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MOTOR INDIA

VOLUME 1

MARCH 1957

NUMBER 8

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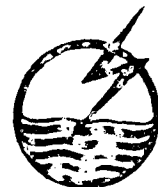
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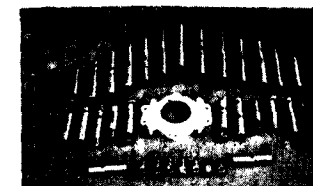
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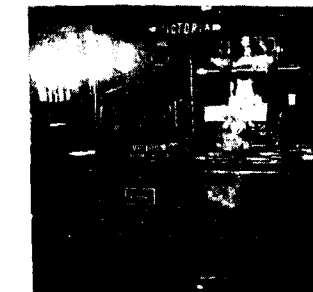
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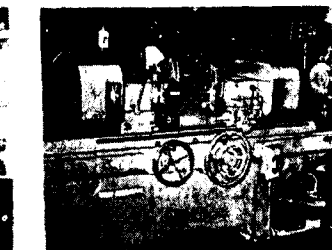
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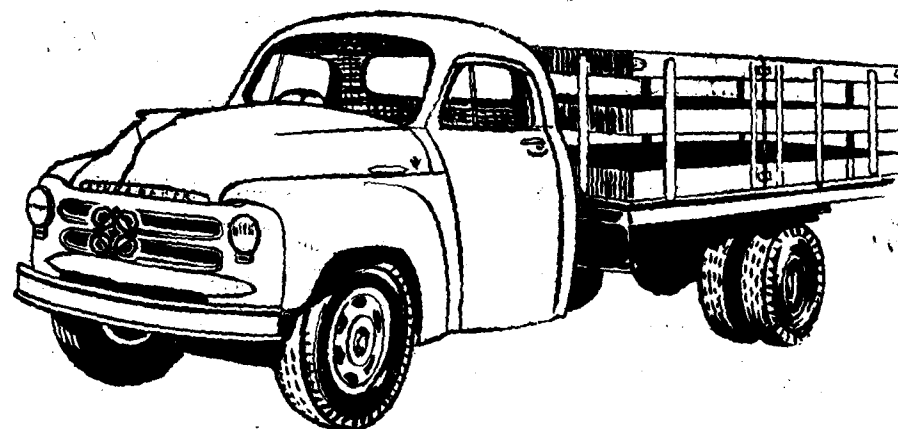
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Editor: M. RAJAGOPALAN

