on the above in our last issue we are able to get more details of the working of the Efficiency Bureau from our Delhi Correspondent.

Mr. M. N. Chakravorthy who is the Director-in-Charge of the Bureau was a Deputy General Manager on the Eastern Railway and prior to this he was the Chief Director of Food Movement and Secretary to the Indian Railway Enquiry Committee. Mr. Chakravorthy, it is expected, will bring forth his valuable experiences as the Secretary of the Kunzru Committee and try to implement them. It is also learnt that the Efficiency Bureau will take up the question of Break of Gauge Tranship points and speed of Goods Trains and to this extent Mr. Chakravorthy is asking the various Railways to submit statistics. Each Railway will appoint a Special Officer of the Operating Department to assist the Bureau. This Officer is expected to be a sharp Movement Officer. The Bureau will then conduct an "on the spot enquiry".

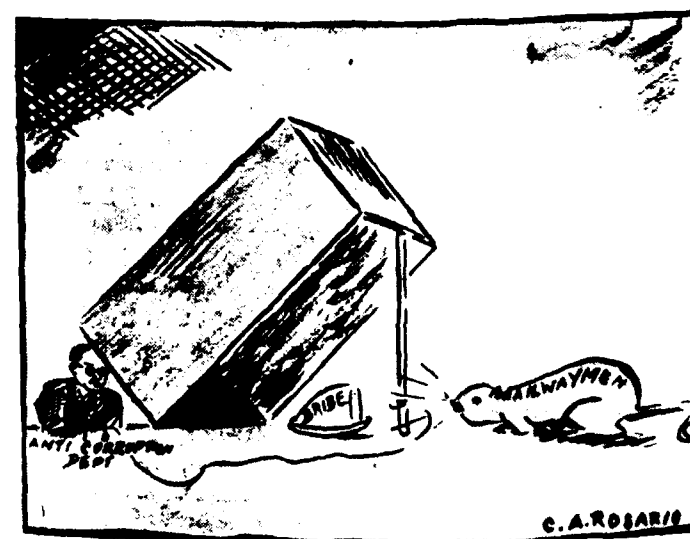
We feel, that however, laudable the efforts of the Bureau will be, they cannot achieve much results unless their basic approach to railway problems is changed. What is this approach? This approach is to tackle the organisation on the railways and to steam line them rather than collecting mountains of data, to be thrown away. Take for instance the present work in Tranship points and speed of Goods trains. Everyone knows that if the Control working in a particular railway is efficient, all else flow naturally and the best way would be to organise the Control Offices. As a first instance a Senior efficient and capable Movement Officer can be put in overall charge of the Control offices say "Inspector of Control Offices" with full powers to deal with them and improve them.

Some authorities in Railway Transport have opined that the best way to obtain quick results to speed up freight traffic by the Control of Operators is to begin at the Control Offices by reorganising them. The system implies the centralization in the control office of

the supervision of traffic working over a given section of the line. Experience has shown that it has resulted in the more punctual running and speedier working of trains, the better loading of trains an increase in the train miles per engine hour and a reduction in light running and empty haulage with an advantage of train control lies in the concentration of supervision throughout a given area, and the consequent ability to arrange the working in that area hour by hour, according to prevailing circumstances. Thus instructions can be given promptly for the cancellation of trains in cases of insufficient traffic or the running of specials to meet unforeseen surplus. In the event of congestion, arrangements can be at once made to divert freight traffic by alternate routes to the less affected yards and sidings.

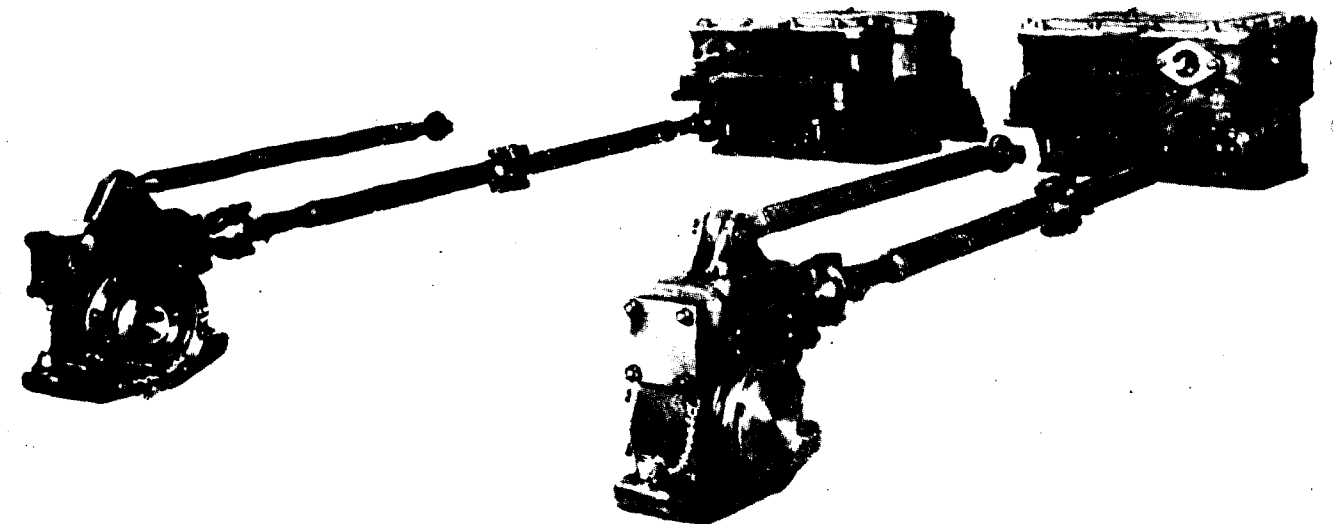
The Movement Officer in charge of Control Offices should be a sharp experienced intelligent Operating Officer who should be imbued with a sense of movement work and with such an officer the results will be spectacular. We hope the Director Efficiency Bureau will look into this and bring forward an improvement in the efficiency of our Indian Railways. We wish him all success in this patriotic effort and we are sure that all Officers will co-operate with him.

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PANDE—THE “MAJOR”

By Socrates

THE “Major” had to take a salute at the parade, and so he was hurrying through, as time was up. I was seated on the front bench in the tram and also wending my way to the parade ground to join in the ‘line up’. The Major saw me and I at once stood up from my seat and gave him a right, royal, military salute. He fumbled for a moment and was not sure if he had to return the salute in the military way, seated as he was.

We both alighted at our destination and by the time we reached the parade ground the march was “on” and so I fell in line with others—the Major took his position.

Those were the days when the War was in full swing and the Defence of India (Indian Engineers) Corps was organised in which railwaymen were asked to join. The corps was intended to serve as a rear defence line to man the railways in case of an emergency.

We, the civilians, were thus given an opportunity, the first of its kind, to get training in the military way. Many of us found it difficult and exacting to attune ourselves to the rigorous discipline that war enforced.

Ranks in the Corps were allotted generally on the basis of seniority in service in the civilian post, and the Major of whom I am now speaking, was at first given the rank of a “Captain”. But since he was senior to the gentlemen who was the ‘Major’ he represented the matter and claimed that the rank of Major should have gone to him although he was for the time being holding a position lower to that of the Chief. The claims of the two officers were investigated and the position reversed.

Major Pande thus won the initial battle of his life in the right, royal, fashion. From all that I know of him he is one of those unyielding men in regard to rights and privileges which according to him, are to be zealously guarded. All the same I could not but wonder if he has the strength of mind to champion the cause of another, when it comes to a matter of putting up a fight and winning it.

Be that as it may, I cannot but concede that Pande is one of those amiable gentlemen who would condescend to take a friendly and sympathetic outlook in life and its

toils; a man of very understanding nature, ready to listen and console the aggrieved. He would certainly help his men but would think twice before embarking on an “adventure” out of the ordinary way. He would not make his presence felt and is not in the habit of thrusting himself upon others. If it came to a point of defeat in any matter he would accept it with grace and good cheer. Systematic and methodical in work he would set an example to those under him. His intellectual past time is reading and noting voraciously, especially highly technical matter pertaining to his profession. His sharp, analytical mind is a great asset to him and in whatever sphere of work he is put in, this trait would stand out. Simple in habits, not fond of show or pomp, he would not hesitate to treat his friends on an equal footing—sometimes even putting



Shri G. Pande.

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Buy your tickets at the proper time. You can avoid unnecessary excitement and trouble if you come to the station in good time, that is at least half an hour before the scheduled departure of your train. The Time Tables of the Railway are on sale at Booking Offices and Bookstalls.

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(Inserted in the interests of Travelling Public)

his hands on the shoulders of friends while walking. This is a praiseworthy quality which shows the real man. He attaches great importance to physical culture and does his morning 'asanas' daily which keeps him quite fit.

Personnel Branch work was anathema to him, and he hated to have to deal with the "ups and downs" of railway workers and knew in his heart of hearts that, however much he might try to be fair and impartial, the very fact of having to promote, depromote, punish, transfer, etc., etc., of staff was a job for which he was not fitted—nor did it suit his calibre, upbringing and disposition.

After a few peregrinations in different projects such as the Post-war Planning Department, the Ganges Bridge at Mokameh, and certain other construction work in the coalfields area, Pande found his way to the Railway Board as its Joint Director and then Director (Civil Engineering) on the eve of the partition, and from there he focussed his attention on the manifold engineering problems of the re-aligned railways which were fast getting ready for the great 'operation' and 'surgery' first and then assimilation into self-contained,

compact 'zones'. He was, however, marked for higher emoluments and when the post of General Manager, O. T. Railway, fell vacant the summons came, and with the metamorphosis that subsequently took place in the structure of the O. T. Railway and the A. B. Railway, into what is now known as the "North-Eastern Railway" he was installed in the comfortable chair of the "Chief".

He was aware of the peculiarly difficult problems of the North Eastern Railway, especially the portion which was previously the O. T. Railway and wanted to put things right. He was distressed to note the increasing crimes that were being perpetrated on the O. T. Ry. and the baffling problem of ticketless travelling. He knew that in tackling these he had to bring to bear a lot of enduring patience, as the material he had to deal with—and reform if possible—was 'rugged'. But he is applying his talents in the right direction.

Can it be said that Pande possesses outstanding skill and ability? There is nothing warranting him to that high eminence. He is just the ordinary type, perhaps a little above the average, but he is very 'humane' and that is the secret of his success.

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THE cold spell has left England, at least for the time being. The weather has been generally milder with maximum temperatures ranging between 40 and 50 degrees. The great thaw which followed the ice and snow of early February brought a host of troubles for property owners with burst water pipes with consequent damage to houses and their contents.

On February 3rd the Royal Scot, bound for London from Glasgow, was partially derailed in a tunnel near Watford, some 20 miles from London. 9 passengers were injured. The enquiry into the accident was conducted by Lt. Col. G. R. S. Wilson, Chief Inspecting Officer of Railways, and was held at Euston Station. Mr. G. S. Hearne, the Operating Superintendent of the London Midland Region, said there was little doubt that a rail breakage caused the original derailment of the Royal Scot in the tunnel. The derailment started with the leading bogie of the last coach. Other derailment followed after the train left the tunnel and the two rear coaches became detached. The driver of the train said that he travelled through the tunnel at 60 to 70 m. p. h. but felt no bump. The condition of the track had improved recently. The guard of the train said that when they were halfway through the tunnel he heard a crash as if some brick or iron had struck the side of the train. When they left the tunnel he looked out and saw the coach in front swaying. The inspecting officer asked him why he did not put the brakes on in the tunnel to which the guard replied that he first wanted to make quite sure what had happened. The permanent way inspector in charge of the section said that the permanent way through the Watford tunnel "was a headache." There had been a series of broken rails and the track was in poor condition when he took it over 2½ years ago. Maintenance had not been up to standard owing to shortage of man power and the quality of labour available.

On February 19, a speed record was set up for trains by a new French electric locomotive, the CC 7121 which

reached 144 m. p. h. during trials. It broke all previous records by pulling three coaches over a distance of 3 miles on the Paris—Dijon line at 138.5 m. p. h. On February 21, this locomotive smashed its own record by achieving 151.8 m. p. h. on a seven mile stretch of level track between Dijon and Beaune. No. 7121 is a square built 4,500 h. p. engine weighing 105 tons. This feat recalls an extraordinary run made on the Italian State Railway on July 20, 1939. It was the only known occasion on which a train of any description has maintained an average of over 100 m. p. h. from start to stop. This was an experimental run with a three car streamline electric unit measuring 206 feet 3 ins. overall and weighing 107½ tons empty and about 118 tons with a full complement of passengers and luggage. On this occasion the train had a distinguished company on board including the Italian Minister of Communications, the General Manager of the Italian State Railways and a party of engineers and journalists. It must have been a breath taking experience. Up the 10 miles, at 1 in 106 average, from Prato to Vernio, speeds of 82 to 90 m. p. h. were maintained steadily. Then the 11½ miles Appennine tunnel was entered at 99 m. p. h. and left at 109 m. p. h. Although there are twelve curves between Prato and Vernio of 30 ch. radius none of them was taken at less than 88 m. p. h. and the speed reductions for later curves of 35 and 40 ch. radius were not below 90 m. p. h. Through the bigger stations speed was reduced to 50 m. p. h. at Florence, 83 at Modena, 87 at Reggio d'Emilia, 63 at Piacenza and 81 at Lodi. The first 10.7 miles out of Florence to Prato took 8.5 mins. and Bologna 60.2 miles was passed in 39 mins. (this length includes a climb of 845 ft. from Prato to the 1058 ft. Summit in the Appennine tunnel). The remaining 136 miles from Bologna to Milan was reeled off in 76.2 mins. making a total of 115.2 mins. for a distance of 195.8 miles and requiring an overall average speed of 101.8 m. p. h. This train passed over numerous facing points that were operated by adjacent hand levers without any kind of interlocking which is still the practice in Italy today, even on main lines. After the pointsman

has thrown the points, and locked them with a special key, he goes to the signal box, hands the key to the signalman (in whose possession it must remain until the train has passed) and signs for his action in a register; in some cases the key must be inserted in the signal frame before the running signals can be pulled off. This is at smaller stations only. The larger stations and junctions have power worked signals and switches. Considerable risks must have been taken on this run and it can be imagined that not a few of those on board heaved a sigh of relief when the train finally came to a stop at Milan.

