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Southrail news

Vol. III

Dec: 1956

no: 9

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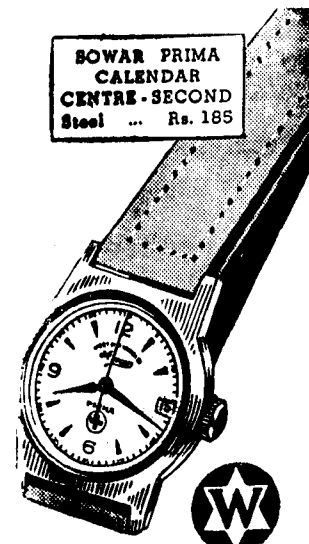
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is

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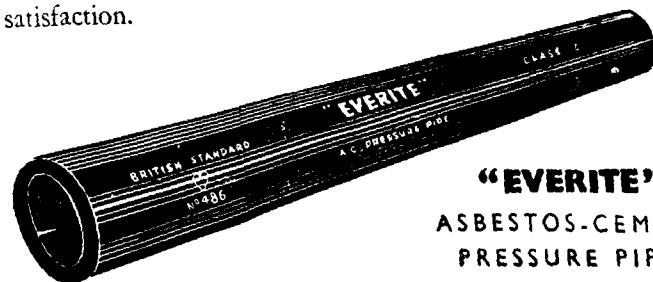
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Cover: A view of the San Thome Church,
Mylapore, Madras.



talking of pipes...

A calabash pipe, filled with overpowering shag, stimulated the inimitable Sherlock Holmes in solving crimes big and small. Solve your problems of conveying good clean water under pressure by using "Everite" Asbestos-Cement Pressure Pipes. There are none better. Manufactured to the highest standards, they are light but strong and easily and rapidly laid. They are bitumen-dipped for added safety. They cannot rust or corrode. Specify "Everite" pipes; they have been in use in India over the past 20 years. This long experience, combined with our unequalled service, is your assurance of satisfaction.



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BOMBAY CALCUTTA MADRAS PODANUR & NEW DELHI

S. 38 (b)

SOUTH RAIL NEWS

VOL. III

DECEMBER 1956

No. 9

TRAIN ACCIDENT BETWEEN ARIYALUR AND KALLAGAM

THE accident to No. 603 Madras-Tuticorin Express, which left Madras Egmore on the 22nd November 1956 night, on the 23rd morning between Ariyalur and Kallagam after passing Marudayar bridge came as a shock to the Railway authorities, the public, the Madras Government, the Ministry of Railways and the Government of India. 152 persons lost their lives and 113 were injured. Our sympathies go to the bereaved families and their friends. The Railway and the local Government rushed medical aid and treated the injured promptly in the Railway Hospital, Golden Rock and Government Civil Hospital.

GIR's enquiry is being conducted

The Government of India have ordered a judicial enquiry by a High Court Judge, Sri H. K. Basu, Sri A. R. Venkatachari, Retired Chief Engineer of Public Works Department, Government of Madras and a Railway Engineer.

Sri V. Ratnam Mudaliar, City Civil Court Judge, has been appointed as

Claims Commissioner for enquiring into and determining all claims for compensation arising from this accident.

The accident is an eye-opener. It is necessary to intensify safety precautions and patrolling during monsoon weather. It has been decided by the Ministry of Railways to intensify patrolling arrangements and safety devices irrespective of the expenditure involved. Efficiency and safety have to be placed on high pedestal in railway working. This does not necessarily mean that other items such as amenities, facilities, improvements, development and expansion will receive a set-back, but it will only mean special attention will be devoted to efficiency and safety in the railway working. No device or combination of devices is a fool-proof solution to the problem of railway safety. In every phase of this problem human equation has to be considered. In spite of the finest safety equipment, accidents due to human faults can occur.

Though there are floods, landslides, elevations, etc., the human element

December 1956

can meet the havoc caused by nature or other factors. The Gita lays down five principles for the attainment of actions :

“Pancheitani mahalaho kaaranani
nibheda me

Samkye kruthomthe proktani
sidhaye sarvakarmanam

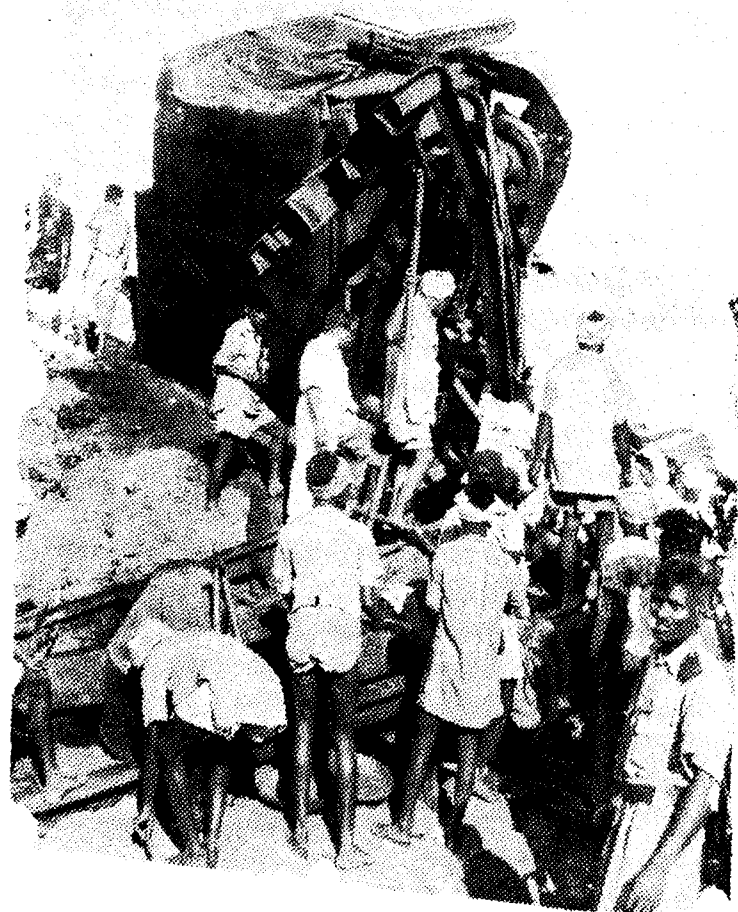
Adhishtanam thatha kartha karanam
cha prudhagyidham