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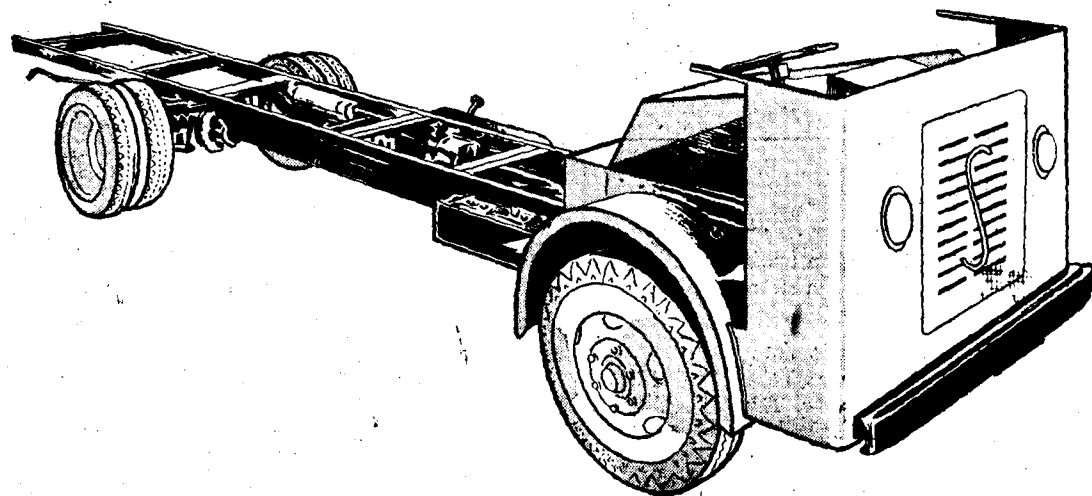
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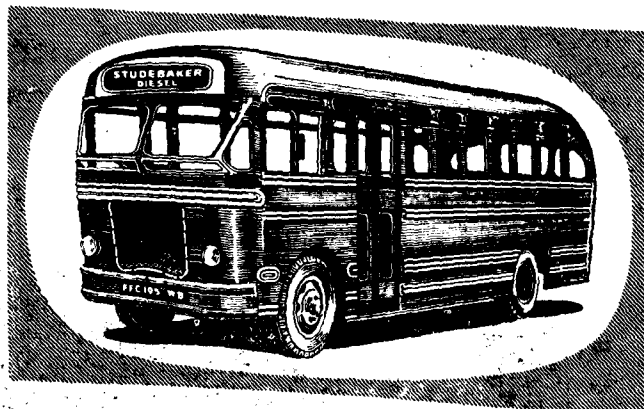
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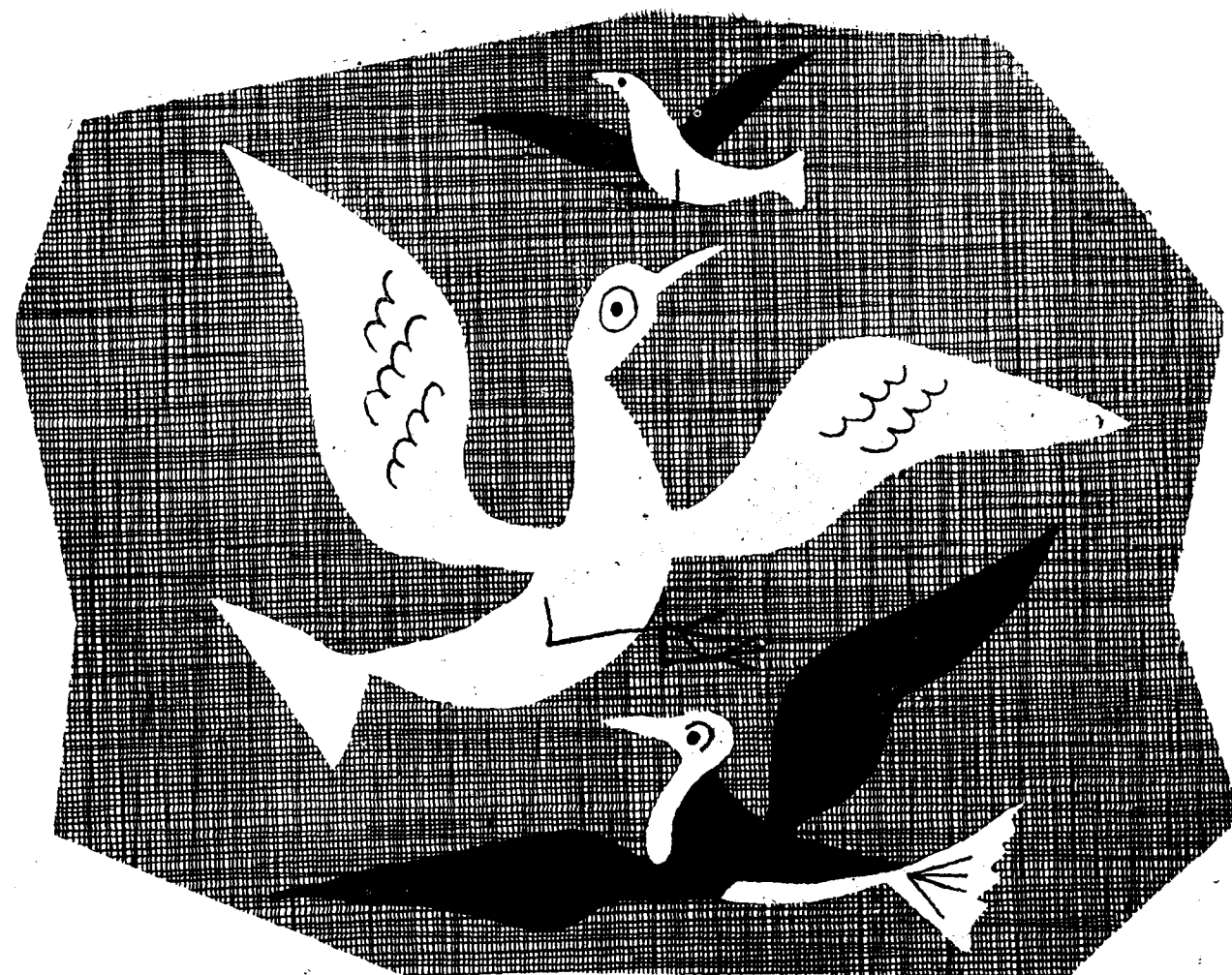
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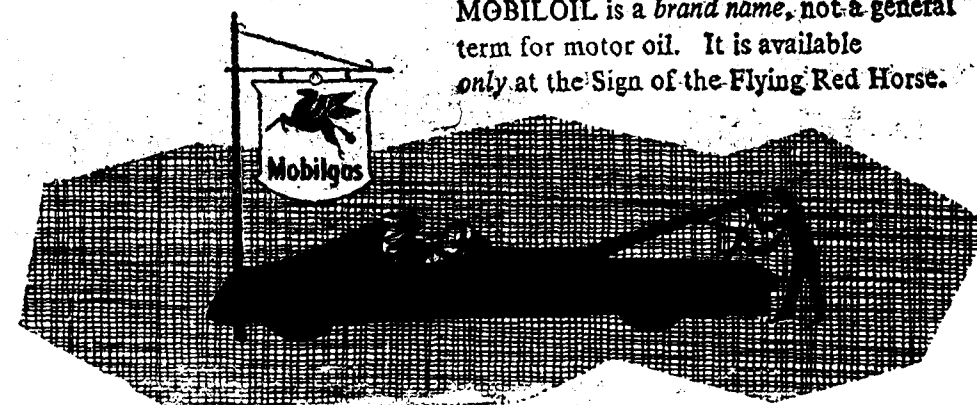
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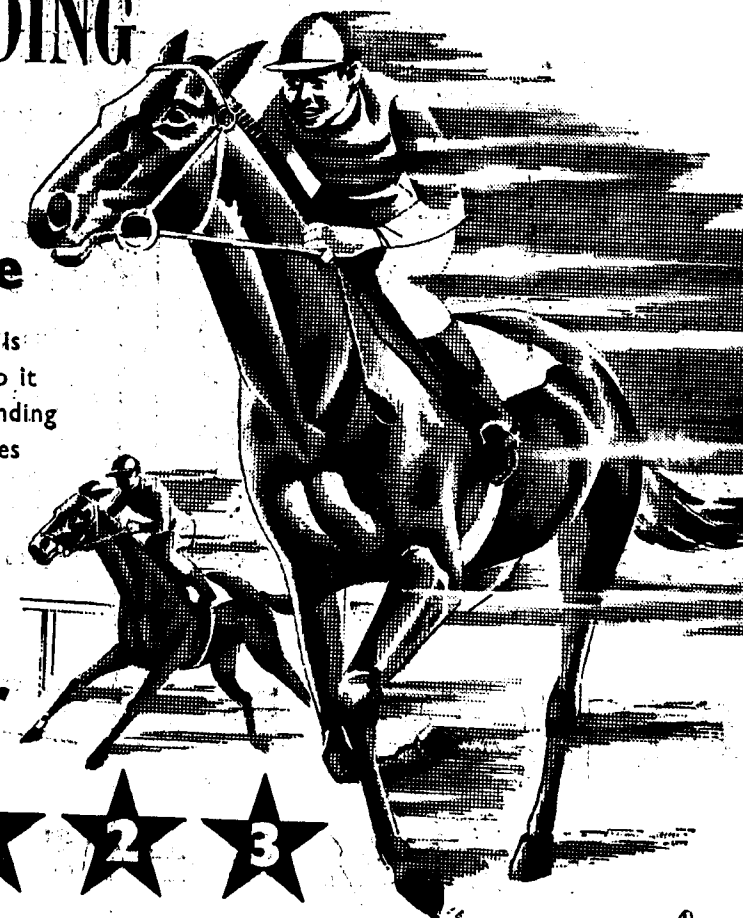
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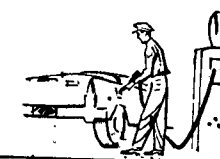
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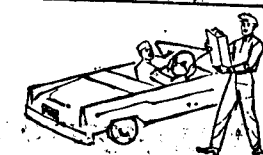
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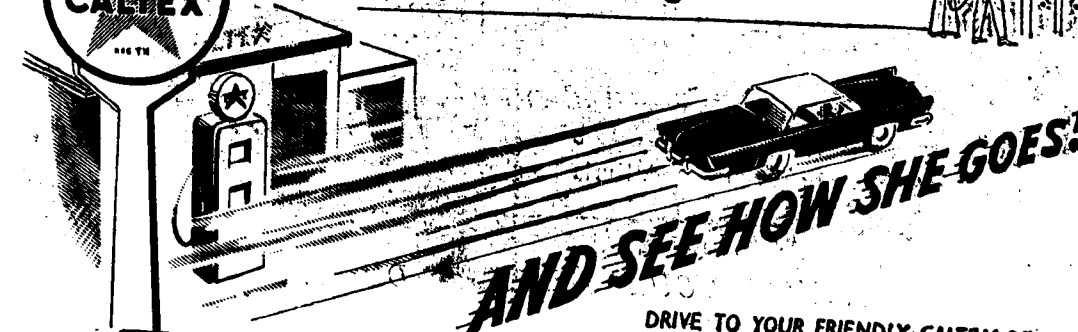
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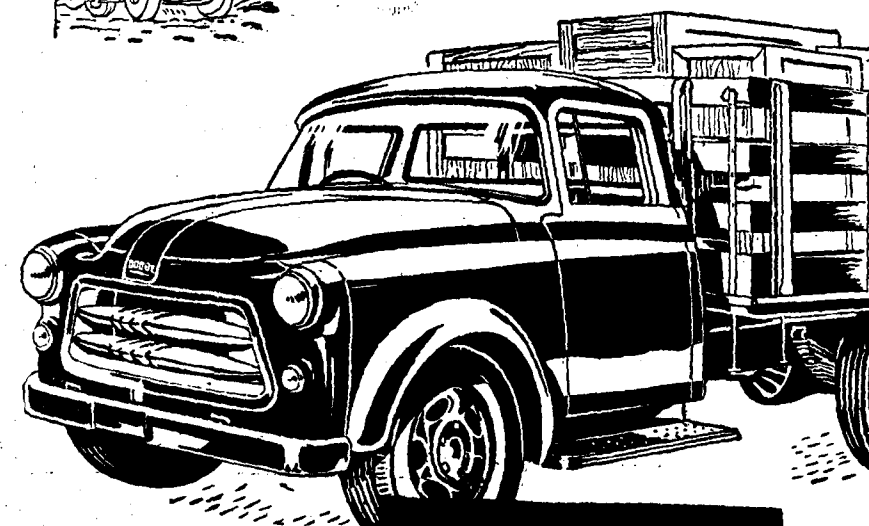
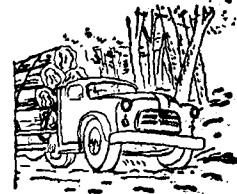