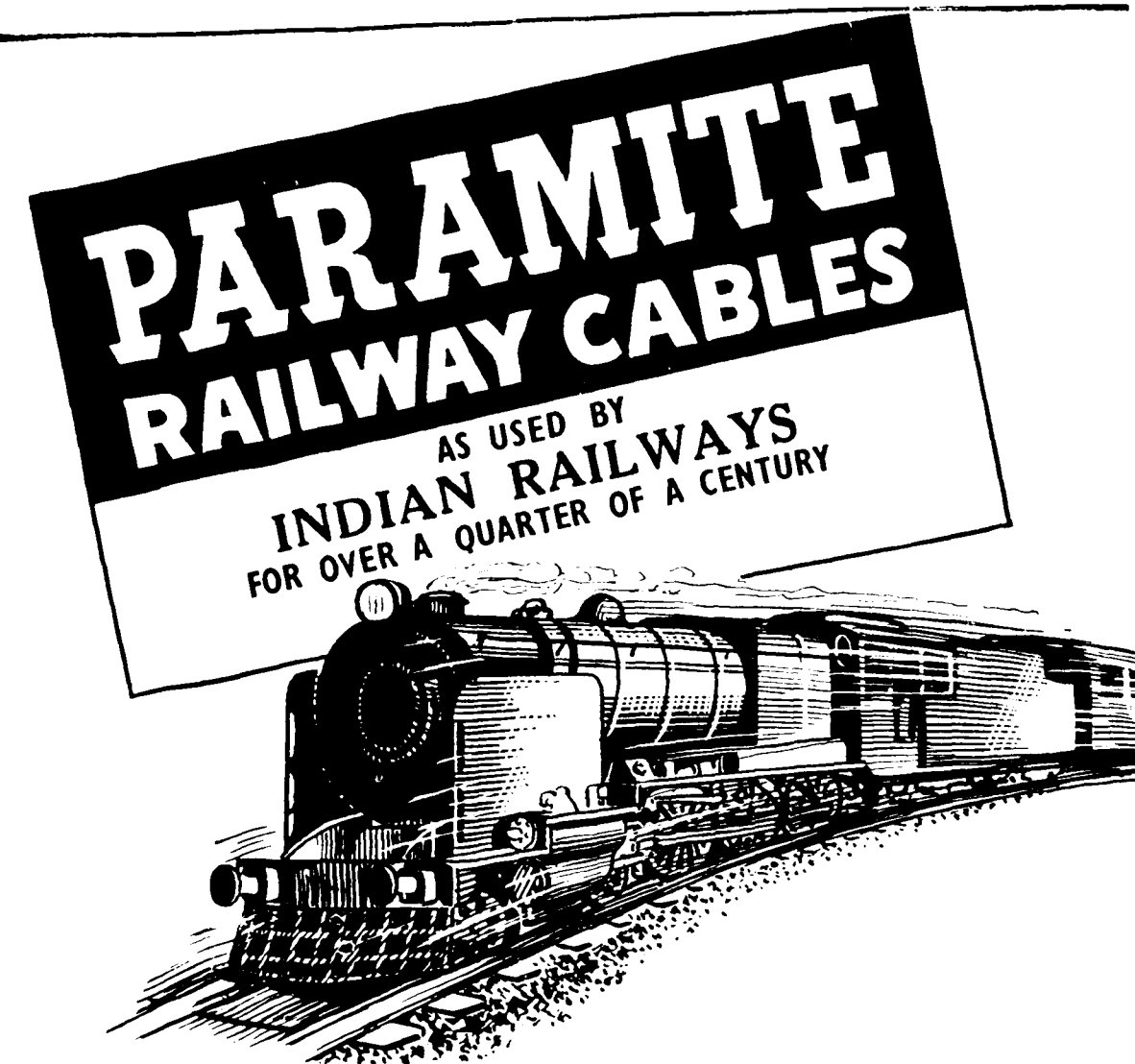
The largest tanker yet built in Britain was launched in Vickers Armstrongs naval yard recently. This was the 33,000 ton ship "World Harmony". The Duchess of Kent named the vessel. She paid tribute to "the enterprise of my native land and the skill and craftsmanship of the country in which I have lived so long and come to love so much". The Greek owner of "World Harmony", Mr. Stavros Niarchos, has built up a tanker fleet of 1,200,000 tons in a few years. He said he was negotiating for the ship to fly the Greek flag. Lt. Gen. Sir Renald Weeks, Chairman of Vickers Ltd. said that Mr. Niarchos had handed him cheques for local charities and for the Royal National Lifeboat Institution of which the Duchess was President.

An analysis of road accidents in 1952, published recently by the Ministry of Transport, blames road defects as contributory factors to mishaps to 1478 vehicles. Wheels catching in tram tracks figured in 67 accidents and animals on the road in 3,991. "While improved road conditions would have led to a reduction in road accidents," the report states, "much more could have been done even without such improvements by more intelligent and more considerate road conduct". In a foreword Mr. Lennox-Boyd, Minister of Transport, wrote:—"Better roads would help and I am anxious to see an expanded programme of road improvements put in hand as soon as our resources permit. But better roads alone will not solve the problem. Accidents in the main arise from the taking of very small risks a very large number of times. A thousand to one chance against an accident may not be rated very high but for every thousand people that take it there will be an accident." In 1952 there were 208,012 casualties including 4,706 killed and 50,351 seriously hurt. In 1953, when the number of road vehicles licensed rose by 400,000 casualties totalled 226,520 including 5,070 killed and 56,452 seriously injured. Between 1938 and 1952 the population increased 6%, and the number of vehicles licensed by about 503 to just over 4,500,000. Mileage of cars and taxis altered little but that for goods, public service vehicles and motor cycles rose by about 503. Referring to the steadily increasing casualty rate between

1949 and 1951, the report says that the improvement in 1952 is difficult to account for with any certainty. It may be regarded as an exceptional year, perhaps largely due to the introduction of zebra crossings. Of the 264,000 vehicles involved in the year's accidents, 76,000 were private cars, 55,700 cycles, 46,000 motor cycles, 46,000 goods vehicles and 27,000 buses and coaches. 763 of these accidents were on speed limit roads. In spite of this, a motorist visiting the United Kingdom would marvel at the fine roads, direction signs, street signals and traffic regulations and general orderliness. Perhaps without these facilities the figures would be much higher.

When the SS "Arnhem" was brought into service on the L. N. E. R. Harwich—Hook of Holland night service in 1947 she was designed as a one class ship. Although she was provided with first class cabins on the upper and second class cabins on the lower decks, the public rooms were available for both classes of passengers. Subsequent experience has shown that one class ships are not popular on this route and arrangements are being put in hand to convert the "Arnhem" to the same standard as the "Amsterdam" and the "Duke of York" the sister ships operating this service. The alterations will consist, on the promenade deck, of converting the existing lounge, first class bar, pantry, and other accommodation into first and second class lounges and dining saloons. One bar will serve both the first and second class lounges but an entrance hall will be provided on the port side for second class passengers. This move shows that a considerable portion of the travelling public is prepared to pay for superior accommodation even on a relatively short journey—a factor to be borne in mind when contemplating alteration in railway passenger classes—and that the luxury of the public rooms used only for a few hours on a night crossing, is appreciated by the passengers.

Although the British Railways were formed over six years ago, each region is still using a very considerable amount of crockery bearing the crest of the former railways, the policy being only to replace these items by those bearing the new British Railway crest as and when required. A sensation has been caused by a complaint received by the National Union of Railwaymen that during the week 14th to 21st February thousands of pieces of serviceable crockery bearing the old Southern Railway crest had been deliberately smashed as being redundant. At first the British Transport Commission denied this allegation. They said that at Waterloo Station, of 3,276 items only one quarter were authorised to be broken up and not because of the crest but because of discolouration, cracking, chipping, etc. No surplus crockery was broken up unless and until it

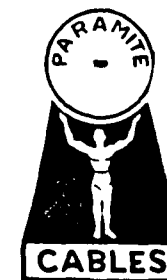


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had been personally inspected by a responsible official. Sir Brian Robertson, Chairman of the British Transport Commission, considered, however, that the matter should be further gone into. He asked Mr. Lennox-Boyd, Minister for Transport, to arrange an impartial enquiry. Lt. General Sir Humphrey Gale, Colonel Commandant of the Army Catering Corps, is to conduct an immediate enquiry into the matter. Apparently 3,726 pieces of crockery marked as redundant were smashed and 14½ cwt. silver plated ware was sold to a dealer for scrap. The Transport Commission have stated that the silver ware was obsolete. It is of course obvious that if cups, saucers, plates etc. are discoloured, chipped or cracked passengers will complain. There is no suitable avenue for disposing of these items because dealers are naturally reluctant to purchase it because it is marked the inference ultimately being that the items were stolen from the railway.

In the development of the permanent way, sleepers of all shapes and sizes have been used. In the Civil Engineers Journal of 1842 there is an account of a triangular sleeper. This was used by the South Eastern Railway of that period. This type of sleeper was cut from a Baltic fir square baulk divided diagonally to form four sleepers. It is claimed that by this economy of timber four sleepers could be obtained from the same baulk as against two cut out in the rectangular form. It is claimed that they had an equal bearing on the ballast in a wedge form and that the surface exposed to weathering was reduced. It was found, however, that the wedge shape inclined the sleepers to sink in the ballast and heave it up between them, and that the wood was more prone to cleave than in the rectangular form.

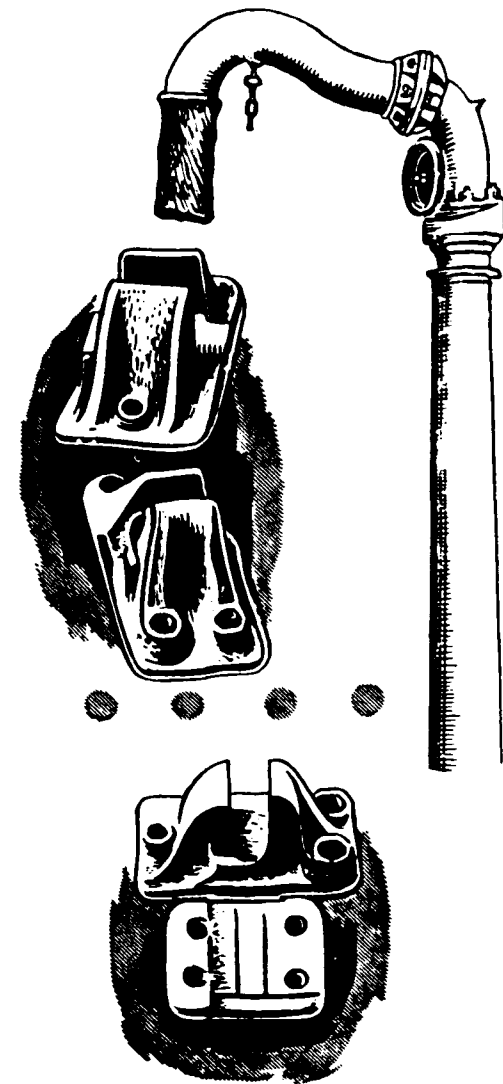
The National Coal Board is to make borings off the coast of Britain to test for undersea coal reserves. The first is likely to be in the Firth of Forth, off Fifeshire and will take place this autumn. Later, there will be borings off the north east coast of England. Mines will not be sunk in the sea but the borings will be valuable in planning new on-shore pits. There are long established mines with submarine workings in Durham, Northumberland, Cumberland and North Wales. Announcing the Board's project, Mr. E. H. Browne, Director General of Production, said that the initial outlay would be considerable. But the insurance against wrong or nugatory undersea development would be of great value in relation to the enormous capital costs involved. There is an important coal reserve off the East Coast and under the Firth of Forth. Future production in Northumberland and Durham must come to a large extent from under the sea and the Cumberland field must also be worked mainly beyond the

coastline. Heavy expenditure is necessary to work the undersea coal. The absence of boreholes was a serious disadvantage. The Coal Board have approached a firm of consulting engineers, who erected seaforths during the war and also a leading boring firm. Boring will take place from a platform similar to that used for the seaforths. The tower would be designed for any depth of water up to 20 fathoms which would permit drilling up to 3½ miles off the north east coast. Living and storage accommodation and life rafts would be provided and there would have to be navigation aids and radio.