Vividhascha prudhakchestta deivam
cheivaatra panchamam”

The five causes, viz., the body, the actor, the various organs, the diverse kinds of energies and the presiding deities, are declared in the Sankhyas system for the accomplishment of all actions.

Thus it is clear that the human effort, aided by providential favour, has to contribute to success. It is possible by the exercise of proper vigilance and prudence to get over many of the difficulties that face the railway working.

Salvage operations in progress at Ariyalur



RAILWAY ‘CO-OPERATIVE WEEK’

THE Madras Co-operative Societies Act lays down the object of all Co-operative Societies as :

“the promotion of thrift, self-help and mutual aid among persons with common economic needs, so as to bring better living, better business and better methods of production.”

Self help and mutual aid are the catch words ; also, service before self.

The objects of the Society are, the purchase of the necessities of life for retail to the members, the carrying on in common for the benefit of members of the Society of the trade of general dealers and the establishment and the conduct on co-operative principles of such other lines of work or departments of business as may from time to time be resolved upon by the general body of members.

From the business point of view, it is necessary that the stores are run at a profit. The primary aim of Co-operative Stores is to eliminate the middlemen. Profit earned should not go into their pockets but be distributed among members of the stores so that they may realise that by their association with the stores, they have gained.

In India there are now as a result of the enthusiastic part played by the Government and the people about

200,000 Co-operative Societies. The working capital of Co-operative Societies is Rs. 300 crores. Notwithstanding, the Reserve Bank of India and the Government are trying to help these societies.

It is the responsibility of the State Governments to foster the growth of the Co-operative Movement within their jurisdictions and up to 1949, the Railway Co-operative Stores were registered on the initiative of the employees themselves supported by the State Co-operative Departments.

From 1949 Railway Board as an employer have been encouraging the setting up of Co-operative Stores as a measure of amenity to staff and the policy formulated by the Board is being implemented by the respective Railways.

The number of members of the Co-operative Stores on the Southern Railways was 8,959 during the year ending March 31, 1955, which has increased to 9,490 during the year ending 31st March 1956. The Working Capital has increased from 1,64,436 during the previous year to 1,78,452 during the year ending 31st March 1956. The Reserve Fund has increased. The net profit has increased from about 8,000 to about 16,000 during the period ending 31st March 1956.

'Co-operative Week' was celebrated by the Southern Railway New General Offices Co-operative Stores Ltd., and the Co-operative Stores at Perambur with great enthusiasm. Important events were the flag hoisting by Sri T. S. Venkateswara Rao on 3rd November 1956 and a public meeting on the 8th November presided by Janab Muhammad Abdul Hafeez, M.A., Joint Registrar of Co-operative Societies, Madras, when Mr. S. Velayudham, M.A., Reader in Commerce, University of Madras, spoke on "Consumers' Co-operation." On the same day there was a lecture on Consumers' Co-operation by one of the Railway Officers at the Railway Co-operative Stores at Perambur, presided over by Mr. S. Chakravarti, Chief Mechanical Engineer, Southern Railway.

The primary aim of a Co-operative Society is to serve the best interest of its members and not to replace the entire band of private retailers. By trying to serve all, the requirements

of its consumers from the beginning a Co-operative Society only imperils its own existence. The societies become too unwieldy to handle and efficiency suffers.

A Co-operative Consumer Society for railwaymen, should avoid all the pitfalls and dangers inherent in such an organisation. Our efforts should, therefore, be to devise a procedure which will first and last be fraud-proof and simultaneously combine simplicity with efficiency.

On the 34th International Co-operative day, the International Co-operative Alliance and its affiliated Organisations in 38 countries, with their 120 million individual members, pledged themselves to strive more energetically to enlarge the place of the Co-operative system of voluntary Self-help in economic and social life, realising that this is vitally important for improving the standard of life in the lesser developed regions of the world.

**Greetings for a Merry Christmas
and a Happy New Year to our
Advertisers, Contributors & Readers**

NOTES AND COMMENTS

DECIMAL COINAGE SYSTEM

FROM APRIL 1

"A reform in the coinage system is a most vital reform as it touches the life and habits of every single individual", says Sri A. C. Guha, Minister for Revenue and Defence Expenditure, in his foreword to a brochure entitled "India's New Coinage Scheme" which comes into force from April 1, 1957.

"For the success of such a reform, therefore, full appreciation of the problem and the purpose is essential.

"The new coins will be put in the market (on 1st April 1957) and the existing coins also will be current for about 3 or 4 years. The rupee will remain unchanged, as also the half and the quarter rupee coins. The rupee will be divided into 100 paise, instead of the present 64 pice or paise. There will be coins for the multiples of paisa, as 2, 5, 10, 50 paise.