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EDITOR

MOTORINDIA

141, MOUNT ROAD

MADRAS-6

editorial

A SMALL CAR FOR INDIA

Indians should envy the announcement from London that a far-sighted firm of motor manufacturers have started producing a car which is to sell at less than Rs. 3,800. If Britain finds the need to produce such a small car, India with such a large area and with an even larger population should welcome the need for such a car much more. In fact, thousands of people would like to have a car of this type, which will be very economical and which will at the same time take them to their destinations without waiting for public transports.

It is true India has started indigenous manufacture of automobiles, but we have a long way to go towards complete indigenous production of such cars. The automobile industry in India has been given all the protection that is necessary to goad it into manufacturing component parts of motor car locally. But, we are afraid that the manufacturing schedule, as it is, will not meet the requirements of the country for a long time to come. If only India can produce a car as cheap and as efficient as the one announced in London, we are sure the number of car owners in India will be multiplied many times before long. It is to be hoped that the Government of India will give due consideration to the need for such a vehicle, which can be more utilitarian than the present cars, and which at the same time can be maintained at a very reasonable cost.

A WISE MOVE

We congratulate the Deputy Commissioner of Police (Traffic) on his scheme for constructing lay-byes for bus-stops in the city of Madras. The transport problem for the thousands of persons who visit the City from suburbs and other parts of the City itself is indeed very pressing, and the number of cases of pick-pockets at bus-stops and the like are no doubt almost testing the efficiency of the Police and the alertness of passengers themselves. These lay-byes can go a long way to help develop an orderly process of getting in or out of buses, and what is more, stopping of buses only at lay-byes will go a long way in reducing the number of accidents, especially in congested areas in the city.

ONCE MORE A PIONEER

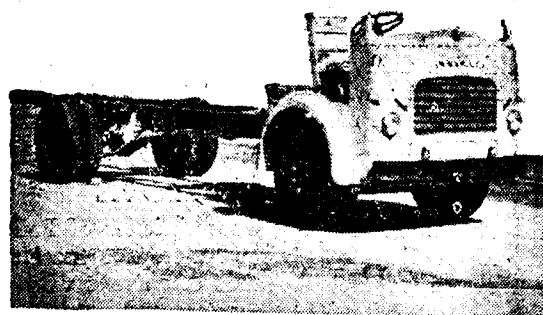
We congratulate Messrs Simpson & Company, those in charge of this 117-year-old firm of pioneers in the field of transport, and the 2,000 workers of their Mount Road factory on the magnificent success they have achieved in producing a cent-per cent indigenous automotive type diesel engine within 18 months of planning—a fact which has once again earned for this leading firm the distinction of being once more pioneers, now in the matter of manufacture of automotive type diesel engines to cope up with the country's ever-increasing demands under the Second Plan and to suit conditions in free India.

It is significant indeed that to mark such an important occasion, this firm should have thought fit to bring together all their dealers in the engine and its components, spread over the entire country, under one roof and in a family sort of gathering for the purpose of giving them, and the world, an idea of their notable achievement.

In an age where most people fall victim to the psychological complex so that some manufacturers do not even wish to publicise the few indigenously manufactured parts for fear that they may not get a good market with pronounced Indian parts, at a time when even new car models are being introduced straight to the queuing buyer instead of focussing public attention to the addition to national achievement, the urge to congratulate those with a modern outlook and a patriotic pride on such things is so great that Motorindia cannot hide it.

We wish this firm of Simpsons, whose name has become a household word in the transport sphere, all the success they deserve in their achievement and in their other manufacturing programmes.

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ROAD TRANSPORT IN INDIA

By S. N. RAMASAMI

In 1914 the First Motor Vehicles Act was passed. After about twenty years, because of the depression of 1930s, there were many committees appointed to investigate what was needed for Road-Rail competition. Because of these reports, the Motor Vehicles Act of 1940 was drafted and passed. The basis of this Act was to restrict Road Transport, so that there may not be any loss to the Railways, by what the various Committees consider wasteful competition. It is to be noted that though this is a Central Statute, the rules are framed by the (then) Provincial Governments. Even this Act did not apply to the (then) Indian States. In addition, the Provincial Governments were left free to tax as they pleased motor vehicles operating in their areas.