Accidents on mountain railways operated by cable or rack and pinion are fortunately few and far between. The severe consequences following anything going wrong are sufficient reason for meticulous maintenance of equipment. On Sunday February 28th there was a serious accident on the rack rail mountain railway which runs between Bagnères de Luchon and the ski-ing resort of Superbagnères. A five car train carrying 250 skiers was descending. At a place called Mishage, 3,700 feet, there was a mechanical failure. It is believed that an electrical short circuit put the brake out of action or the cog wheel engaging with the rack rail broke. For several hundred yards the train rushed down a stretch of line with a precipice on one side and a sheer wall of rock on the other. 8 passengers jumped from the windows, struck the rock wall and fell back under the train. The train came off the rails and bounced over some rocks. The engine car, and the two behind it, fell over the precipice and into a ravine 600 feet below. Though derailed, the last two cars were saved by a brakesman who slowed them down and they became separated from the front of the train. Rescue teams reached the spot in a blizzard just before dark and found the eight skiers who jumped from the train all dead.

As this letter is being concluded the month of March has arrived with a return of the cold spell and heavy snow. Traffic both by road and rail, has been severely delayed and many motorists have had to abandon their cars. In the electrified areas of the Southern Region and the outdoor sections of London Transport, electric trains have been brought to a stand by snow and ice on the conductor rails. Because of icy conditions a bus skidded a quarter of a mile and narrowly avoided disaster. This occurred on the Cat Tor Hill, which has a gradient of one in eight, near Leek, Staffordshire. It was the last Buxton to Henley bus carrying fifteen passengers. The vehicle was brought safely to rest at the side of the road just before reaching a notoriously bad bend over a 50 ft. drop into a river. The cold spell is promised for the next two or three days with heavy falls of snow. After that, perhaps, spring!

Castings of Infinite variety



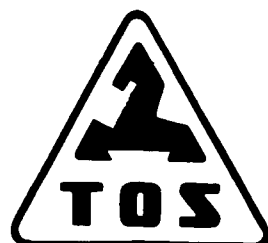
The uses to which cast iron is put by railways are innumerable. Cast iron chairs and bearing plates, pipes of all kinds, pillar water cranes for locomotives and water tanks are only a few of these. ISCO manufacture all these and many other products for railways with the utmost skill.



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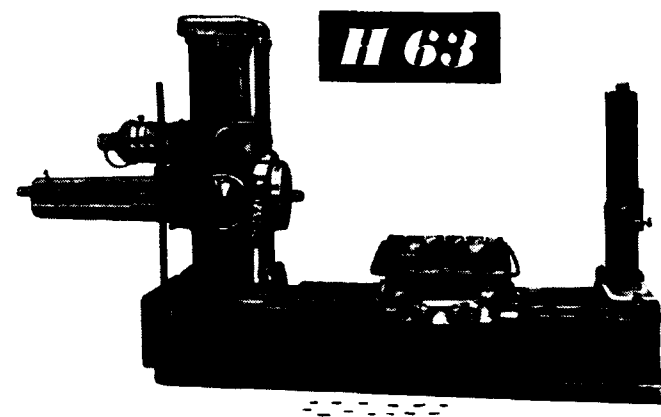
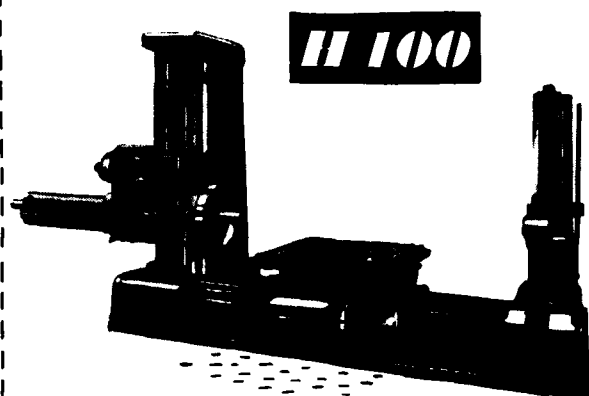
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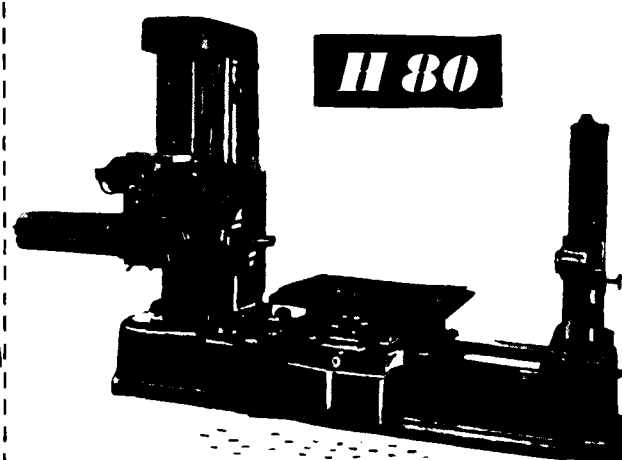
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April 1954

SOUTHERN RAILWAYS MAGAZINE

17

HOW TO RESERVE ACCOMMODATION

Unless you reserve your berth (I and II Class) or Seat (Inter and 3rd Class long distance) in advance, you may not be sure of getting accommodation on the train you wish to travel by.

Application should be made to the Station Master of your starting station at least 3 days in advance specifying the date and train by which you intend travelling and the tickets must be bought in advance. The reservation fee leviable is 8 annas per seat or berth.

Reservation by I and II Class from intermediate stations by Express trains can also be made similarly, but reservation ticket can be issued only after getting an advice from the Reservation Centre that the reservation has been made.

Tickets will be issued only if accommodation is available.

If the reserved seats or berths are not occupied at least 5 minutes before the booked departure of the train the reservation will be cancelled and the seat or berth given away to another.

Reservation fee is not refundable

III Class seats are also reservable on Express and certain other important trains for long distance passengers from the train-starting stations on payment of a reservation fee of four annas per seat.

Do not occupy a berth or seat reserved for another, as you are liable to be displaced at the last moment.

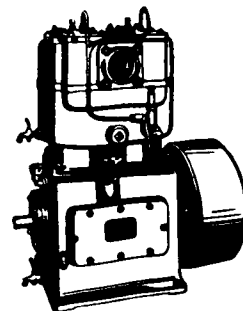
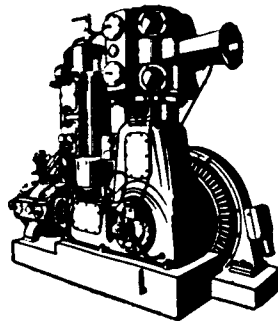
If you find another person occupying the berth or seat reserved for you and if he will not vacate it on demand, report it to the Guard or Station Master. They will help you.

(Inserted in the interests of Travelling Public by the Public Relations Officer, Southern Railways Magazine)

Atlas Diesel

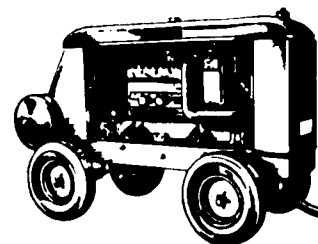
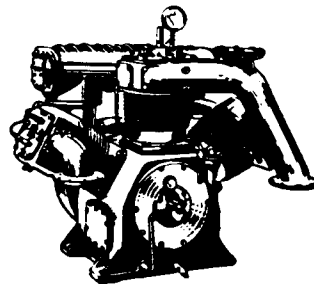
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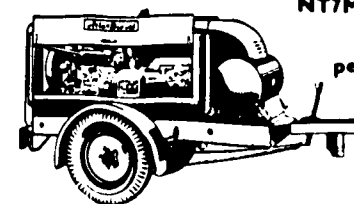
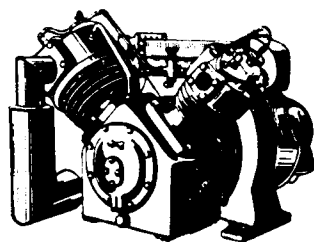
R2A6-Watercooled, stationary—one stage aircompressors. Simple, reliable, low priced and cheap in upkeep. 117 CFM capacity 100 p.s.i. working pressure.

CR-CT Class, water and aircooled 2 stage stationary air compressor. Capacity 150-330 CFM for working pressure up to 125 p.s.i.



HR4V-FR4V-Portable, 2 stage all-watercooled diesel compressors with Atlas-Diesel "Polar" engine, extremely rugged and simple, cheap upkeep, economical, favourable prices, 250 and 160 CFM capacity.

NT-Class, aircooled, 2 stage aircompressors. Compact units for direct flanging to electric motors and for Vee belt drive. 4 sizes, 35-110 CFM, working pressure up to 125 p.s.i.

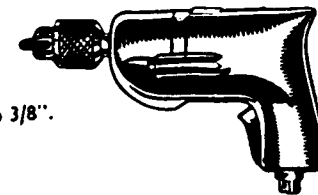


NT7MV-NT9MV-Portable 2 stage diesel and petrol driven compressors. Powered by Dorman, Armstrong or Standard engines. 60 and 110 CFM

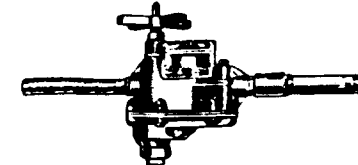
Atlas Diesel

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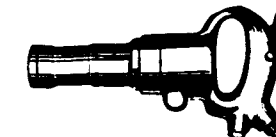
Pistol grip metal drills, up to 1/2". Pistol grip screwdrivers up to 1/4". Pistol grip tappers up to 3/8".



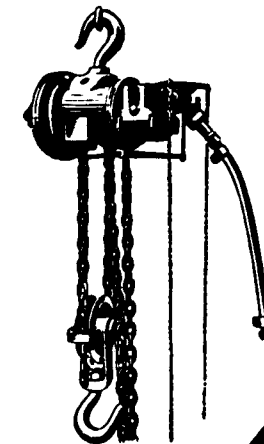
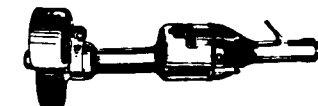
Heavy type drills max. 4".



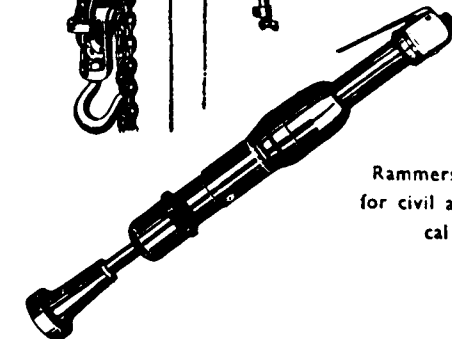
Riveters, clipping hammers, Rivet Burstors.



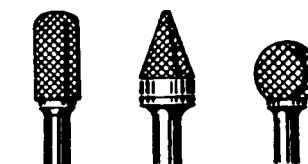
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April 1954

SOUTHERN RAILWAYS MAGAZINE

21

Australia's East-West Rail Link Set High Luxury Standard

By T. A. G. Hungerford

The new distance-chewing diesel electric locomotives of the Australian Commonwealth Railways are showing just how speedily they can bridge the thousand-odd arid miles between east and west.

THE diesels now operating on the Trans-Australian Railway cover the 1,108 miles between Port Pirie, South Australia, and Kalgoorlie, Western Australia, in 24 hours, little more than half the time formerly taken by steam trains.

The passenger accommodation is of a standard comparable with the most efficient overseas trains; it is the self-avowed masterpiece of the 79-year-old owner and director of Wogman & Co. the West Australian firm which built the trains.

The new trains are made up of nine cars; from front to rear they comprise the combination brake and power van immediately behind the locomotive, two second-class sleeping cars, second-class sleeping-lounge car, dining car, lounge car, two first-class sleeping cars and first-class sleeper-observation car.

New schedules introduced by them provide for three trips each way every week, working to an overall time of 24 hours 15 minutes. With 75 minutes allowed for intermediate stops, the running time is 23 hours, at an average speed of 48.2 miles an hour. The trains have reached a top speed of over 90 miles an hour.

The country crossed by the Trans train is like no other on earth. It is not scenically arresting. Its singular appeal lies in its vast loneliness, its hot sunset colours, its strange, eroded "other planet" mountains. In summer, mirages dance over skybound plains of hot red gibbers and gyrating spirals of dust stand like pillars between the earth and the cobalt sky.

In winter, cool winds ripple through oceans of grass and wild flowers, kangaroos and emus stand and stare as the trains roar past.

Glittering salt lakes lay a mirror to the sky or sear the eyes with a white flame, dead hills brood over the beds of long departed seas and fantastic sunsets linger in magnificent splashes of saffron and gold. At night, the moon gilds gnarled trees and glistening stones to a moon landscape and the stars seem to hang just above the low hills.

6

It is all so remote and strange as to give the feeling of intrusion into a region immeasurably old and forbidden. Although trains have made this crossing for 36 years, each traveller feels like a pioneer as, from the wide windows of the observation car, he watches it slide by.