"For the transitional period, when both the old and the new coins will be current, to avoid confusion, the new paisa will be called *Naya Paisa*. After the transition period when the old coins will be gradually withdrawn, the lowest coin will no longer be called *Naya Paisa*, but simply paisa.

"The decimal system of coinage has been adopted by many countries in the world. Except India and Pakistan, practically all the important countries of Asia also have adopted the decimal system. After careful consideration in consultation with the Planning Commission, the State Governments, different academic institutions, Chambers of Commerce and business establishments, the Government have decided to adopt the decimal system because of its definite advantages.

"It is expected that our people would be able to adjust themselves with the new system without much difficulty. We hope the educated community would try to help the vast masses of our population in understanding and adopting the new system.

"To facilitate conversion, conversion tables will also be circulated. In the process of conversion, some adjustments have to be made in accepting slight deviations from exact equivalents in the new coins.

"We hope the Government can count on the proper understanding and willing co-operation from the people in such a big change-over: and that will be to the benefit of the people, particularly of the generations to come."

"CREATING" NEW RAIL TRANSPORT CAPACITY

In a communication addressed

December 1956

railway material should be released within five hours instead of in six, as previously. Steps are also in hand to reduce the detention of wagons in collieries and other sidings and port areas.

The Railway Board's communication emphasises that in view of the likelihood of a shortfall in the availability of rail transportation during the Second Plan period, it is of the highest importance that the maximum possible use should be made of the Railway's existing resources in wagons, engines and line capacity, as more intensive use of existing resources would mean the "creation" of additional transportation capacity.

The Railway Board has urged the business community to extend its whole-hearted support to this and to any other measures which Railway Administrations may be constrained

to take, as these measures will not only be in the wider national interests, but also in the particular interests of the large number of individual business organisations which depend for their development on the maximum possible availability of rail transportation.

DEMANDS FOR WAGONS FALL INCREASED MOVEMENT OF GOODS BY RAIL

As a result of the increased movement of goods traffic during recent months, outstanding demands for wagons have recorded an appreciable decrease. The total outstanding demands registered at Broad Gauge Stations in the beginning of August 1956, were for 87,000 wagons, as against the present outstanding demands totalling about 18,000 wagons. The figures of outstanding registrations on the various Railways are given below :

	Total outstanding registrations as on			
	1st August 1956		20th October 1956	
	B.G.	M.G.	B.G.	M.G.
Central Railway	10,514	2,313	3,400	854
Eastern Railway	2,523	..	754	..
South-Eastern Railway	28,417	..	3,500	..
Northern Railway	24,807	16,443	1,700	1,312
Western Railway	3,399	6,000	846	2,164
Southern Railway	17,339	50,110	7,800	12,673
North-Eastern Railway	..	54,134	..	43,000
Total	87,000	1,29,000	18,000	60,000

December 1956

NOTES AND COMMENTS

11

The daily loading on Broad Gauge sections of the Indian Railways being of the order of 15,000 wagons, the outstanding demands represent just about a day's loading.

On the metre gauge sections also, outstanding demands for wagons have decreased satisfactorily : as against registrations for 129,000 wagons in the beginning of August 1956, the registrations on hand at present are for about 60,000 wagons. Out of these, about 9,000 wagons are for iron and manganese ore registered in advance for clearance during the next six months, and about 35,000 wagons are for jute from stations on the North-Eastern Railway.

IRON AND MANGANESE MOVEMENTS

The movement of iron and manganese ore for export has also recorded a substantial increase, and considerable quantities of manganese and iron ore have been stocked

of any of the new lines which have had to be excluded from the Railway Plan on account of a cut in its allocation. The sum of Rs. 150 crores would, however, include some major development of line capacity on trunk routes, which would be useful even during the Third Plan period.

According to Sri Mathur, the "uncovered gap" in goods transport capacity is of the order of 30 million tons. He observes: "We cannot obviously leave this matter to chance. Since the main impact of additional traffic will come when the new steel works go into full production, there is yet time to plan".

In a series of constructive suggestions, Sri Mathur indicates the directions in which road services can supplement the effort of the Railways "to deliver the nation's goods" during the Second Plan period.

It goes without saying, he remarks, that the development of means of transport other than the Railways must be proceeded with. The road services should be developed as ancillary to the railways and should work in co-ordination with them.

Sri Mathur points out that the increase of "general goods" traffic by rail by 30 to 35 million tons by the end of the Second Plan period would mean that the road hauliers would be required to cater to the correspondingly increased terminal services. With the new emphasis on agriculture, more and more bullocks will be withdrawn from the road to the field, leaving the road services to fill the gap. Then, with the vast constructional activity going on in the country, large quantities of goods would have to be carried by road. The volume of this

traffic must steadily grow. There are also several areas which are not touched by rail or where rail transport has been deficient.

There is, in these directions, rich scope for the development of road transport, as a service supplementing the effort of the railways.

Pointing out that in the larger interest of the country road development must be well regulated, Sri Mathur advocates a "strong machinery" to ensure that road services are pressed into service only where they are really needed.

Referring to passenger transportation, Sri Mathur says that the provision made in the Railway Plan for this purpose "hardly touches the fringe of the problem." Passenger transportation, therefore, "is a field in which road services can play a more important role than they are doing at present."

In conclusion, Sri Mathur sounds a note of caution against allowing road transport to cater only to the higher-rated "cream" of traffic. This would inevitably result in the railway freight for industrial raw products being enhanced substantially.