Because of this Act regulation, there was no operation worth mentioning between Provinces, now called States. Such a restriction imposed in a meagre way, the then prevailing economic conditions.

It is to be noted that the merits of this Central Legislation cannot be overestimated, as the World War II came and the Act became a casualty. Many of the sections of this Act had to be abrogated because of war emergency.

After 1947, because of the chronic shortage of and overwork by Railway equipment and because of the tempo of the First and Second Five Year Plans, there was a re-appraisal of the transport needs of our land—Rail, Road, Canal, Coastal-Shipping and Air.

The rehabilitation of the Railways was taken on hand. Even then, it was found that the Railways could not take all the traffic offered. Today the spare capacity of rail is scarce, because of heavy import of Iron and Steel, Cement, the equipment for the steel factories and other economic activities generated by the Second Five Year Plan.

There has been a Study Group on transport; there was an appraisal of transport requirements by the Planning Commission etc. After some consideration of the transport

needs in the period 1956-60, the Motor Vehicles Act was amended by the Parliament early this year. It had now received the assent of the President. THIS BILL DOES NOT IN ANY WAY HELP TO FOSTER ROAD TRANSPORT IN GENERAL. IT IS GOOD IN A FEW ASPECTS. Under Section 63, it has eased the flow of Inter-State transport movement. It has made the fitness certificate of a Transport Vehicle an All India document, valid throughout India. It has laid down under Chapter IV-A, the procedure for nationalising Road-Transport. It has not made any provision for taking over the assets of the displaced operators.

Even as it is, this Act will not do much good to the Road-Transport need of our land, as the motor vehicles taxation is still a State subject. It was never the intention of the sponsors of Road-Transport to appeal for reduction in the quantum of motor vehicles taxes. But sponsors object to the mode of taxation.

The mode that exists at present, makes States feel as if they are independent countries; they never consider the motor vehicles operation as one of All India interest. Such a narrow outlook has led the States to restrict motor vehicles operation to their boundaries. The cause of this malady in outlook is historical. We were tied to the British concept of Motor Vehicles Act and Taxation. England is a country of short distances, well served by canals and sea, but with narrow roads. It is a manufacturing country producing Automobiles and spares. Its economy was not bothered by the insistent necessity to run public transport as private transport was well within the means of at least a majority of its population. Even in this copying of the British mode of taxation, we have not discriminated and hence not wisely. For example, the maximum and tight levy of British tax is on fuel. The rest of the taxes on motor vehicles is a token one. In our copying methods, we have shifted the emphasis from fuel to the other taxes. Because of

the shifting, the States have killed inter-state transport. This killing is as a result of multiplicity of taxes levied by the States as in the case of Inter-State operation.

This is the situation in which we are placed at present.

What is the solution? A solution has to be found because the country needs transport in increasing measure to meet the requirements and needs of the Second Plan.

Of course, the solution has to be found in an integrated manner by a complete estimate of all forms of transport. This over-all picture shall not be partial to a particular mode of transport. It will serve all India interests. The Railways are always hungry for huge capital expenditure. In addition the major items of Railway requirements have to be imported, thus consuming a lot of foreign exchange. So far as Canals are concerned, the deepening of canals, etc., is a long-term problem of heavy expenditure. So far as coastal-shipping is concerned, any increase in tonnage is at a huge cost of foreign exchange.

But so far as road transport is concerned, it is possible to increase the availability of trucks and buses at comparatively less cost. It is less costly because we are having certain types of progressive manufacture of motor vehicles. There is heavy stock in Disposals. Our automobile people have been trained over the past four decades, in accurate, precise and cheap maintenance of motor vehicles. We know how to re-condition spares and make interchangeability of different makes easy. Because of the prohibitive import duty on spares and on CKD packs the cost of a vehicle to the consumer is very high; in the place of import duty, there should be monetary ceiling restriction in import of spare parts, with complete abolition of import duty by a up-grading of tax on fuel. **The Excise Duty on tyres, sales-tax on motor vehicles and spares and all other multifarious**

imposts must be liquidated and replaced by a high duty on fuel. Such a shift in mode of taxation will bring to the Exchequer the total motor vehicles tax revenue it is getting at present. We have

not got accurate data of High-speed Diesel Oil consumption by motor vehicles. Petrol consumption is not less than thirty crores gallons per year; assuming that petrol consumption is thirty-five crores gallons, a direct levy of Rs. 2/- per gallon will bring in a revenue of Rs. 70 crores to the Exchequer. This figure is exclusive of the tax realisation from Diesel Oil. This tax is incapable of evasion and easy to collect!

It is to be realised that there will be no increase in the motor vehicle population of our land unless:

- (1) The Motor Vehicle's price is acceptable
- (2) Motor Vehicle tax is reasonable.

IT MAY SEEM STRANGE THAT IMPORT DUTY, EXCISE DUTY, SALES-TAX, STATE MOTOR VEHICLE TAX, AND ALL OTHER IMPORTS ARE RECOMMENDED FOR ABOLITION AND REPLACEMENT BY A SINGLE TAX ON FUEL. BUT

OUR COUNTRY NEEDS, AND THE ADVENTURE OF BUILDING A NEW INDIA DEMANDS A NEW WAY OF THINKING—AN INDIAN WAY TO SOLUTION.

It is cheap and futile to imitate the conditions in other lands. Such an imitation is wasteful of energy and money.

Let me quote from a recent American Magazine the following:

"Our mass-produced highways have become as marvellous to the rest of the world as have the mass-produced vehicles that use these people's roads. Like our vehicles, our roads—and the methods for their production—have been sedulously imitated, with signal lack of success.

A notable example of such failure is presented by the case of Germany, under the Third Reich of Adolf Hitler. After careful study of American production and construction methods, the master-planners of Germany's National Socialist Government drew up elaborate plans both for production of the VOLKSWAGEN, or "People's Car", and for construction of the AUTOBAHMEN, an elaborate network of the most modern kind of motor-high-

ways. Widely advertised in the late 1930's as means for motorizing the masses of Germany, these devices were the result of deliberate bureaucratic planning, rather than the end-products of that inter-play of related forces which, as Mr. Belloc holds, govern the natural evolution of the vehicle and its road. The irony of such master-planning obtrudes from the fact, when the real test came, the VOLKSWAGEN, though revealed to have been actually devised as a military vehicle, failed in contest with the military adaptations of automotive vehicles which the American people turned out; and the AUTOBAHMEN, though carefully built by ORGANISATION TODT as a device to implement the speedy conquest of neighbouring nations, became the ideal means for the quick dismemberment of the German military machine in 1945."