Each car, maroon and silver in colour, is an all-welded unit, skin dressed, combining strength and lightness. The entire train is air conditioned so that even when the outside air blisters with a hundred and more degrees of heat, inside it is as cool as the spring-time bush. Each compartment receives its own quota of cooled or heated fresh air, according to the season, fed through ceiling vents from a duct running the full length of each car, from which it passes through multi-vent ceiling panels into the compartment without the slightest sensation of draught. Insulation consists of a cork and rubber mixture, glass wool and timber, then cork and then lead. Several layers of this material aggregates up to 9 ins. under the floors, and 3 ins. on the sides and ceilings.

The first-class sleeping car consists of nine two-berth compartments, carpeted throughout as are all the first class compartments. The walls are panelled in Swedish birch, the corridors outside in mahogany. Hot and cold water is provided in every compartment, with hot and cold showers in every car. An amplifier in each compartment has its own volume control, but programmes are controlled from a master set in the music room.

Each compartment is provided with a two-door locker from which the conductor, without entering, can extract shoes for cleaning. There is a wash basin, with daytime cover of shining birchwood, luggage racks, a full width wardrobe for each person, thermos flasks for either hot or cold water and a point for electric razors.

The second class compartments are only slightly less luxurious. Designed to carry 32 passengers in eight compartments of four berths each, they are upholstered in leather. For daytime use, the two upper berths are raised and the two lower break down into six separate seats with arm-rests.

177 295

Wash basins are provided with hot and cold water, there is ample luggage space, a wide-view window and a shower room at one end of the car. One of the three second-class cars has been extended to provide lounge space for 24 passengers who can spend the time there when their cabins are being prepared.

The lounge car is divided into three sections—smoking room, music room and women's room. They are pannelled throughout in elmwood, the end wall of each compartment carrying, inlaid skillfully in different coloured woods, a picture of a German castle. Upholstery in the smoking room is of red leather and in the music and women's rooms, of tapestry. Bowls of flowers, racks of magazines, card tables and, in the music room, a well patronised piano, give a homelike and informal air to the compartment. It is, as it was designed to be, a happy and congenial meeting place for the passengers.

It is unlikely that even the most blase travellers, whisked in complete comfort across the face of a great plain which has known no change in millions of years, fails to speculate on the dream, the work, the heartbreak and the ultimate triumph that laid these twin strips of steel across a waterless waste.

Perhaps the train is on the world's longest straight stretch of rail (300 miles) on the treeless Nullarbor—420 flat and featureless miles of sandstone plain where the diesel locomotive hauls its string of cars at a smooth and effortless 90 miles an hour. Behind it and in front of it the rails meet at the horizon; on either side of it no hill or house makes even a dog's-tooth indentation on the skyline. The ghostly grey and blue of saltbush and blue-bush, the red of the earth and the blue of the sky absorb and hide the whole world of men. It is as it was when first it was reared from the bottom of a primeval sea, when the pyramids were a building, when Christ was crucified, when Cortes first looked on the coveted gold of the New World, when Cook sailed into Botany Bay, when in 1870 John Forrest took five months to cross it and conceived the idea of bridging it by rail.

Can anybody, seated in cool comfort, listening to music from 500 miles away, even begin to appreciate the difficulties of that task? Of the transportation of material, labour and personal necessities for the workmen and their families, of the provision of water in an area with a yearly evaporation rate of nine feet and a yearly rainfall of eight inches? Of work in temperatures up to 114 degrees in the shade, of supply for up to 3,500 men and 750 animals, of the long trains of swaying camels that transported goods and men beyond the rail-

heads? Of the superhuman labour of building culverts and embankments and bridges in a day before the advent of bulldozers, carry-alls, graders, tractors and all the great earth-moving behemoths that are commonplace on the major construction jobs of today?

Yet it was accomplished—and by a nation at war. In September 1912, Governor-General Lord Denman, turned the first sod of the work at Port Augusta and Prime Minister Andrew Fisher performed a similar duty at Kalgoorlie five months later. Platelaying from the east was commenced in April, 1913, and from the west a month later; on October 17, 1917, the link was complete and the first passenger train travelled over the line five days later.

On the new diesel express, the child of that long and strenuous gestation, it is hard to credit, for instance, that food could ever have been a problem to travellers in this region. The dining car accommodates 48 passengers at a sitting. Shining silver and snowy linen are reflected in the birch-panelled walls and landscape windows, fitted like all the windows of the train with venetian blinds to exclude glare, allow uninterrupted views of the countryside. Service is swift and efficient; stewards were specially chosen for this showpiece train.

Fresh fruits, crisp salads, frozen desserts and a whole range of cooked meats, soups, entrees and savouries are prepared in the kitchen. The most modern cooking equipment designed for train cooking is used, but paradoxically the coal fuelled range is retained, having been proved by experience the best for the job. Whenever possible, stainless steel has been used on the workbenches, and tables and chairs are hinged so that they can be raised to expose the entire floor to cleaning. The freezing plant includes a special 120 cubic foot refrigerator.

Luxury on this train is not confined to the passengers' quarters. The dining car staff have beautifully equipped cabins at the end of the dining car, with toilets, showers and wash-basins for their personal use, and the comfort of their bunks is similar to that of the passengers' compartments.

Locomotive crews (two drivers) work an average section of 250 miles, and drivers alternate at the controls to guard against overdue fatigue. The driving cabs are fitted with refrigeration boxes, electric kettles, teapots, refrigerated water coolers, and, for the smoker, ashtrays. The guard's compartment is provided with electric heating stoves for the preparation of the crew's meals.

The locomotive that draws this 724 ft. long, 440-ton desert holiday resort with its 198 passengers was built by Clyde Engineering Co. Pty. Ltd. of Granville, near Sydney; in association with the Electromotive Division of General Motors Corporation, America. The power unit comprises a 16-cylinder V-type engine directly coupled to a 1,200 k. w. direct current generator which feeds four 400-h. p. motors. The engine develops 1,625 h. p. which sends the 108 ton engine along at its smooth and safe maximum speed of just over 90 miles an hour.

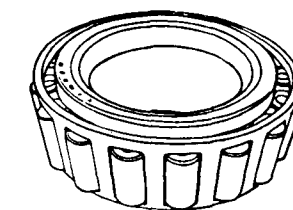
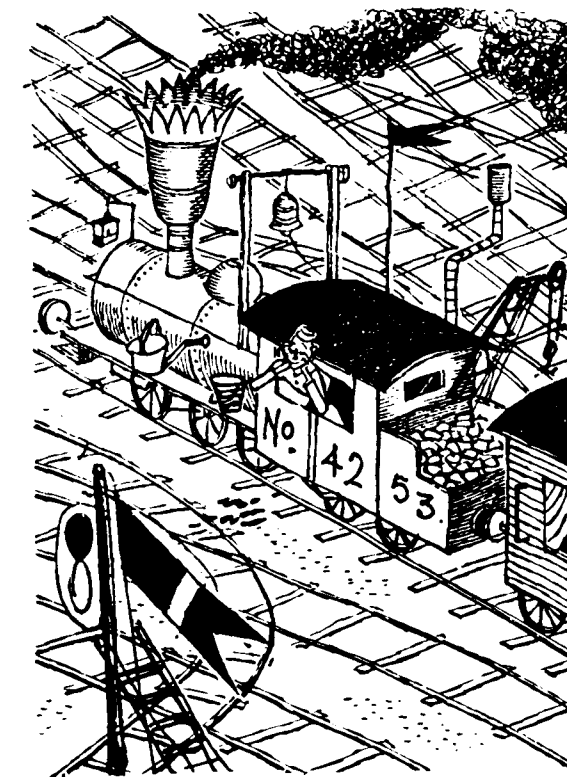
The bogies are a departure from usual Australian practice, being of the all-welded, four-wheel, individual spring, single bolster type. They are coil sprung, the main springs controlled by an inclined shock absorber with both vertical and lateral control. Tensions on the main vertical springs and for lateral control of the main springs are easily adjustable. Adjustable vertical shock absorbers are fitted over each axle box and the main spring centre is separated from the rest of the bogie by heavy rubber pads, insulating track noises. The bogie centre is also rubber insulated.

Vertical and horizontal oscillation is controlled by shock absorbers and tyres are specially profiled, the

tread being half 1 in 40 and half 1 in 20, to erase lateral oscillation.

Braking is by two separate installations on each bogie, operated by separate brake cylinders applying the brake force to a wheel and axle assembly. Slack adjusters specially made for this bogie are fitted to each cylinder. Four brake blocks to each wheel is another feature uncommon in usual practice. The cars are fitted for high speed braking at 90 lb. brake cylinder pressure as well as for the normal 50 lb., the selection being made by a centrifugovernor on the locomotive. Points of suspension or bearing which are likely to transmit vibration to the main car body are fitted with rubber pads, no effort being spared to ensure a smooth, comfortable ride.

Before the advent of the diesel express, one-fifth of the total ton-mileage of the railways operation was devoted to carrying supplies—mainly water and coal—for the steam locos. The diesels have eliminated that crippling overhead as well as cutting the time of the trip by a day.



WJX 148

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Railway Training Centre for ECAFE Countries

U. K. TO PROVIDE £26,000 WORTH OF EQUIPMENT

BRITISH manufacturers are joining the United Kingdom Government in contributing £26,000 worth of up-to-date signalling equipment to a United Nations railway training centre in Pakistan. Half the cost is being borne by the suppliers of the equipment and half by the British Government under the Technical Co-operation Scheme of the Colombo Plan.

The equipment is for a railway training centre being established at Lahore to provide training in up-to-date railway operation for students from all the countries which are members of the Economic Commission for Asia and the Far East (ECAFE).

The establishment of the centre is a joint venture by the United Nations Technical Assistance Administration and ECAFE, and the equipment required will be provided not only by Britain but by the U. S. A., France, the Netherlands and Japan. The buildings for the centre are being provided by the Government of Pakistan.

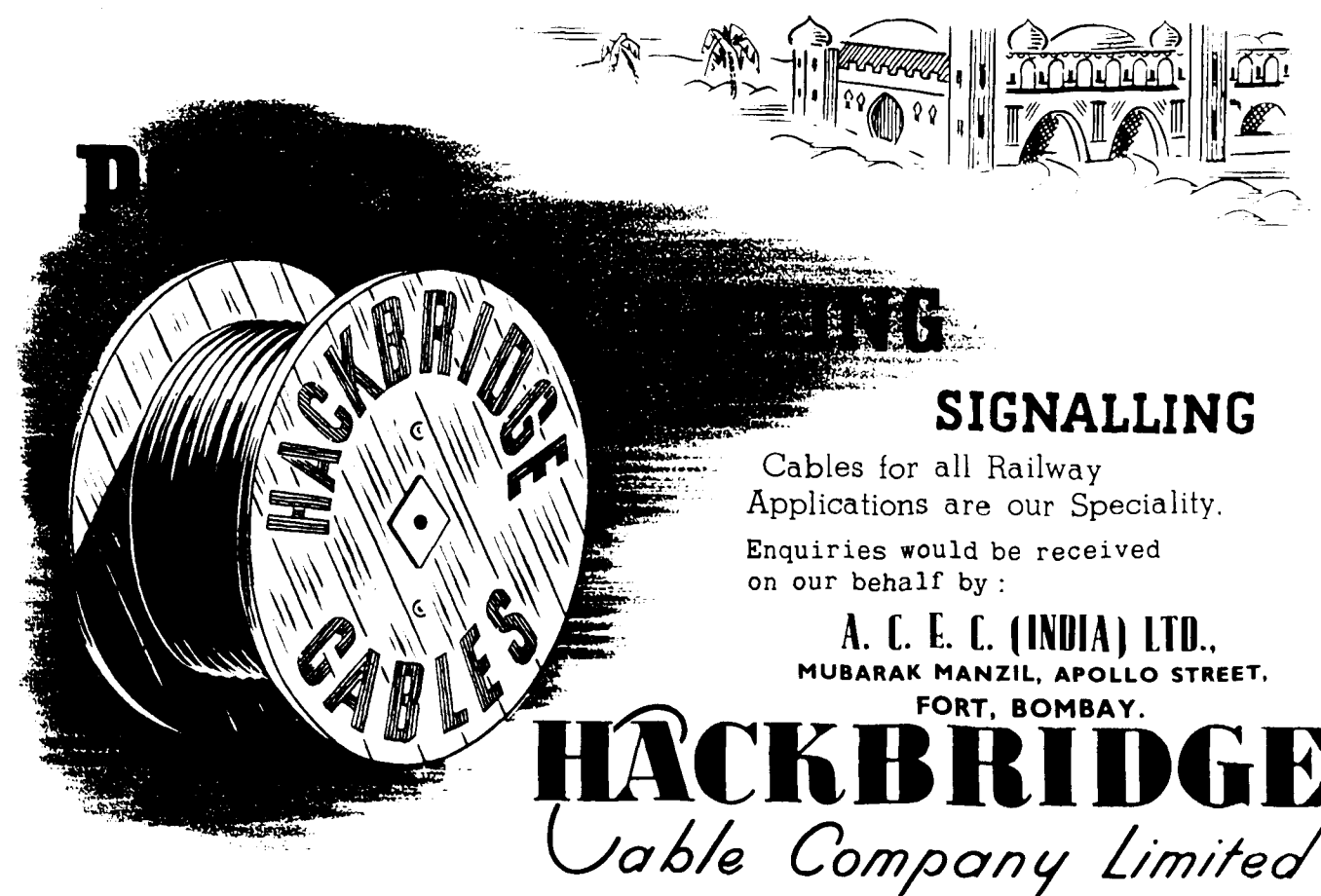
The United Kingdom is also providing the services of the principal lecturer for the centre. He is Mr. Rogers, of Knebworth, Hertfordshire, who is already at Lahore and has been temporarily released for this purpose from his post of Deputy Chief Signal Engineer of the British Transport Commission.