"If, like the Railways, in areas where the Railways are under-developed, the road services were to carry low-rated traffic with high-rated traffic, mixing the lucrative with the less lucrative, they can certainly serve an important national purpose."

GURGAON PARCEL CLERK WINS CASH AWARD

Sundar Lal, a parcel clerk of the Northern Railway at Gurgaon station, has won a reward of Rs. 200 from the

General Manager for outstanding valour and presence of mind displayed by him recently.

On the last Independence Day, a pick-pocket got into a crowded train, and at Gurgaon station he is alleged to have picked a purse containing Rs. 1,500 from the pocket of a passenger. The victim immediately raised an alarm, but the pick-pocket managed to get out of the crowded compartment and ran down the platform, flashing a knife.

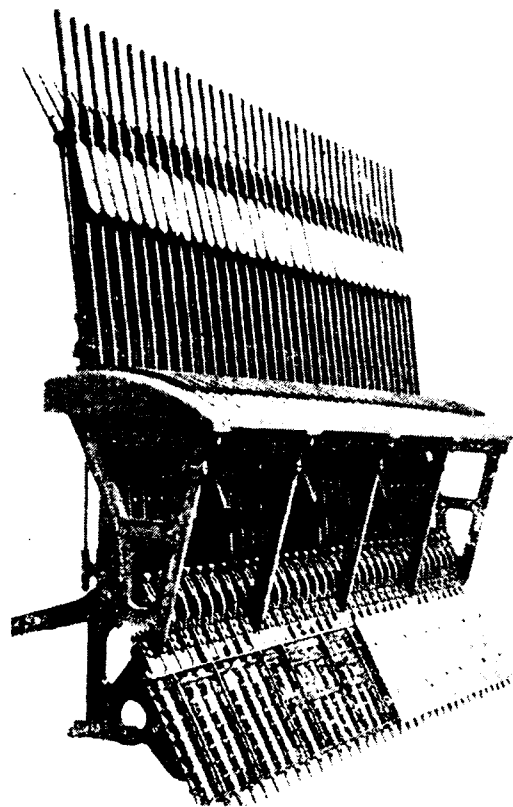
Sundar Lal was on duty on the platform. Alone out of the large crowd which watched the scene, he mustered courage to give chase. Across the railway lines and into the neighbouring jungle, the race continued for about a mile. As Sundar Lal was about to over-take the pick-pocket, the latter suddenly turned to attack him with his knife. The unarmed parcel clerk managed to over-power the assailant, disarmed him, and brought him back to the station, where he was handed over to the police.

OTHER EFFICIENCY INDICES

Engine usage is another important criterion of a railway system's operational efficiency. Here, the index of engine-miles per engine-day on line on the Indian Railways has gone up from



His Imperial Majesty Haile Selassie, Emperor of Ethiopia, visited the Integral Coach Factory on 29-10-56. Photo shows Sri K. Sadagopan, Chief Administrative Officer,



Modern Westinghouse locking frame with catch-handle actuation of the interlocking

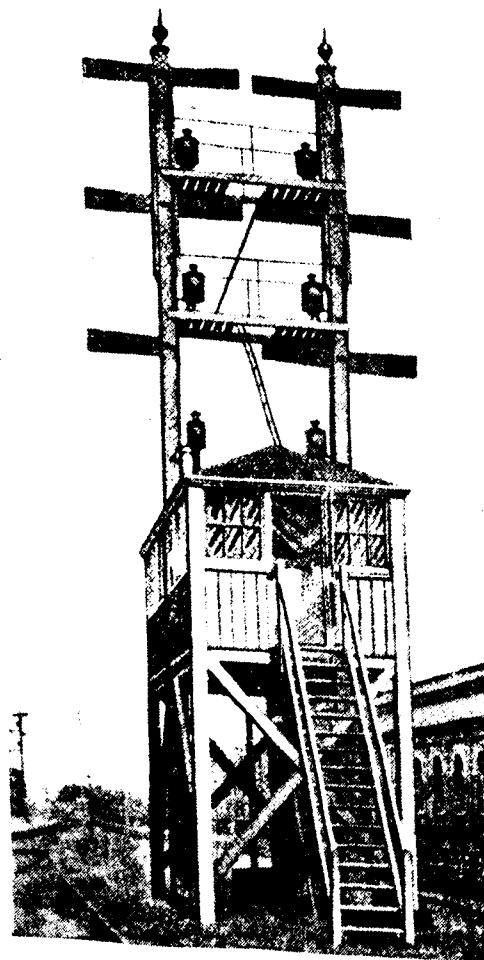
Railway, in the so-called "Hole-in-the-wall" signal box, as well as in several other boxes in the London area. In those early days, it was the custom to mount the signals above the boxes, and not on separate posts, connecting them to their levers by rodding, which meant that there were no detectors in such installations.

In the early eighteen-sixties, John Saxby took into partnership John Stinson Farmer, who vacated his job as Assistant Traffic Manager of the L., B. & S.C. Railway on the setting up of the firm of Saxby & Farmer, at Kilburn, London. Saxby & Farmer became sole signal contractors to the London

Brighton & South Coast and London & North-Western Railways, and soon began to supply other lines in Britain and elsewhere.

The year 1867 was remarkable in witnessing the origin of "Catch-handle" locking. Up till then, interlocking mechanisms had acted directly on the lever, and experience had shown that some types were liable to become strained excessively, while much wear arose from the manner in which the locking was set in motion.