And so, it should be clear that we should tackle road transport problems in a way suitable to our country's needs and conform to the genius of our land. To imitate any other country will naturally result in a signal lack of success of our planning.

"DEVELOP ROAD TRANSPORT RAPIDLY"

Mr. WENZEL'S CALL TO GOVT.

Speaking at the recent 16th annual General Meeting of the Federation of Motor Transport Associations, Mr. A. D. Wenzel, President, said:

"At our last General Meeting on 10th February I surveyed the position of Roads and Road Transport in the two Five-Year Plans and emphasized that unfortunately both were inadequate to meet the country's requirements considering the substantial economic development envisaged in those Two Great Plans. I am happy to report that much has been done by Government since then and to enable you to evaluate what has been done I would like to briefly review the previous survey.

Development of Roads

Out of a total estimated expenditure of Rs. 744 crores on the Nagpur Road Plan, Rs. 48 crores were incurred pre-plan, Rs. 156 crores were incurred during the First Plan and Rs. 272 crores have been provided in the Second Plan making in all by 1960/61 Rs. 476 crores, i.e., about two-thirds of the target of Rs. 744 crores. This must be considered unsatisfactory for two reasons, viz.

- (i) that the original intention was to complete the entire programme by 1953 but here we find that by 1960-61, i.e., 7 years later, we shall have achieved only two-thirds of it and
- (ii) that the Road programme outlined in the Nagpur Plan was not based on our present economic condition but the economic position prevailing in 1943 and, therefore, it is far short of our today's requirements.

India's overall production by 1960 to 61 is estimated at about 210% of the pre-plan level in 1950-51 and at least 250% of the 1943 level. Therefore, to meet this unprecedented increase the capacity of roads should be at least twice of what it was in 1943 instead of only 1½ times as proposed in the Nagpur Plan. Far from reaching this goal of twice the 1943 level we shall be attaining only about 2/3rds of the



Mr. A. D. Wenzel.

lower target of 1½ times the level in that year, i.e., 1960/61.

Road Transport

In regard to road transport I indicated that its development was not keeping pace with the increased production during the First Plan and actually was far below the rate of progress maintained during a period of 30 years before that Plan. Considering the requirements of the Second Plan I indicated that the country's requirements of trucks for passenger and goods traffic and replacements of old vehicles was about 3 lakhs against the 2 lakhs likely to be available by 1960-61 based on the production targets of the automobile industry as per our two plans. This means a gap of about 1 lakh of trucks by 1960-61 to be met in 5 years and to make it good our production targets of trucks must be raised by about 20,000 units p.a. during the Second Plan.

During the past 10 months a great deal has been said about the shortage of transport in the Second Plan by the Planning Commission, by the All-India Congress Committee, by several members of Parliament and by independent observers like the World Bank Mission. THE SUM AND SUBSTANCE OF THESE

VARIOUS STATEMENTS IS THAT WITHIN THE FUNDS LIKELY TO BE AVAILABLE FOR THE EXPANSION OF THE RAILWAYS THE LATTER WILL NOT BE ABLE TO COPE WITH THE TRAFFIC OFFERING AND THAT OTHER FORMS OF TRANSPORT, PARTICULARLY ROAD TRANSPORT, DEFINITELY MUST BE DEVELOPED. The World Bank Mission has said:

"We urge that the Government review its transport policy and programme with a view to maximising transport by all available means—by rail, roads, coastal shipping and inland water-ways. While we are unable to suggest in detail how this might be accomplished, we consider it important that both the level and structure of railway rates be revised promptly so as to provide more incentive for the utilisation of other means of transport."

Shortage in Transport Capacity

The total traffic estimated to be moved by the end of the Second Plan is about 195 million tons p.a. Actually this is likely to be well over 200 million tons at least on account of the greatly increased targets for steel, cement and agricultural products and certain imports which have since been decided upon. Out of this total, the railways can carry about 162 million tons, coastal shipping and inland water transport about 5 million tons leaving a gap of about 33 million tons. The railways have placed this gap at about 30 million tons, the Deputy Minister of Transport has placed it at about 25 million tons while many observers feel that it may be nearer 40 million tons. But taking it at only 30 million tons we have calculated that out of the 3 lakhs of extra trucks required by the country at least 20,000 trucks and 20,000 truck/trailer combinations will have to be placed on our roads in long-distance goods traffic and that their initial cost will be about Rs. 150 crores. Thus, the position in regard

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"cost of transportation by road will be same as that of Railways if national highways kept at accepted standard"

to requirements seems now to be rather well clarified and it now remains for the Government to take prompt executive action to :

- (i) make available the extra trucks and truck/trailer combinations estimated at about one lakh over and above what has already been planned ;
- (ii) create conditions favourable to attract an investment of Rs. 150 crores required for long-distance transport.

New measures

ON (i) THERE SHOULD BE NO DIFFICULTY SINCE THE AUTOMOBILE INDUSTRY SHOULD HAVE SUFFICIENT PRODUCTION CAPACITY TO MEET THIS DEMAND IF GOVERNMENT TAKE THE INITIATIVE IN THE MATTER AND MAKE KNOWN THEIR INTENTIONS TO ENABLE THE MANUFACTURERS OF TRUCKS AND THE ANCILLARY INDUSTRIES TO MAKE THEIR PLANS IN GOOD TIME TO ENSURE PRODUCTION ON THE SCALE REQUIRED.

In regard to (ii) Government have recently passed two enactments, whose effect needs to be assessed. They are :

(i) The National Highways Act and (ii) The Motor Vehicles Act. Both these measures have been pending since 1947 and their enactment in the first year of our Second Plan, though belated, is most welcome and a very good omen for the successful implementation of that Plan in so far as it depends on the provision of vitally needed road transport. Welcome as these two Acts are they unfortunately appear somewhat inadequate in certain respects and, therefore, while congratulating Government on enacting them before the close of the last session of the two houses of our Parliament, I feel it my duty to bring to their notice certain shortcomings which I feel are important.