BRITISH CONTRIBUTION

Britain's contribution will form the bulk of the signalling equipment. It will include all forms of mechanical signalling apparatus; a complete relay interlocking installation for a typical station, including colour light signals and power-operated point machines; and single—and double-line block instruments. The British Government also has under consideration the supply of further equipment, including batteries and cable.

Lahore was chosen as the site for the training centre by the U. N. Technical Assistance Administration because of the facilities provided by a railway training school already in existence there. The Technibal Assistance Administration has entered into an agreement with

(Continued on page 25)



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THE SOUTHERN SCENE SERIES—II

MATHURAI—THE 'ATHENS' OF THE EAST

By Nilkan Perumal

MATHURAI has been described as the *City of Festivals*. This means, there is religious festivity in all the twelve months of the year, here. But, this month (April) the most important of the festivals of the Temple of Sri Minakshi takes place. *Chitra Puarnami* (the full moon day of the month) is all too significant, and pilgrims pour in here in their thousands for the event. This is a city of a hundred temples, and in them you see classic Tamilian architecture and historic inscriptions which give us an insight into the days that the Glory was Mathurai, in the ancient past. Here is a temple in which you find the image of God Natraja whose right-foot touches the ground, whereas in all other places it is the left-foot! The *Thirumal Naick hall*, the *pond of the lily*, the *music pillar* in the Minakshi temple, all are significant for the pilgrim.

Mathurai is a city of history and legend, culture and civilization of the Tamils in South India. The seat of the old Pandya Kings, they were the earliest, in the world to send political envoys to distant lands, understanding the utility of diplomacy. They sent to the court of Kubli Khan in China a Representative, centuries ago! This is also the city where the Shaivite-Gods played their miracles in those days men treasured their faith towards the Almighty, and the Shaivite Saints recorded their immortal songs on palm-leaf scrolls on the ways of man and the path to salvation for the human soul. By the side of the city flows the historic river *Vaigai* about which are woven countless fables, from times pre-historic. When scholars of those days disputed on the truth of a palm-leaf script extolling the greatness of Hinduism, they put it to test on the waters of the *Vaigai*, when it swam upstream, performing a miracle and scoring a triumph for the greatness of the Shaivite-creed, as against the disputing Jains from the far off North! In Mathurai also existed the true centre of Tamilian culture in all its splendour, and that was in the years, even before the birth of Christ. The *Tamil Sangham* which was patronized

by scholars and saints, and which gave birth to many treasures to the knowledge of man, is a name still venerated by those who talk the most ancients of world's languages. Lord Curzon, the one time British Viceroy of India called Mathurai, the *Athens of the East* in all propriety, and no wonder, that His Lordship was right in his sense of fairness, atleast in this. Mathurai also gave birth to an immortal classic legend of the Tamils, the *story of Kannagi*, the most virtuous woman who ever treaded the soil of the earth. Suffering from a grave injustice in the execution of her husband, she hurled many curses on the ruling Pandyan monarch of Mathurai in her day, that leading to the destruction of the City in flames and pestilence, and the monarch's dynasty coming to a dead end. The episode is precious to every Tamil even to this day, that they read it in prose and poetry, to preserve the legend in all its glory. It is even enacted on the stage and in street-plays, also depicted on the screen. Such is its importance as recorded in that monumental work *Silapathigaram*, beloved to all Tamils althrough the ages and considered the oldest literature of theirs.

The second important city in the State of Madras, in size and population, this temple-city of the South is a delight to tourists. Tall towers of the temples rising towards the sky greet you as your train approaches the place. They proclaim the religious side of the city which is the most important about it. A place of industry too, there are textile mills here producing the music of the whirling spindle and the weaving-loom, from the *House of Harveys* and a few others. Mathurai is also a centre of the hand-loom industry having a fairly good number of people engaged in it. A Municipality looks after the administration of the place, but a growing population is causing anxiety to the authorities as to how best civic amenities could be expanded to make the city happy for the citizens. A City full of life, its importance is growing more and more, as day succeeds day.

(Continued from page 24)

the Government of Pakistan providing for the new centre to be administered by a committee of management to be recruited mainly from the countries of the region, but to include U. N. officials.

By providing training in up-to-date methods of train working, signalling, and communications for junior executive officials, the new centre will assist in expanding the capacity of the railway systems of the ECAFE area.

Locomotives to Meet all Requirements

By The Secretary, Locomotive Manufacturers' Association of Great Britain

This article describes some of the aspects of the British locomotive industry which has played a prominent part in the life of the Indian Railways.

THE building of locomotives has been an important industry in Great Britain since the locomotive was, as is well known, brought to fruition by a group of brilliant British engineers working in the first years of the 19th century. So great was their prestige and so excellent their products that the first locomotive in almost every country in the world was a British locomotive and the high reputation then established has been maintained.

In modern times 80 per cent. of the locomotives built in Britain are for export and the long experience which British manufacturers have of the conditions and operating methods in all parts of the world is of great service to them in designing locomotives which will meet the requirements of overseas locomotive engineers and suit every condition.

The design of a locomotive depends upon the fuel it will use, the trains it will haul, the natural conditions with which it must cope and the staff which must maintain it. The best fuel used is naturally that which provides traction at the cheapest cost. It may be better to import oil rather than use inferior coal or firewood. On the other hand, high interest rates on the extra capital cost of diesel or electric power may swallow up their operating economies. Furthermore, the availability of trained diesel and electric fitters is often a controlling factor.

The whole subject of relative costs and efficiency requires in each case careful study with a full knowledge of local conditions. The decision in this matter rests with railway authorities but the British industry is always willing to give advice on the matter and co-operate in producing locomotives which will give the best possible service under every condition.

33 FIRMS

There are no less than 33 firms in Britain which build locomotives, and railcars. These vary in size and in type of product. While some firms build steam, diesel and electric locomotives others specialise in one or other form of motive power. Further, some firms devote themselves principally to main line locomotives, while others concentrate their energies on industrial mining and shuttling

locomotives. The industry as a whole can in normal times produce as many as 1,000 locomotives per year.

It is sometimes said that British firms cannot deliver locomotives as quickly as can their foreign competitors. This is incorrect, but it is nevertheless true that average delivery periods are longer simply because the high quality and low price of British locomotives have caused so great a world-wide demand that there is a long list of orders on the books of every firm. Many railways prefer to order their locomotives well in advance and this is undoubtedly an efficient policy.

A few examples of modern British locomotives may appropriately commence with the first standard locomotives for the British Railways. This is a steam locomotive of medium power for both passenger and goods work. It is of the Pacific type with a 20-ton axle-load and 6 ft. 2 ins. dia. driving wheels. It has a large grate area to enable it to burn inferior coal efficiently and a big boiler to allow it to climb hills rapidly. The standard of design and workmanship of this locomotive is on a par with any diesel or electric locomotive in the world today for its measurements are accurate to thousandths of an inch, it has roller bearings, streamlined steam passages and is ultramodern in every respect.

LOCO. FOR INDIA

An equally modern steam locomotive which was designed in India and manufactured in Britain is for the metre gauge having a 10½ ton axle-load and driving wheels 4 ft. 6 ins. in dia. Like the locomotive above, it is suitable for both passenger and goods work. Its ratios of grate area, boiler and tractive effort are all in line with modern standards and it is giving excellent service in a wide variety of duties.

Ceylon finds it better to use oil rather than coal and new locomotives now being supplied by Britain are of the diesel electric type. These locomotives are of the A1A-A1A double bogie type of 1,250 B. H. P. having a 15-ton axle-load. They are equipped with pressure-charged Mirrlees 12-cylinder engines and Brush electric equipment. These locomotives are performing satisfactorily under the special conditions found in Ceylon.

(Continued on page 27)

SUDHA'S AYAH

By Amar

“POST”

“Postman, Sir”

Nirupama went to the window overlooking their compound, she prayed as she saw her father receive a letter from the postman that it was not from Surendra's father Surendra the son and heir of the multi millionaire Gopinath had fallen a victim to the slim nymph like beauty of Nirupama, but the very thought of him brought a sickening feeling in Nirupama's mind. Nirupama knew very well that she herself was to be blamed for that. She was fully aware that by letting go the bird in hand she was waiting for the bird in the bush to turn up. Many girls would have died to marry the handsome Surendra. Girls stared at the big black stude car whenever it drew itself at her gate and envied her. She knew Surendra would kiss the ground she trod on. She asked herself what was wrong with Surendra, true he had only passed the Matric examination that too because his fathers fat purse lost some of its weight; but what did education count now a days, what was the fate of her colleague Srikant who was the darling of professors and had come out of the university with flying colours? Was he not toiling in some remote school 20 hours a day and 6 days a week? His salary was not half the rent of one of the many houses of Surendra. Will she not be happy with Surendra in his mansion giving large parties? No she then

and there decided she would rather slave 20 hours a day for her loved one than spend 20 hours idly on a “Beauty rest” as Mrs. Surendra.

* * * * *

“Again a letter has come from Gopinath, offering to make Nirupama his daughter-in-law darling”. Nirupama heard her father telling her mother in the afternoon “Oh, why should not the old man let me alone” sighed Nirupama. So what she feared and hoped not was true. Nirupama strained her ears to hear more.

“Yes, why not, you are no good with her, I will just go to her and give her a piece of my mind. All this trouble is because of you, for you spoilt her by giving her freedom in everything and giving her such high education, who gave me any education, am I not a capable housewife, who dare say anything against us and who asked our opinion when we were married, are we not happy? I can't understand what Nirupama finds in Surendra that is objectionable, what if he is not educated, education is meant for those who have to find a livelihood. I will go and tell her that if she misses this chance she will regret for her life” it seemed as if her mother would not stop.

“Oh, what shall I do” Nirupama waited burying her face in the pillow, days of misery and ill-feeling between

(Continued from page 26)

Another type of diesel locomotive built for entirely different service is a 500 H. P. locomotive with a 14-ton axle-load developed for use in Peru where the railways are steeply graded and attain great heights above sea level. Unlike the locomotive for Ceylon, this locomotive has mechanical transmission and is of 0—8—0 type.

ELECTRIC TRACTION

More passengers are moved by electric traction in Britain than in any other country and Britain took an early lead in this field. An example of the latest type of electric locomotive is that designed and built in Britain for the Spanish National Railways. These locomotives are of 3,600 H. P., have an axle-load of 17-tons and are performing well in conditions which are far from easy. These locomotives resemble in many respects some earlier locomotives built in Britain for Brazil which are also giving excellent service.

The majority of electric traction in Britain itself is on the multiple-unit system and it is generally conceded that London leads the world in its suburban services. Some new trains put into service on the Eastern regions are made up of 3-car train sets each having four 110 H.P. motors and a seating capacity of 176. Their good acceleration, high maximum speed and powerful brakes enable them to maintain fast services on the heavily loaded lines out of London.

These examples are sufficient to show the trend of modern British design, but research continues in all forms of motive power. At present, much work is being devoted to the development of gas turbine locomotives. These are still in the experimental stage but are showing good promise of success. This flow of new ideas coupled with the proverbial high standard of British workmanship enables the British locomotive industry to face any competition.

herself and her parents on the refusal to this match floated before her eyes sending a chill down her back, the book she was reading fell down making a noise which brought another wave of conversation to her ".....I don't think, as you say, that Gopinath will repeat his offer, anyway I will ask her in the night and this time I intend to be stein with her" her father was saying.

Nirupama sprang up from her bed, thousands of thoughts raced in her brain, clashing with one another, loyalty to her parents, to fight against the desire to submit to her parents and marry Surendra or to stand on her own feet and choose her beloved herself clashed with one another and each one seemed to have the upper hand for one moment then suddenly an idea struck her. Yes when had she seen that advertisement seeking governess for an one year old motherless child she picked up the newspaper on the table and looked through the "wanted" column. There it was.

"Wanted an educated and well cultured young lady to look after an one year motherless child. Decent salary. Free Boarding and lodging must be prepared to stay with the family. Apply personally to "Narendranath Ghore, Sunder Bagh, Bhavanipur before 2—12—1952". Nirupama thought deeply for few minutes. In those few minutes she had reached a decision.