Exterior of Brighton signal box in 1832, showing signals mounted box and operated by direct rod connections



Various new locking devices were produced, and in 1871 Saxby patented a form of motion for effecting catch-handle locking which, perhaps more than anything else, has caused his name to be remembered. In this patent, Saxby introduced a principle which has been generally followed ever since in catch-handle locking as now understood, whatever its actual form of construction.

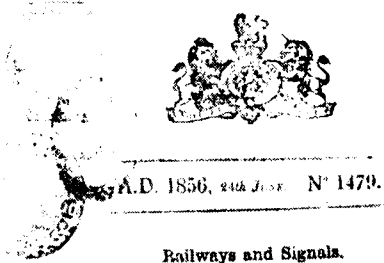
The principle in question is that the lifting of the catch-handle moves the

locking mechanism through a certain travel, after which the latter remains immovable, or practically so, while the lever itself is being moved. The dropping of the catch-handle at the termination of the lever stroke causes the locking mechanism to travel once more in the same direction as it did when the catch was raised, and so release any other lever or levers dependent on it.

Saxby effected this by mounting a slotted rocker beside the lever, one

John Saxby's original interlocking patent of 1856

[Second Edition.]



LETTERS PATENT to John Saxby, of Brighton, Sussex, for the Invention of "A Manner of Working SIMULTANEOUSLY THE POINTS AND SIGNALS OF RAILWAYS AT JUNCTIONS, TO PREVENT ACCIDENTS."

Scaled the 19th December 1856, and dated the 24th June 1856.

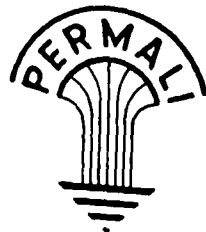
PROVISIONAL SPECIFICATION left by the said John Saxby at the

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- Extreme simplicity of design (no bushes or collars).
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- No special drilling of rail ends required.
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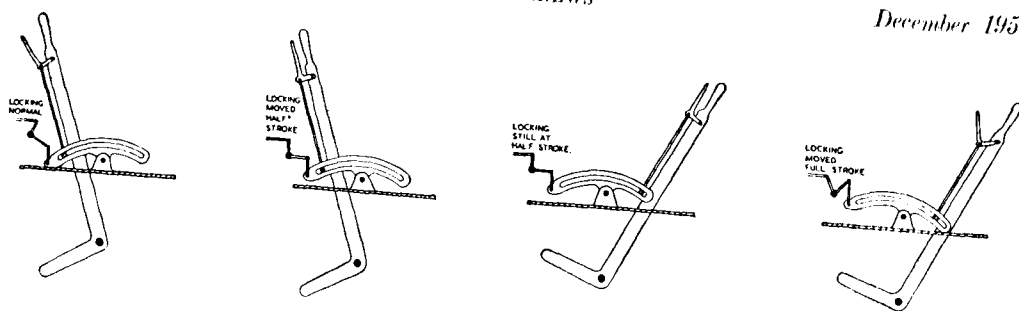
GEC. 2721

end of which was connected to the locking mechanism. In the slot in the rocker was a pin attached to the catch-rod. Lifting the catch raised the end of the rocker and moved the locking mechanism, bringing the slot in the rocker concentric with the lever pivot, so that the rocker did not move while the lever was moving. When the catch was again released, however, it necessarily shifted the rocker once again in the same direction, and hence also the locking mechanism.

In 1871, Saxby took out another patent in which he abolished the ordinary frame quadrant by providing a second slot in the rocker, an attachment on the lever engaging in recesses cut above this slot. This design does not appear to have been used to any extent, but in 1874 Saxby patented a form of locking frame of which large numbers were supplied to all parts of the world. It introduced what became, with slight modifications, the "rocker and grid-iron" machine.

India first became seriously interested in Saxby's work in the late eighteen-seventies. Railways were then being rapidly extended in the sub-continent, and in 1879 Saxby & Farmer, in consultation with Mr. Wilson Bell, Chief Engineer of the Great Indian Peninsula Railway, and Sir George Berkley, Consulting Engineer to the line, designed and installed a system of "indirect" interlocking which was applied to six stations between Lonavla and Poona, on what was then a single line.