National Highways inadequate

The National Highways Act brings under the Centre only 13,800 miles of roads out of a total of 3,31,000 miles envisaged in the Nagpur Plan. This is just about 4% which judged by any standard is most inadequate. It must be remembered that both from the point of long-distance through traffic and of defence, if not administrative convenience, our National Highways will play the same role in our economy as the railways and, therefore, their mileage should be comparable with that of the railways. On the figures of the Nagpur Plan the National Highways were 64% of the total. On this basis they work out to about 20,000 in a total mileage of 3,31,000 to be provided in the country. I suggest it is necessary to consider this aspect carefully and substantially raise the mileage of the National Highways as soon as possible.

Likewise, from the point of view of cheapening the cost of road transport the National Highway system will have to aim at providing bridges and surfaces capable of carrying heavy loads and truck/trailer combinations of the type employed in other countries for the fast and economical transportation of goods. Here the standard should be the same as recommended by the Indian Roads Congress, viz. an axle-load of 18,000 lbs. which is generally also the standard in many other countries of the world. We have estimated that with these improvements the cost of transportation by road will be about the same as by the railways. This is an important consideration from the point of view of the Transport user who will then be free to use both roads and railways according to their relative efficiency in satisfying his individual requirements. As between railways and National highways the main difference is that the development of the former requires State outlay both on the track and the rolling stock while the development of the latter requires it only on the roads, the outlay on

rolling stock coming from the private sector. Therefore, the development of National Highways should be more economical to the State. Another point is that when the railways were developed the emphasis was on connecting ports with consuming centres since in those days India was essentially an importing country. NOW THAT INDIA IS FAST BECOMING A PRODUCING COUNTRY THE WHOLE SYSTEM OF PASSENGER AND GOODS TRANSPORT NEEDS A COMPLETE RE-ORIENTATION AND IN THIS GREATER ATTENTION WILL HAVE TO BE PAID TO NATIONAL HIGHWAYS. THE PROVISION FOR NATIONAL HIGHWAYS IN THE SECOND PLAN IS ONLY RS. 55 CRORES WHICH IT SHOULD NOT BE TOO DIFFICULT TO DOUBLE SINCE THE EXTRA AMOUNT IS ONLY ABOUT 1% OF THE TOTAL OUTLAY OF ABOUT RS. 5,300 CRORES NOW ENVISAGED FOR THE PUBLIC SECTOR IN THAT PLAN. I EARNESTLY REQUEST THE TRANSPORT MINISTRY TO CONSIDER THIS QUESTION.

Motor Vehicles Act

In regard to road transport I invite your attention to two new and most important provisions in the Motor Vehicles Act which has now been passed by Parliament. They are as follows :

- (i) That in future there will be no distance limit on road transport anywhere in the country including routes which are parallel to the railways.
- (ii) That all Inter-State road traffic including passenger traffic but more especially goods traffic will in future be under the jurisdiction of an All-India Inter-State Road Transport Commission to be appointed by and under the control of the Government of India.

atmosphere of suspicion must change

For many years this Federation together with the Indian Roads and Transport Development Association has been working continuously for these two vital provisions, but we encountered strong opposition from those interests who felt that all the restrictions imposed by the Motor Vehicles Act of 1939 and its off-shoot the Code of Principles and Practice were necessary in the interests of the railways. This contention has never been substantiated since our examination of the background of these restrictions has established the following points :

- (i) The loss of railway earnings during the thirties was due primarily to depression and not to road competition.
- (ii) The loss disappeared with the depression before the restrictions on motor transport became effective under the Motor Vehicles Act of 1939.
- (iii) The loss of railway revenue on goods traffic was estimated by the Wedgewood Committee in 1936/37 at only Rs. 0.75 crore out of a total earning of about Rs. 100 crores and, therefore, was negligible.

However, these facts were ignored and the restrictions were rigorously enforced thereby seriously crippling the only form of transport which should have supplemented the railways and which may have made unnecessary the heavy allotments on the railways during the two Plans. Now, however, aided by the stress of circumstances there has been a wholesome recognition of this fact and road transport has been finally freed from its shackles. While organisations like ours which have put in a great deal of solid work in helping to bring about these changes may be excused for taking a legitimate pride in the results achieved a great deal of credit is due to those members of Parliament who took considerable interest in this subject and supported our point of view and also to Government for their hearty co-operation in the effort.

Its deficiencies

However, a great deal will depend on the way these important deci-

sions are implemented. For many years the Regional Transport Authorities have operated in an atmosphere of suspicion about road transport and their main concern has been to see first that railway interests are safeguarded. This atmosphere has to be changed as railway interests were never in danger and there is no possibility of their being in danger at any future time in the country's rapidly expanding economy. THE PRIME CONCERN OF THE MOMENT IS NOT THE INTERESTS OF RAILWAY OR ROAD TRANSPORT BUT OF THE TREMENDOUS PLANS OF ECONOMIC DEVELOPMENTS ON WHICH AN OUTLAY OF OVER RS. 8,000 CRORES WILL HAVE BEEN INCURRED BY 1960/61. THESE REQUIRE MORE AND MORE TRANSPORT WHICH BECAUSE OF THE NATURAL LIMITATIONS OF ANY RAILWAY SYSTEM MUST INEVITABLY BE PROVIDED BY ROADS.

Therefore, the need must now be to develop road transport rapidly and not to restrict it as in the past. It is hoped that Government will take steps to emphasize this aspect by issuing necessary instructions to the authorities concerned.

Inter-State Commission

In regard to the Inter-State Commission it is necessary to invest it with full powers to ensure that Inter-State traffic is developed, co-ordinated and regulated so as to produce results. It is also necessary that the reports of this Commission are regularly placed before the Parliament so that the public may know what has been happening from time to time. Red tape should be cut down to a minimum and the Commission should be composed of qualified persons having practical experience of transportation problems. Government should not hesitate to secure them from wherever they may be available.

The extent to which long-distance road traffic can develop will depend primarily on two factors :

- (i) the cost of transportation which has to be as economical as possible and

(ii) operational efficiency. The former depends on permissible axle-loads which should be as high as possible within the carrying capacity of our roads and bridges, modern road surfaces, sufficient road-widths and proper geometric designs particularly on inter-state roads. In all these respects the Commission should be empowered to make concrete recommendations, which, after careful study, should be carried out expeditiously. In regard to operational efficiency it will require up-to-date knowledge of the modern technique of running long-distance road services. This will mean the organization of large operating units with sufficient financial and technical backing. The Commission should be empowered to study these requirements and make recommendations to attract the right type of people. I have mentioned earlier that the capital outlay for long-distance road traffic of about 30 million tons per annum will be of the order of about Rs. 150 crores. The Commission should have power to make recommendations regarding the credit facilities likely to be required to attract this capital, from any source, and also whether any large operating unit can be expected to work on a 5-year permit for public carriers which the Act lays down. Long-distance road traffic is like railway traffic which requires conditions of stability over a long period to properly develop. Just as it would be impossible to develop railways on the basis of a 5-year period it will be impossible to develop Inter-State road transport on a 5-year permit. In the U.S.A. permits for public carriers are for an indefinite period and this facility has certainly produced results.