* * * * *

A young lady neatly dressed stood before the front door of a fashionable Bungalow in the outskirts of Bhavanipur. She wore a pink georgette which clung to her slender form. Her face was flushed with excitement, fear and by the brisk walk she had taken from her hotel. She pressed the bell with trembling hands, an elderly servant opened the door and led her to the drawing room and inquired whom she wished to see. On being told that she wished to see his master, grumbled something about his master disturbed during his breakfast. Nirupama sat in one of the many chairs and looked round. It was a big room lavishly furnished the person who had furnished it certainly had plenty of artistic sense but the next moment Nirupama saw that carelessness must have crept into it lately for the top of the grand baby piano was filled with dust, newspapers were scattered all round and toys could be seen everywhere, infact the room looked like a beautiful lady faded into an ignoble position by some terrible tragedy. Nirupama's eyes wandered all round the room and rested on a picture of a lady. The lady in the picture was a lovely lady with the lovely face of a girl unwilling as if to let the girlhood go and let womanhood bloom. Who can it be? If she was the mistress of the house, now dead and gone, what would the master of the house be like? What if

he was a pot bellied upstairs to whom money mattered little on the other hand what if he was an absent minded professor to whom life was nothing but a dream? Nirupama was suddenly jerked into reality by the entrance of a youngman of about 32 or 34. He was tall and well built man with a handsome face which gave the impression that he knew more than what his face revealed. He smiled benevolently at Nirupama and started without any introduction "Did I startle you, if so I am very sorry, I am a man of little or no conventions". His manner was simple and charming.

"Certainly not! I was just admiring your fine furniture and regretting its..."

What Nirupama was thinking came out into words. But she checked herself she did not want him to know what has passed in her mind.

"And regretting its decline" the stranger completed the sentence for her Nirupama felt like a teenager who was caught in the act of copying from her neighbour, seeing her embarrassment the young man drew a chair in front of her and introduced himself.

"I am Narendranath Ghore. I am sure you have come in response to my advertisement in the "Tide". I am a busy man with little leisure to spare for empty formalities. Let me see, well Miss..." He stopped not knowing how to proceed, "Nirupama" she said quickly.

"Well, Miss. Nirupama..." again he halted raising his eye-brows as if he expected her to enlighten him again by supplying her surname.

"Miss. Nirupama will do" she blushed, what a fool she was not to have thought of a suitable surname before hand, she had unnecessarily created a suspicion that she was ashamed of her surname or that she did not want to disclose it for some big reason. But none of these seemed to disturb the cool mindedness of Narendra he continued as if he did not care for it.

"Well, Miss. Nirupama, are my terms acceptable to you? Are you satisfied with them or do you have any fresh ones" he asked.

"Only one" she said "that is you should never ask anything about my family nor should you ask any personal questions" she feebly told him.

"That is O. K." he said. "I do respect the feelings of others, if that is the only condition, may I consider that you are going to work for me".

"Yes sir" Nirupama sighed with relief she had never hoped to be let off so easily!

"Nanda" he shouted and the oily faced man again appeared. "Nanda, here is Sudha's new governess, show her Sudha and her room" saying this he disappeared.

* * * * *

Young and Chubby Sudha was quite a lady. Nirupama learnt from the old maid who brought her luncheon and Sudha's milk that the child's mother had died when Sudha was 10 months old. Further discreet query disclosed that Mrs. Ghore was a social butterfly who cared little either for her husband or for her only lovely child. The once gay and carefree Narendra was brought to this state under her regime. Now his whole life revolved round this bit of humanity.

* * * * *

Tea at Sunderbagh was a simple affair Narendra Babu came in as it was striking 5.30. There was very little conversation during tea, he just asked her casually whether she was comfortable and how she liked Sudha.

"She is a darling, a pet" Nirupama managed to say.

"Glad you like her". He had a far away look in his big eyes "she is an unfortunate child she..." he abruptly stopped, pushed his chair back and walked out of the hall leaving Nirupama to muse over her tea. From the place where she sat she could see Narendra going into the Nursery and the old maid who come to take away the tea things hinted to Nirupama that her master spent most of his evenings with his child alone and undisturbed.

An uneventful week passed. Work in the house went on with machine like precision. Both of them would not emerge even an inch from their tight shells but both of them liked to linger over their tea longer talking all sorts of news but nothing personal. Narendra always evinced a keen interest in Sudha's progress and it was not an uncommon sight for the other occupants of the house to observe Narendra and Nirupama spending more and more time in the nursery in the evenings. Meaningful glances passed between servants. The master would come early for his time, have a leisurely tea with Nirupama and he usually took both of them, Nirupama and Sudha for a ride in the big "Hill man" sports car and return late in the night for their supper and usually Sudha was fast asleep when they returned. Nirupama began to take an active part in the household duties, the

other servants though at first resented the untrusion began to reconcile themselves as their work was lessened and Narendra would be in a jolly mood if Nirupama was about. The house took on a new appearance and Narendra usually complimented Nirupama on her excellent taste in the choice of curtained cloths and sofa covers. On these occasions she blushed to the very roots of her hair and usually she excused herself and went out of the room on some pretext. Narendra would smile but he never came in her way. She failed to understand why she who never spent more than few minutes in front of the mirror now took a long time while she dressed for tea and dinner. And Sudha, the darling had become a part of Nirupama, she would never go to bed till her aunty told her a bedside story, it was Nirupama who must give her, her bath, it was her aunty who should accompany her in her walks infact the world moved round each other, for their sake only. Sometimes Nirupama would wonder while lying on her bed, what would be her position, if Narendra decided to marry again, and what if she was asked to quit her job and who would look after Sudha. "No it can never happen" she assured herself but was she sure herself?

* * * * *

One day Narendra came back from the office earlier than usual with a telegram in his hand. His face wore sad appearance and he looked mighty disturbed. He went straight to the nursery where Nirupama was giving Sudha her evening bath. He squatted near the tub and said "May I help". It was unusual for him to offer his services in this manner.

"Certainly, if Sudha has no objection" Nirupama replied.

She hoped that he would shake his head and walk out smiling. She was wrong there, he moved near the tub and put his hand on Sudha who was trying to float a soap. His fingers accidentally touched those of Nirupama and a pleasant feeling ran down Nirupama's body and suddenly she realised that she did not want to take away her fingers and that same how she liked the touch and wanted her fingers to linger on his. She looked up and saw him smiling down at her, her heart missed a beat and she smiled back understandingly. Suddenly a cloud passed over Narendra's face and in his usual manner he announced that he expected his mother that evening and hoped that they would like each other. It was evident from his manner that he did not like the prospective visit and he dreaded it.

* * * * *

Narendra's mother arrived, just as Nirupama was emerging out of Sudha's nursery after seeing the child to bed. She proved to be a fat lady with a sour face with the expression that everybody took advantage of her goodness. She had little or no resemblance to her only son and at once Nirupama concluded that trouble was not far off in the household. Though it seemed that she was aware of Nirupama's presence in the house there was no doubt that she resented it and she made no secret of the fact in the course of two or three days.

Few weeks passed by and the old lady lingered on with sugar coated words of advice to Nirupama in Narendra's presence and direct criticism in his absence. Nirupama would have bid goodbye to her work but for her immense love for Sudha and her attachment to Narendra. No doubt their relations had reached the point of intimacy. Now a days their discussions on this point or that were so long and in so earnest that they were usually late to dinner which made the old lady frown and decide on the future path she ought to take in the interest of her one and only son. Time revealed that Narendra's mother had come to stay for good with her son and that Narendra was a mere puppet in his mother's hands. He was very fond of his mother though her insistence on certain rules made him irritable. He would not willingly disobey even one of her words. She was his Goddess. Grateful he was for all his mother had sacrificed to mould her son into what he was and she would see that her royal commands were carried out to the very letter however distasteful it might be for her son.

* * * * * *

It was a pleasant afternoon. The late winter sunshine was filtering through the net curtained windows of Nirupama. Narendra's mother was out visiting one of her friends. Sudha was absorbed in play with a new doll. Nirupama had presented to her on her birthday. Nirupama sat on a low sofa with her back to the door watching Sudha at play. Suddenly Narendra stroked into her room and broke her reverie by crying "A penny for your thoughts".

It startled Nirupama and she jerked out of the sofa and stood up not knowing who it was. She looked beautiful in the yellow winter sunshine with her dark saree and light fitting choli. Her hair was combed upwards giving her an extremely youthful look. Her fair skin was flushed to a deep rose hue by the abrupt entrance of Narendra. There was only one sofa in the room and smilingly Narendra said.

"Any objection if we share the sofa, I have come to discuss some important questions relating to Sudha".

"Not at all" what else could she say. She can't object to man occupying his own sofa in his own house. Saying this she came round and sat beside him. Both were at a loss for words. Then suddenly Sudha laughed. Nirupama and Narendra both looked up. Two pairs of eyes met an understanding glance passed between them. Sudha was absorbed in her play it seemed as if nothing could disturb her. Narendra's hand sought Miras and found them readily. His pressure on them was returned with a force full of understanding. Hours passed. Now the room was almost dark. A young moon sickle shaped floated in the sky. Two stars twinkled shyly as if they were unwilling to see what was going on in the room. Suddenly Nirupama was in Narendra's arms and her lips yielded to the pressure put on them by his lips. Both were in a ecstasy. All of a sudden Sudha looked up, clapped her hands and smiled as if she gave her consent to their behaviour. Both of them looked up. His hands went tighter. She feared that her heart would burst. She could almost hear the loud beatings of his heart. How sweet it was! How wonderful it would be if this could go on for ever!

Bang! Suddenly the door opened and Narendra's mother stood on the threshold. Narendra got up almost jerking Nirupama. Horror was clearly written on Narendra's mother's face. She turned round as abruptly as she had entered the room and went away banging the door behind her. Sudha began to cry, and Nirupama picked her up and went out of the room leaving Narendra alone with his thoughts.

She could not sleep that night. She was well aware of the tension that prevailed during dinner. It was a hot night and many pictures passed before her mind's eye as she sat in arm chair after sending Sudha to bed. The room became stiff and unbearable. So she went out on the balcony and as she passed Narendra's room bits of conversation came to her ears. The subject of which she very well knew. Suddenly Narendra's voice rose to a high pitch and she heard him say "Yes I love her, I am prepared to marry her if she agrees."

His mother's voice was also high "Certainly, I have no objection to your marrying but whom you are going to marry, is for me to decide. I am not going to allow you to marry any chip of a girl who does not even possess a family name or who does not want to reveal it to others. The Ghore family shall not be stained by the blood of an Ayah, even if she is worth her weight in gold."

"So that was the reason for the old lady's anger" thought Nirupama.

"Oh, God! How complicated things were! What if her parents should hear those words just uttered by

Narendra's mother, why the life that was so sweet till now should become so bitter suddenly?"

After a sleepless night Nirupama went to the nursery to take Sudha for a outdoor stroll only to find the room empty. All the toys, dresses and the rocking horse which she herself had presented on the child's birthday were missing. Panic stricken she yelled out for the servant who entered the room just as she was calling out and told her that his master desired to see her at once in his study. Ignoring his message she asked about Sudha and was promptly told that Narendra's mother had taken her away to her sister's house. Her sister, Nirupama tried to remember who it was, then suddenly the image of the fat lady, to whom Sudha had taken instant dislike came to her mind. She shuddered as she imagined Sudha in her house was she not herself responsible for the child's misery?

Dreamily she entered Narendra's study. He was not there "I will wait here alone" she told herself and sat in one of the chairs. The first edition of the paper had come and just to calm herself she picked it and went through the advertisement columns.

Suddenly she sat upright and could not believe her own eyes as she read "Dear Nirupama Pramukh—Mother seriously ill. Asking for you. Be a dear and return for her sake—Father".

This was another bolt from the blue. How was she to face it? Why was fate so cruel to her? First the humiliation in front of Narendra's mother, then this blow how could she bear it?

Just then Narendra entered the study. How aged he looked in one single night. His carefree and smiling face had changed into a careworn sad face it looked as though he too had spent a sleepless night.

"I am extremely sorry for last night Nirupama, it should never have happened—"

"But where is Sudha?" she interrupted him.

"That is the point for which I have asked you to come to the study. Mother has taken her to her sister's house and swears that she would not allow Sudha to come back till" he stopped unable to continue.

"Till I get out of the house" Nirupama completed the sentence. "In other words you want me to quit. But there is no need for you to tell me that, for I have already decided it. If you had not sent for me I myself would have come to bid you good-bye. I sincerely hope there is no objection for us to remain friends?"

"Certainly not! Oh. Nirupama, you are an angel. How you understand my position? What a coward I am not to stand by you, but Nirupama, what can I do? I cannot go against my mother's wishes. It was she who made what I am? She has staked all that is gems, on me. How can I go against her? I love you, I have loved you from the very day you came to this house and I will never love anybody else but you, Nirupa, my darling". His hands went round her slim waist. He bent on her and kissed her so hard that she felt that her heart would break into thousand bits and her lips melt away the touch of his.

* * * * * *

A sad and lonely figure stood before the closed doors of Rajendra Pramukh. The figure mounted the high steps with a suitcase in hand unwillingly. It knocked twice and waited as if it was waiting to get no response from inside and to get away from the house. The door opened and an old man emerged from the semi darkness of the house.

"Oh. Nirupama, is it you. Can I believe my eyes or am I dreaming?"

"How is mother?" Nirupama interrupted.