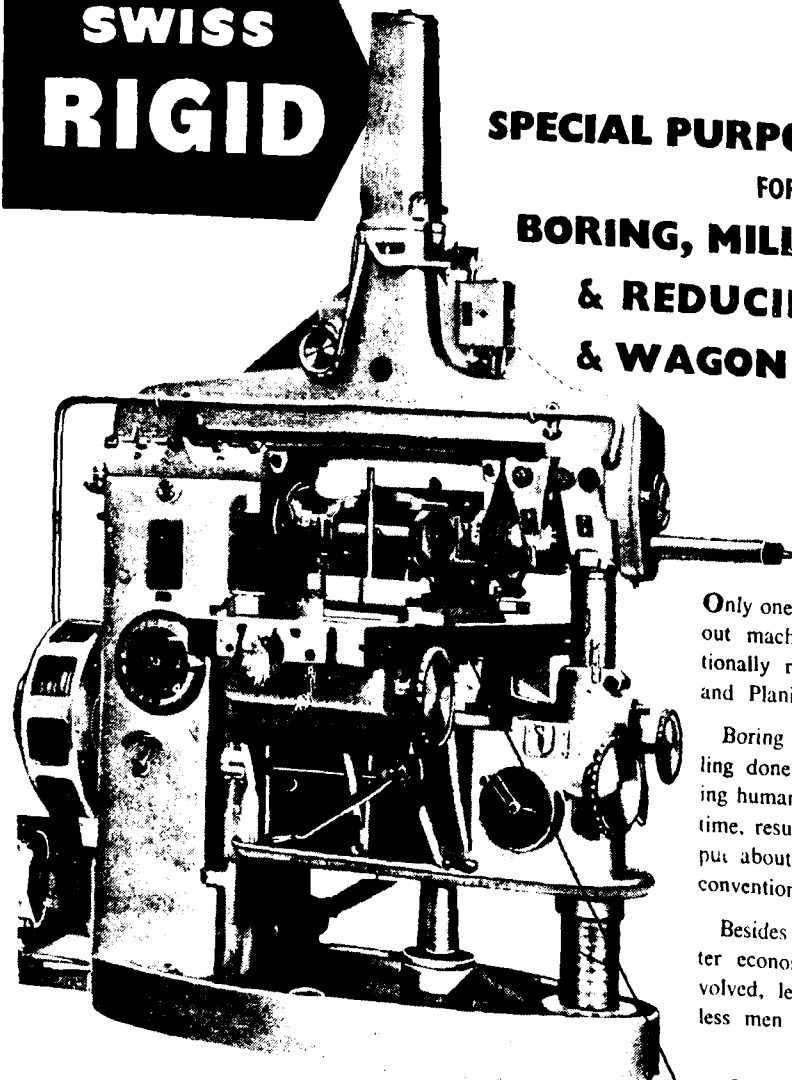
Despite the very great advantages thus obtained in faster and safer running of the through trains, little in interlocking progress was made on the G.I.P., or any other Indian line,



Sri Lakshmi with Lord Narasimha, which takes place on the full-moon day in the month of *Panguni* (March-April), when a grand utsavam is celebrated for ten days, ending with the car festival. In this temple

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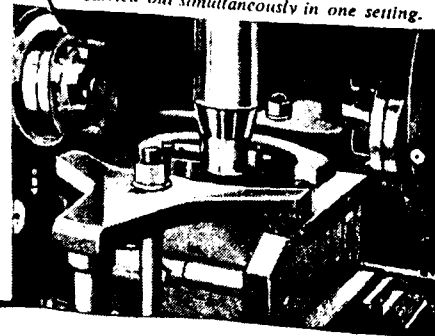


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Besides increased production, better economy due to less H.P. involved, less space for installation less men required, etc.

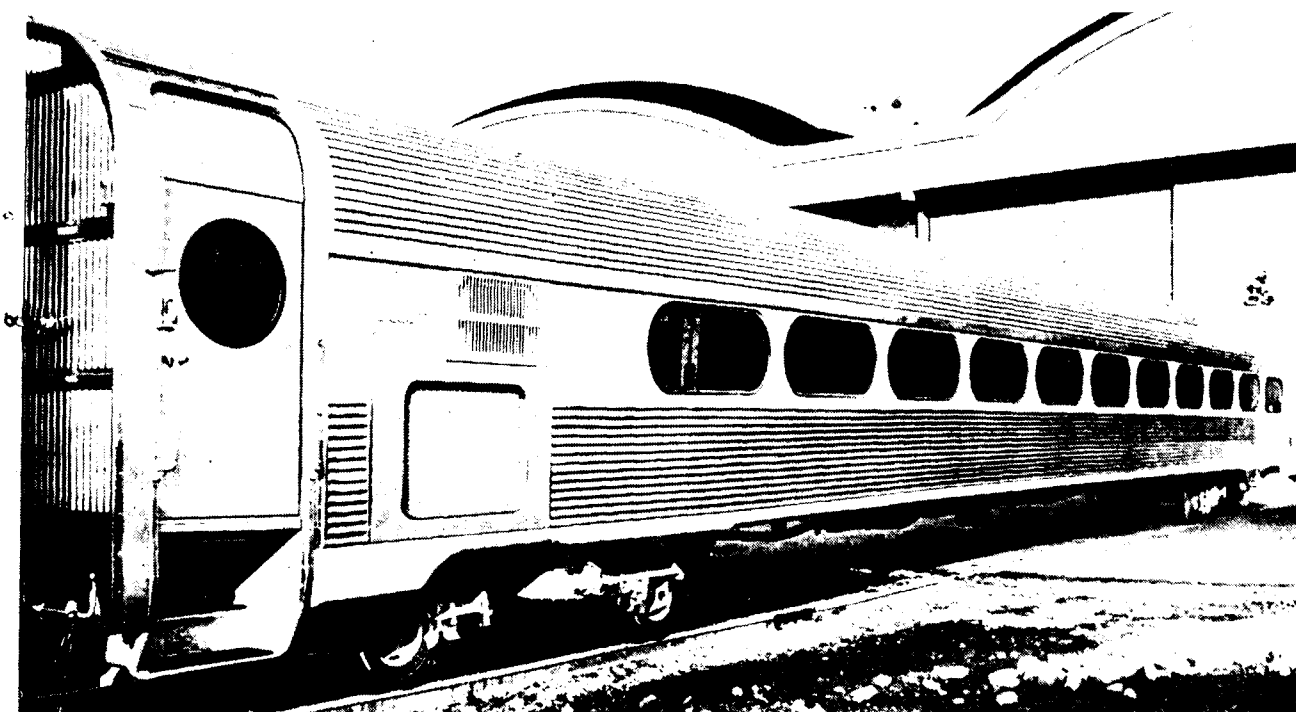
Boring and horn cheek milling operations carried out simultaneously in one setting.