Mighty system must be built

As I mentioned previously much has been done in the last few months; vexatious restrictions have been lifted and a foundation has been laid on which a mighty system of Road Transport can be built up. It is vital to the country's economic progress and I am confident that Road Transport in general and Inter-State transport in particular can and will develop to do their full share in providing a better way of life for all.

AUTO MEN ON THE MOVE

A Diplomat on wheels!

BOMBAY

Few foreigners in India can claim to have travelled by car as much as Herr Dietrich F. Witzell, delegate of the German Trade Information Service. "I have lived in the car and in the roads almost half the time I have been in India," the charming diplomat said in an interview. He has travelled from the Buddhist monastery in Baramula in Kashmir, down to the holy temple in Ramnad, in Madras, from the Gateway of India to the mighty Calcutta on the banks of the Hooghly. A keen tourist he has taken several splendid shots of festivals, tribal dances, folk dances and "the humdrum, easy village life".

Witzell is on a job that covers India, Burma and Ceylon. Engaged in the task of promoting trade relations, he acts as a "post office, passing on inquiries from one desk to another". He informs the German exporters of what India wants, and the German importers of what this country can export. He also assesses the requirements of countries in the stage of development and suggests to his Government what it can offer to the former. The Rs. 5 crore grant for technical assistance to under-developed countries which the West German Government recently sanctioned is a sequel to his efforts.

Firestone President in Bombay

BOMBAY

"I have come here to review our production programme. It's pretty well developed in accordance with your ambitious Second Plan," said Mr. W. D. Waugh, President of the Firestone International Company, in an interview. With him was the popular managing director of the firm's Bombay Division, Mr. A. D. Wenzel.

The simple, unostentatious Mr. Waugh said in a musing fashion: "I did not want to be a lawyer... I studied law thinking it would equip me well in business... I

have also done accountancy and was auditor of our main plant at Akron." He takes keen pleasure in golf, fishing, shooting, football and basketball. "I shall be back in India soon when I look forward to trout fishing in Kashmir and big game shooting in jungle," he added with a broad smile.

"Wedded" to the internationally famous firm for 31 years, Mr. Waugh has served in various capacities in various branches the world over.

Prospects for Perkins in the United States

LONDON (By Air-Mail)

Senior executives of F. Perkins Ltd., the Peterborough diesel engine company, will travel many thousands of miles in the next few weeks probing new markets to replace those temporarily affected by the Suez crisis.

The company, which has an annual turnover of about £20,000,000, exports 70% of its diesel engines, either directly or indirectly, to 143 countries including America and Canada.

Off to the United States is Mr. M. I. Prichard, the company's Deputy Managing Director, for top-level talks with American industrialists and to obtain first-hand knowledge of important dollar-earning markets.

The company believe that there is a big potential market in the United States for Perkins engines, particularly in view of the terrific impetus which a colossal road building programme will give to the manufacture of equipment of all types.

It is already supplying engines to a number of important American and Canadian companies, including Hyster, International Harvester and Cockshutt.

Mr. McNair, who has flown nearly 150,000 miles on business for the company since 1950, will spend four weeks in the United States and will visit manufacturers in a number of important industrial

centres, including New York, Chicago, Cleveland and Detroit. He is attending the New York Boat Show and will also fly to Canada for talks with Canadian Company officials and will see representatives of big Canadian firms.

Advantages of bearings

BOMBAY

Speaking at a tea party given in his honour by Mr. S. P. S. Talyarkhan of Voltas, Mr. William E. Umstatt, President of the Timken Roller Bearing Company of America, suggested that India would do well to completely avoid the use of friction bearings. Otherwise the progress of industrialisation would be retarded, he added.

Mr. Umstatt made it clear that his object in making that statement was not to suggest that he had in his mind the products solely of his company. He explained that friction bearings, as the name suggests, cause friction which costs money and consequently delays.

Mr. Umstatt, who had come to India after a tour of Australia, said that his company planned to manufacture Timken bearings in that country. When this correspondent asked whether his tour in India was in connection with opening a new factory here, he said, "Conditions in India are not favourable now for launching on such a project." In his view India's present requirements would not make the scheme an economic proposition. Further, as a matter of policy his company was not interested in starting manufacturing plants in any country which denied the company complete control.

Referring to the growth of his company, Mr. Umstatt said that when he joined it 30 years ago it had employed 10,000 people and had an output of only 10 million bearings a year; today, 25,000 employees are on its rolls and its production is of the order of 70 million bearings of 25,000 different types. The company had set up plants in the U.K., France and Canada.

Mr. R. H. Schuepp, Managing Director of Voltas, introduced Mr. Umstatt to the guests.

OF PERSONS



Photograph taken at Santa Cruz Airport on the arrival of Mr. Donald K. David who is a Director of the Ford Motor Co., U.S.A. Greeting him at the airport is (left) Mr. George W. Stones, Executive Director of George Oakes Private Ltd.



Photo taken when the Governor of West Bengal, Shrimati Padmaja Naidu, paid an informal visit to the Home & Colour Exhibition at Calcutta recently, being taken around the colourful show by Mr. Desmond Nicholson, Managing Director of Jensen & Nicholson, the Sponsors of this impressive exhibition.



Mr. & Mrs. B. J. Nicholson, chairman of Jensen & Nicholson left by S. S. Angola from Calcutta on February 4, 1957, continuing their world tour. They were seen off by Mr. Desmond Nicholson, extreme left.

BELOW:

Marshal Zhukov, Defence Minister, U.S.S.R., visited Hindustan Motors Factory on 7th February 1957. He was very much impressed with the progress achieved by the Indian Automobile Industry. Seen in the photograph—L to R—Shri M. R. Rungta, Secretary, Hindustan Motors; Shri S. L. Jhunjhunwala, Sales Manager, Hindustan Motors, shaking hand with Marshal Zhukov; Shri B. K. Birla, Marshal Zhukov and Shri G. P. Birla.

The Maharajah of Burdwan opened a very interesting exhibition of world famous watches at Hamilton's, Calcutta recently, when this photo was taken.