"Um. Um. She is little better but goes on asking for you. Oh dear how glad she will be, when she hears that you have come back. Where were you dear, we searched for you from such a long time?" Her father led her to her mother.

Days passed. Nirupama's mother slowly recovered but her one ambition which has almost become an obsession was to get Nirupama married soon. During the daytime she day-dreamed her daughter as housewife, during nights she dreamed her as the happy bride. Nirupama was a lifeless girl who said 'yes' to everything. No wonder she had decided to marry the very first man who came along, be he young or old, rich or poor.

Life had become miserable to Narendra. Life seemed blank without Nirupama's presence. Where was justice? Where was his heart's idol? What right had he to push an innocent girl to such a gloomy pit and he himself live a happy life? But was he happy? What a wonderful girl Nirupama was? How well she had stood by him till the last moment? What had come over him? Where was his personality and his will power? Why was he acting like man under magical spell? He pondered day and night over these questions without finding a suitable answer to any. Letters from the parents of anxious unmarried girls began to pour in as soon as it was revealed that he was in the

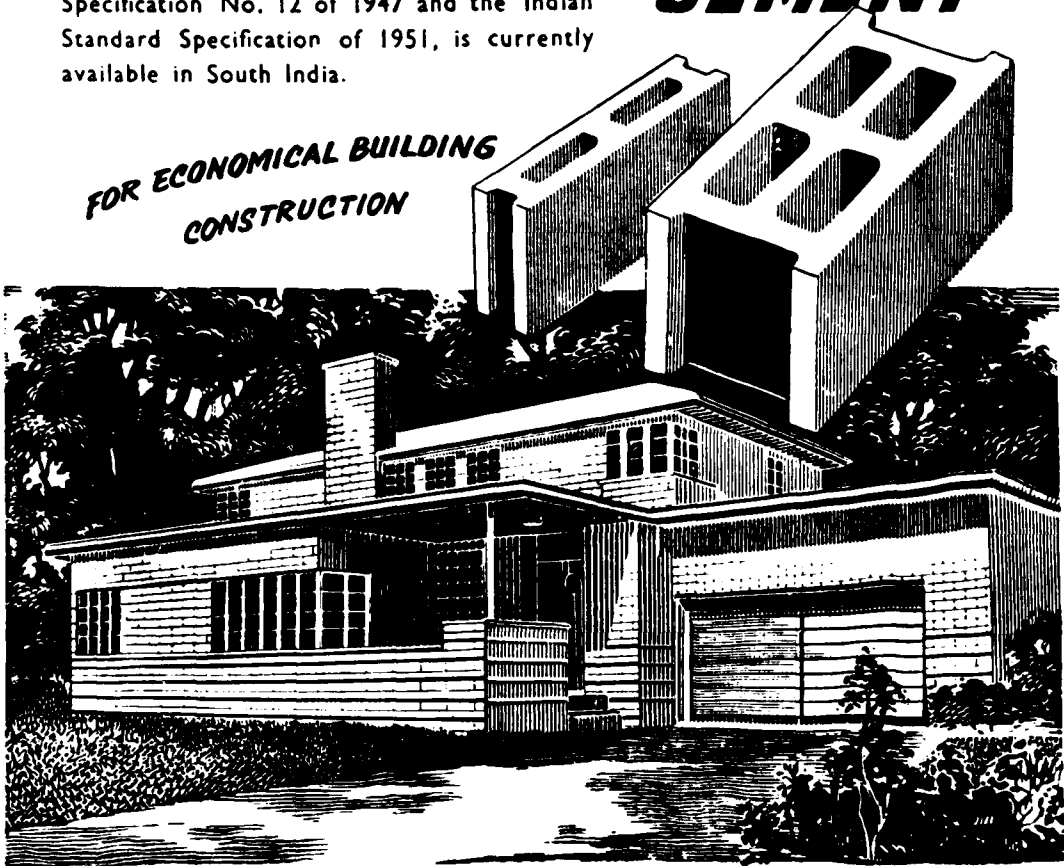
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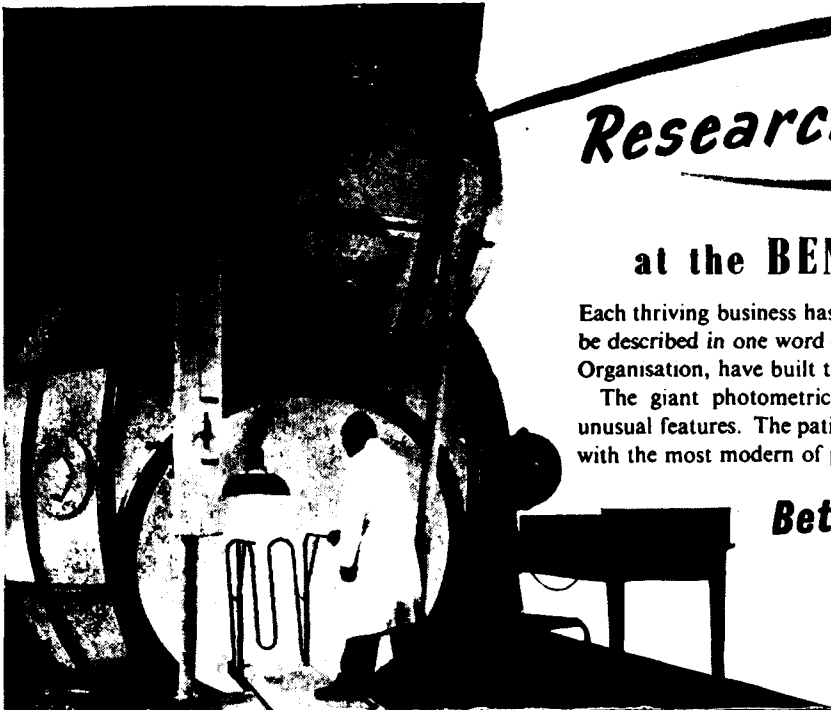
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matrimonial market. His mother insisted on his choosing one of them. No arguments could keep the old lady silent. Fed up with all this Narendra at last consented to interview the girls. His mother was overjoyed. The idea behind Narendra's consent was to interview the girls and then say that he did not approve any of them. He knew this was the only way to escape from the clutches of his mother and be loyal to his lady love. His mother knew nothing of this but was overjoyed at the prospect of Narendra getting married again. She did not want to lose this chance by giving Narendra time to change his opinion. So at once she went through the pile of letters she had received. The topmost was from one Sri Rajendra Pramukh. He had claimed relation with her family, he belonged to a respectable family, had a beautiful daughter, who was a graduate and he was very anxious to marry her very soon. What else Narendra could desire. She took the letter to Narendra and told him about it. She was surprised. He refused to see the letter but consented to call on Rajendra Pramukh next day evening.

* * * * *

Rajendra Pramukh and his wife were eagerly waiting for the gentle man, the prospective bridegroom in their

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well furnished drawing room. Fortune and good luck atleast seemed to smile upon them. A rich young man from a noble family was coming to interview Nirupama. He was reputed for his culture. Nirupama was indeed very lucky.

A Big Hillman sports car stopped in front of their door. A young, tall, good looking man, stepped out and shook hands with Pramukh and courtised to Mrs. Pramukh. They took him inside and after few minutes Sri Pramukh called out.

“Nirupama, came and meet my friend” and beamed at Narendra.

The very name stirred a hundred emotions in Narendra's heart.

A voice from his heart shouted “You are doing injustice to your love and also to another innocent girl, and you call yourself educated, cultured shame”.

The room floated before his eyes and he could feel the heavy hands of Pramukh on his shoulders and hear his voice saying :

Railway Accidents Inquiry Committee

Memorandum submitted by J. V. Somayajulu, M.A.B. Ed. Member, Southern Railway Zonal Users Consultative Committee representing Andhra Chamber of Commerce, to the Chairman, Railway Accidents Inquiry Committee on 18th March, 1954.

IT is really gratifying to note that the Government of India have appointed an expert committee to investigate into the causes of various accidents on railways and to make recommendations for preventing such accidents as the accidents have been on the increase during the past four years.

In less than four weeks from the middle of June, 1953 there have been four serious rail disasters. On June 14, there was a head on collision about 193 miles from Madras on the Dharmavaram-Pakala section of the metre gauge line of the Southern Railway involving a mixed train and a goods train. In this accident, 50 were killed and 70 injured. Again on June 16, there was another head on collision between No. 422 Parcels Mixed Train and a Goods train which occurred between Semapol and Katihar on the North Eastern Railway. The casualties were 5 killed and 50 injured. This was followed by another accident on June 17, when Madras-Bangalore Passenger Train hit the rear of a stationary goods train at Marubalam on the Southern Railway resulting in injuries to six railway employees. On July 9, an engine, a water tank, a second class and three third class bogies of Somnath Mail derailed near Ahmedabad on the metre gauge section of Western Railway.

The year 1954 also has seen many rail disasters. On 1st January, a coal loaded goods train and an empty rake of a passenger train collided near Takapara Railway Yard about a mile from Howrah Station resulting in injuries to six railway employees. On the next day Rauxaul bound 338 Down passenger train of North Eastern Railway came to a head on collision with a goods train just outside the Station, the casualty being eight killed and six injured. On 3rd January, five goods wagons and three passenger bogies of a mixed train went

off the rails near Ganatpur Station near Baroda. In this, 8 passengers have been injured. On January 4, a passenger train running between Bhatinda and Ambala Cantt. met with an accident in the early hours near Bhatinda Station. These 1954 accidents were preceded by the Deccan Queen accident which involved injuries to 47 passengers.

The Hon'ble Minister for Railway also referred to these unfortunate accidents which had all happened within a short time. We are glad that the Minister realising that it was the duty of the administration to remain alert and vigilant and see that accidents are kept down has set up the Railway Accidents Inquiry Committee under the Chairmanship of Shri Shah Nawaz



*Sri J. V. Somayajulu, M.A.B. Ed.
Vice-President, Andhra Chamber
of Commerce.*

(Continued from page 33)

"Poor boy, he is confused. The room is so stiffy".

Narendra opened his eyes. From the other end of the big room he could see a figure approaching. The figure seemed familiar. It came nearer and raised its head and Lo.....

"Nirupama, you are here, this cannot be true" he gasped.

"Narendra" whispered Nirupama "Am I dreaming?" and she flew into his arms.

"What is the matter? What in the name of hell do you mean by this Nirupama?" gasped her parents.

"There is plenty of time to explain everything. Just now leave us please" shouted Narendra as he drew her outside the room and raced for his car.

Khan. We hope and trust that the Committee which has the Chief Government Inspector for Railway and a retired General Manager of Railway as members will go into the question deeply and make concrete suggestions to the Government to minimise the accidents.

The Committee has been entrusted with the task of (a) studying the reports of enquiries into all train accidents on all Indian Railways which have taken place since 1st January, 1953 and analysing their causes, (b) examining how the recommendations made by the investigating officers have been dealt with and those accepted by the Railway Board or the Railway administrations have been implemented, and (c) making recommendations with a view to reduce the incidence of such accidents. We have gathered from press and other sources information regarding some of the accidents. It has not been possible for us to prepare an exhaustive and complete list of accidents that have occurred from 1st January, 1953 till date for various reasons.

In respect of some accidents no inquiries were made and in respect of many inquiries reports have not been yet made available to the public. Even in the case of reports made available to the public, the details of action taken on such reports are not known. Besides, there are many technical details and matters which should also be considered in this connection. It will not be possible for businessmen or their organisations to give any detailed report in this subject in view of the above handicaps. However with the available information we have attempted to give some suggestions which we hope would receive your attention.

The Railway administration is not always instituting enquiries into all accidents. According to us no accident should go without enquiry and the findings of the Inspectors of Railways should be published promptly. It is not enough to order an enquiry but the findings of the enquiry and the punishment awarded to those whose slackness or negligence might have caused the accident should be published without delay. The time taken between the date of the accident and the date of availability of the report to the public at times takes some years. This fact will be substantiated by the following:—

Details of accident and date of accident	Year of Publication of Report	When made available to public
1	2	3
1. Collision between 18 Up Passenger and 14 Up Passenger trains at	1951	March 1952

Details of accident and date of accident	Year of Publication of Report	When made available to public
1	2	3
Kolaghat Station on Howrah-Kharagpur Section on 27th August 1947.		
2. Collision between 2 Down Delhi-Calcutta Mail and 4 Down Bombay-Calcutta Mail at Hirodih station on East Indian Railway on 21st December 1947.	1951	August 1951
3. Derailement of Dehra Dun Express on Grand Chord line of E. I. Railway on 15th May 1948.	1951	November 1951
4. Collision between 8 Down Express and 49 Passenger between Puranpur and Shahgara Stations on Oudh-Tirhut Railway on 14th September 1948.	1952	July 1952
5. Derailement of passenger train near Kamarbanda Ali stations on Assam Railway on 15th November 1948.	1951	December 1951
6. Derailement of a mixed train between Tumba and Darjari on Dehri-Rohtas Light Railway on 21st February 1949.	1951	November 1951
7. Derailement of Punjab Express near Banaras Cantonment on 10th April 1949.	1950	March 1951
8. Derailement of S. 104 near Danihat station on Barharwa Loop of E. I. Railway on 14th June 1949.	1951	April 1951
9. Derailement of Calcutta Mail near Sullurpet on 3rd March 1950.	1951	March 1952

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Details of accident and date of accident	Year of Publication of Report	When made available to public
1	2	3
10. Toofan Express Collision near Karmanasa on E. I. Railway on 13th August 1950.	1951	October 1951
11. Derailment of Khargpur-Gidhi Local train near Jargaon of B. N. Railway on 18th March 1951.	1952	August 1952
12. Fire on Calcutta-Bombay Mail at Bilaspur on 11th May 1951.	1952	June 1952
13. Derailment of 1 Up link Express near Nagarakota station of Assam Railway on 26th August 1951.	1952	December 1952
14. Derailment of Down mixed train near Gotra on Shahdara-Sahranpur Light Railway on 3rd September 1951.	1952	September 1952
15. Smoke in 405 Down Local and casualties at Lower Parel Station of B. B. & C. I. Rly. on 17th October 1951.	1952	December 1952

Though several accidents have occurred after October, 1951 our Chamber does not seem to have received enquiry reports in respect of all such accidents. It is not also known whether inquiry has been ordered in respect of all accidents that have taken place in 1953 and 1954. We suggest that the enquiry should be instituted in respect of all accidents and inquiry reports should be published and made available to the public as early as possible.