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**NEW LIGHTWEIGHT RAILCOACH
FOR U.S. RAILWAYS**

PIONEER III, the lightest railroad passenger coach car ever to be built in the United States, was unveiled recently in New York by its maker, the Edward G. Budd Company of Philadelphia. Latest entrant in the race to design the best low-slung, lightweight train for inter-city travel, the new coach is built of stainless steel and makes wide use of plastics in its interior.

This single prototype car, the fifth of the new design lightweight cars to be introduced thus for this year in the United States, features such developments as a four-wheel truck with air spring suspension, which weighs less than a third of the conventional complicated steel spring mechanism.

The 88-passenger Pioneer III car, besides being the lightest in weight, also is the least costly to build—about \$1,080 per passenger seat. The car

is of conventional length, 85 feet and weighs only 52,330 pounds, or 595 pounds per passenger seat. A standard U.S. railroad coach weighs 123,000 pounds or more, or about 1,700 pounds for each of the 74 passengers it seats.

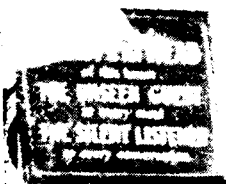
The Budd Company says it can sell the car for \$95,000 on orders of 50 or more. This compares with \$125,000 or more for a conventional U.S. railroad coach. It points out that the car can be adapted to nearly any type of railroad service, including commuter. It can be interspersed with other equipment and its standard coupler height requires no special gear for switching.

The manufacturer of the car says it has achieved its weight and cost objectives for the new car through use of plastics, simplified design, and assembly line methods of construction.



4-wheel truck of the Pioneer III

For example, single panels of glass-reinforced polyester laminate form the sidewall, window trim and part of the baggage rack. A second plastic panel forms the upper surface of the baggage rack and half the ceiling. These are attached as a unit and eliminate many individual parts that in a conventional car have to be cut, fitted and



cherished with sentimental unction their "Weihnachtsbaum"—the Christmas tree, which was the centre of their X'mas festivities. According to another popular legend it appears that Martin Luther wandering one starry Christmas Eve through



A.E.I. MOVES THE MILLIONS

A.E.I. are supplying the complete traction equipment for 34 three-car local trains of the Calcutta Suburban Railway Electrification Scheme. The equipment has been designed and manufactured by METROPOLITAN-VICKERS, international leaders

"Now listen to this," he said, and began reading out from the book.

".....About the age of eighteen months, when the child

forgotten all about that! I hurried to the kitchen before my husband started off on his next lecture about my absentmindedness and inefficiency.

* * *

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December 1956

the child imitating the father, or does it come at a later stage?"

He came round and grow

SURVEY FOR NEW LINES

(II)

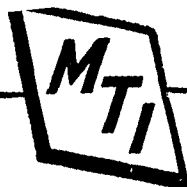
OPRAIL

IN any commercial undertaking, when a new project is mooted, no matter how attractive and lucrative the prospects may look, businessmen must have facts and figures before them. Obviously, the main consideration can be summed up in the question, "Will it pay?"

<

December 1956

overlook any commodity that is marketable, and thus a potential commodity seeking means of transport by rail.



Announce that they can now offer

DOUBLE COLUMN

HEAVY DUTY VERTICAL BORING and TURNING MILLS

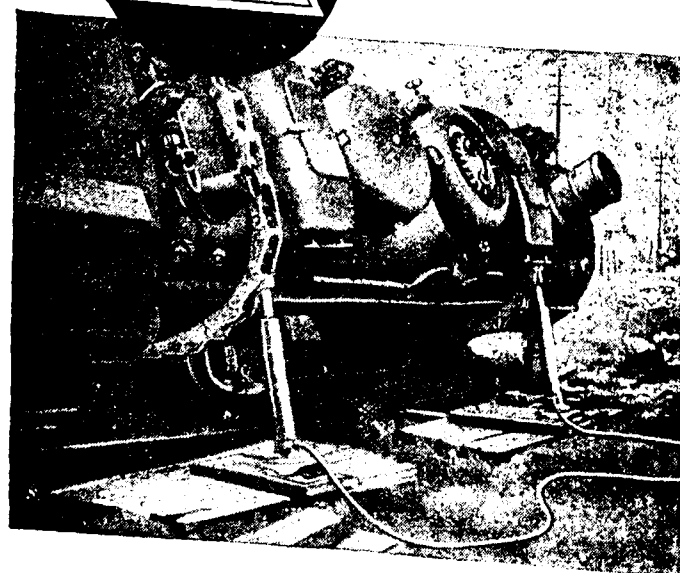
"As for the finger pinching, well, if you had only taken care to hold that glass of milk with a long pole, my fingers would not have engineered a collision with yours. In any event, it seemed to me that your fingers were also itching

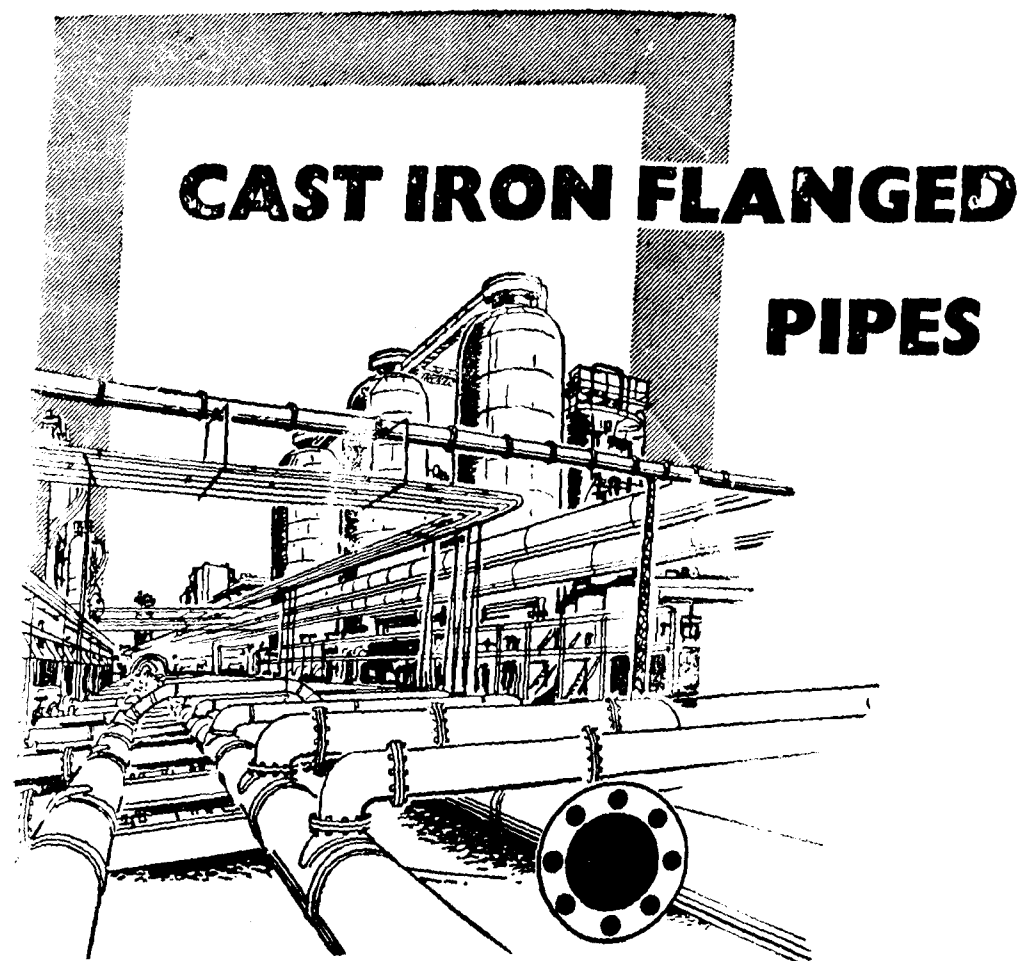
electric coach when assessing the economies of electrification against other forms of traction. The fixed line equipment is comprised of an overhead contact line for supplying current to the trains (by means of a pantograph) and the necessary

development projects under the Second Five-Year Plan, notably the railway programme of import of specialised kind of rolling-stock. Messrs. P. C. Bhattacharya, Secretary, Ministry of Finance, K. B



MASCHINENFABRIK DEUTSCHLAND RE-RAILING EQUIPMENT

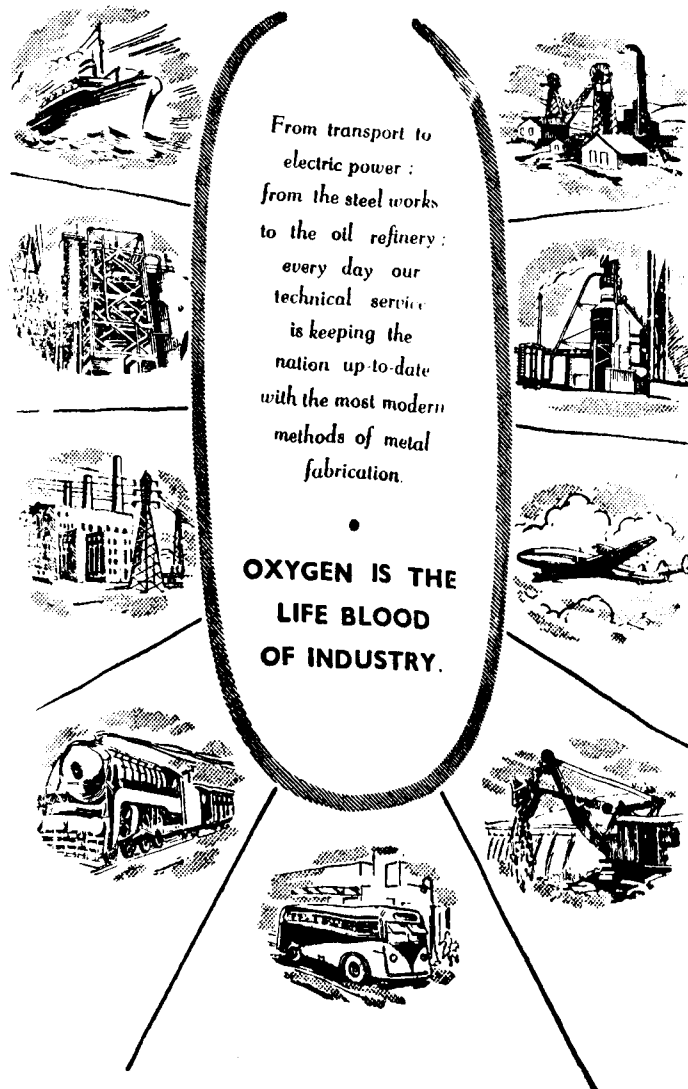




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