In addition to the accidents mentioned above, we mention below a few accidents which have come to our knowledge together with the causes for the same :

(a) The grand Trunk Express was derailed the other day at Basin Bridge. This was believed to be due to perishing of wooden sleepers under the rail seat and the consequent widening of the gauge.

(b) Two trains collided in Pakala district a few months back due to wrong signals.

(c) A serious accident took place to a goods train on Bellary-Guntakal section between Virapur and Baivankal resulting in loss of life and property. The draw bar appears to have been broken during running and the parted portion in the rear must have bumped against the front portion.

(d) Very recently there was a derailment of goods train near Nadikudi on Guntur-Macharla section. The derailed wagon was not shifted to the standard distance. Hence two or three passengers were killed when they were riding on the foot-board of another train which passed that way.

(e) A serious railway accident was reported in Northern India due to scouring by water under a bridge.

It may be out of place to mention that the serious loss of life and property that occurred during two major incidents in the Andhra State, viz., at Ongole and Sullurpet literally made many passengers shudder the travelling by trains.

From a brief and cursory survey of a few accidents one may classify the causes for the accidents broadly under the following heads :

I. NEGLECT OF DUTIES

(a) A number of accidents could have been avoided if the low paid (Class IV) staff had been made to attend to their duties with greater care and efficiency and with enthusiasm. It should not have been difficult for the gangmen on duty to find out the perished sleepers at Basin Bridge or the scour caused by water (in North India) where a train derailed near a bridge. The railway staff could have shifted the wagon at Nadikudi to a proper distance. If they had no such facility they could have stopped the other passenger train and cautioned all passengers riding on foot-boards.

(b) Even the members of the staff belonging to class III or IV do not appear to have been strictly adhering to rules. The accident in Pakala district could have been easily avoided.

The railway administrative officials also do not appear to be very strict in enforcing all laws over the low paid staff, in view of the gradual increase in the number of recalcitrant elements among labour ranks and the long procedure involved in punishing any lazy, unruly and insubordinate workers.

II. PROPER RENEWALS AND REPLACEMENTS

The entire railway system was subjected to a very serious strain during the war period. Renewals and

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repairs are now being attended to. Further it is heartening to note that most of these things are done within our country. But the Railway administration should bestow greater attention to this aspect than at present, as it is generally believed that efficiency in these workshops is not very high, and that the quality of the material used is not superior. This is a matter for technical experts to examine. The Railway Board may examine this problem in detail.

III. GREATER CONTROL OVER EXAMINATION OF WAGONS AND COACHES

This is now being done only at certain stations. It may be advisable to examine them at intermediate stations when the trains stop for watering and for other purposes, so that defects to coaches may be located at the earliest possible time while they are running. The Inspector of Railways also has observed in respect of one inquiry (accident on Shahdara-Sahranpur Light Railway

on 3rd September 1951) that he considered "that the system of and facilities for the examination of the rolling stock need improvement".

IV. MECHANICAL DEFECTS

It spite of introducing automatic controls for regulating train movements, it is generally believed that there is still room for increasing efficiency and the technical experts may be deputed to investigate into this matter as many head on collisions were believed to be due to failure of the automatic system.

V. SABOTAGE

Many accidents were also believed to be due to wanton removal of fish-plate and rails and putting obstructions on the track by some unsocial elements of the society.

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VI. ACCIDENTAL

Some accidents may be due to purely accidental causes.

According to the annual report for 1952-53 of the Chief Government Inspector of Railways there was a clear evidence that most of the accidents were due to inefficiency or negligence on the part of the Railway staff. Many accidents occur due to removal of fish-plates, dog spikes or the rails or due to obstructions on the lines and these could be averted if the gangmen who watch the line are a little bit more vigilant. The Railway authorities should rigidly enforce the traffic rules. If there is any violation prompt action should be taken and punishment meted out. It is not known what action has been taken by the Railway administration on the reports of the Railway Inspectors.

I would, therefore, suggest that the Railway Administration may bestow special attention to the following so as to minimise and prevent accidents on railways.

1. The low paid staff should be made to realise their responsibilities. They should be made to work with enthusiasm. They must be educated by special classes and made to understand the grave responsibilities on their shoulders. Lack of education appears to make them irresponsible. The head gangmen must be trained properly. The higher officers must be made to enforce rules strictly. There should be greater co-operation between the different grades of workers. The inspecting officers on duty may be asked to go in ordinary coaches along with other passengers so that they can easily feel and detect the defects in running coaches if any and also ascertain other difficulties of the travelling public. The present procedure of giving punishments should be simplified. A good deal depends upon the low paid staff. Hence they should be made to work with enthusiasm and responsibility.

There should be adequate gangmen to watch and supervise the lines and see whether there are any obstructions or whether fish-plates or rails have been removed.

The services of the Watch and Ward staff as also the Railway and State Police who get annually over Rs. 4 crores of Railway Funds should also be utilised in

seeing that no parts are removed either from the trains or from the permanent way.

2. The rehabilitation work should be done with greater care and efficiency and also expeditiously. Proper materials also should be used. The checking over these repairs should also be improved.

3. A greater control should be exercised over the examination of trains and at as many stations as possible.

4. The automatic controls system should be perfected.

5. It is also suggested that if more powerful head lights are fitted to engines, it may enable the drivers to detect defects in time and apply brakes sufficiently in advance.

6. The number of passenger trains may be increased wherever possible so as to prevent travel on foot boards.

7. More check should be enforced to see that combustible materials are not carried in passenger trains.

8. Sufficient propaganda should be made among villagers all along the railway track so as to instill enthusiasm among the villagers and make them feel that the railways belong to them and that they should cooperate with the administration and thus prevent any acts of sabotage.

9. Replacement of parts, repairs, overhauling, etc. of the locomotives, etc. should be done periodically and proper inspection should be made before the train or locomotives leave the workshop. The present system of inspection is stated to be poor.

10. The standard of efficiency of the traffic staff should be improved by proper education and training and periodical tests should be conducted. People who fall below the standards at any time should be sent to other departments or dealt with otherwise suitably.

11. In the metre gauge sections, goods trains are not provided with vacuum brakes while passenger trains are

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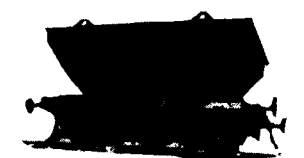
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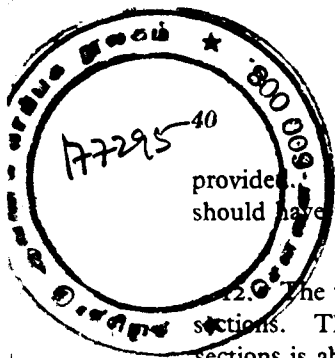
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provided. It is necessary that all trains in all gauges should have vacuum brakes.

12. The train control system is not in force in all sections. The introduction of train control in all sections is absolutely necessary.

13. At crossing points and loop lines near the Railway station adequate lighting should be provided.

14. It is stated that technically the present system of changing trains from one line to another at crossing points is not foul-proof. Railway administration should see that necessary technical assistance is taken and the defect is removed.

15. The Security Adviser to the Railway Board should also advise the Board on avoidance of accidents by effective collaboration between the Police and the Watch and Ward.

16. The Railway Administration should offer inducements to their technical and engineering personnel and also other scientists and experts in the country by offering prizes or other remunerations for inventing safety devices or devices which could avoid accidents.

17. It is understood there are equipments called line detectors which would detect any defect in the permanent way. We remember to have read some thing about this equipment in an Australian Journal last year or so. The possibility of adopting such devices in India should also be explored.

18. As far as possible passenger coaches should not be attached immediately next to engines.

19. When Railway Inspectors institute enquiries on accidents non-officials of the locality should be associated with the enquiry.

We hope and trust that the above would receive your best consideration.

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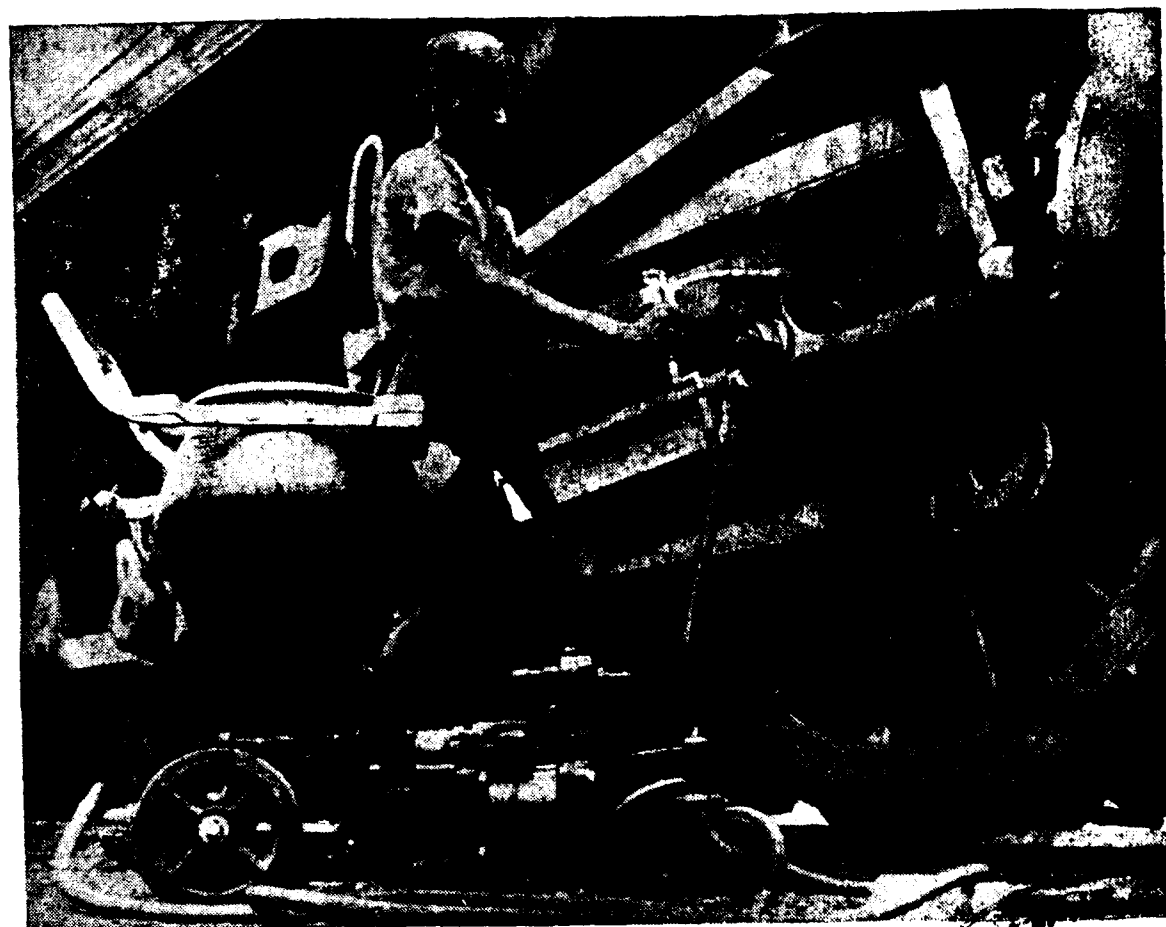
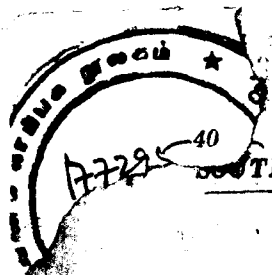
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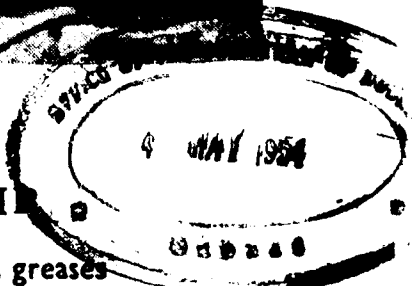
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