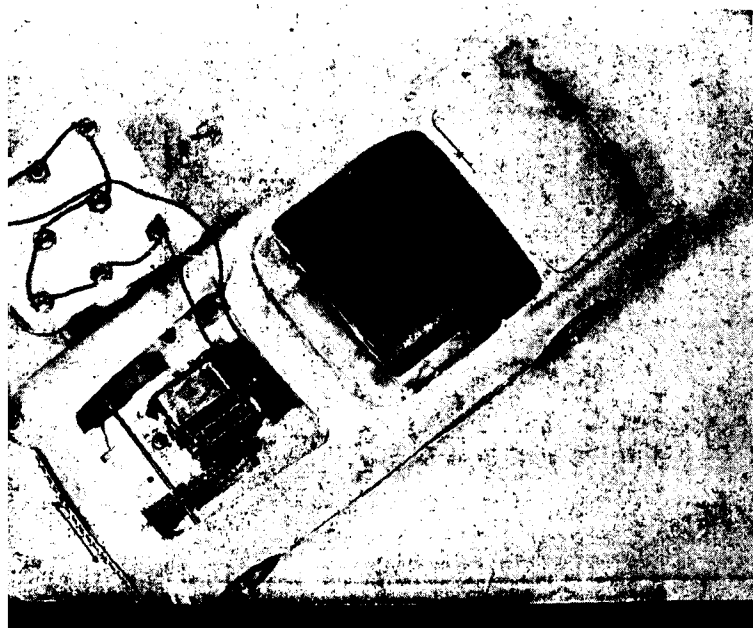




OFF THEY GO, THE WORLD'S FIRST FLEET OF SUNMOBILES!!!!—

Every small boy with big ideas is six-year-old-Eddie Bracken. He gives the traditional checkered flag to a unique fleet of General Motors Sunmobiles—cars that actually run on power from the sun, powered by the button-like photo cells mounted on their hoods. Each of these Sunmobiles, pictured at the GM Technical Centre, will be the star of one of the expanded twelve units of GM's Previews of Progress which GM President Harlow H. Curtice recently announced would appear before a total of three million students and adults throughout the country in the next year. A single Sunmobile was introduced by GM at its Powerama last year. GM has no plans for production of any full-sized sun-powered car but is using this fleet of Sunmobiles to demonstrate the wonders of science to Preview audiences. Over 16 million in the U.S. and eleven foreign countries have already seen the admission-free Previews show. Picture below shows the sunmobile—bonnet up.

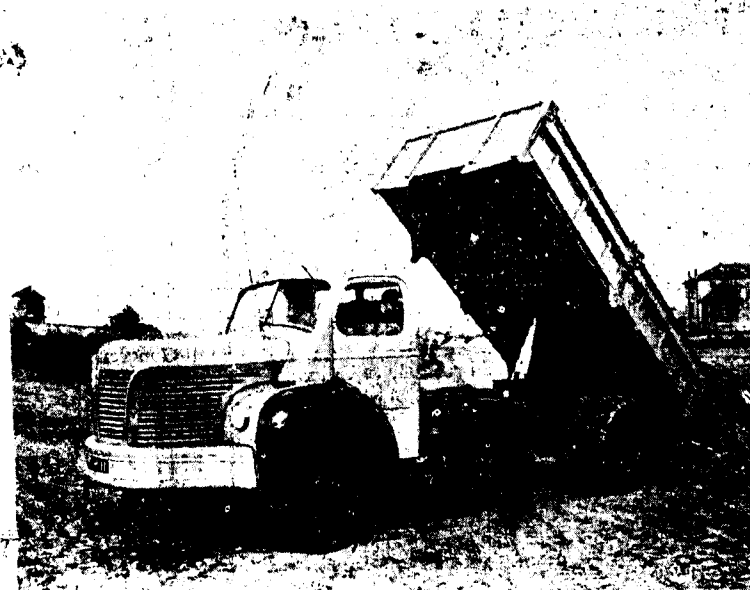
—(PHOTOS EXCLUSIVE TO MOTORINDIA)



WHAT IS NEW - IN CARS



BERLIET, DIESEL AUTO CAR



BERLIET, DIESEL TIPPER

THE INTERNATIONAL MOTOR SHOW



Windsor Castle makes an impressive background for the "Two-Point-Four" litre Jaguar saloon, which embodies all the highly specialised technical knowledge and engineering achievement that have gained for the name of Jaguar the highest international repute.



QUIT HORSE—GOOD JOURNEY!

When the two horses above get uneasy, that is signal that something is wrong with the car or the driver. A low pressure box connected to carburettor does the trick!

CAR FOR THE YOUNGSTER - £110.

The latest ideas in British toys are to be seen at the Toy Fair which opened at Park Lane House, by the Lines Brothers group. The Keystone photo shows :- Three-year-old-Debbie Browne comes from Pittsburgh, U.S.A., arrives at the fair in one of the 'toys', a 12 volt battery driven car priced at £110.

THE RUSSIAN SMALL CAR



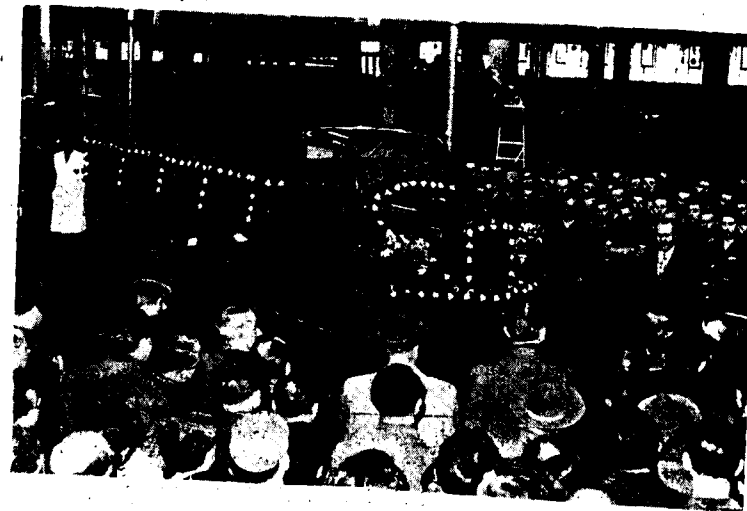
This basic design of the roadster version retained features of the Mercedes-Benz 300 S.L. This roadster is equipped with a 6 cyl. injection engine.



OF EVENTS



Photo shows conference of Dealers of Tata-Mercedes-Benz trucks and buses held recently in Bombay.



The 100,000th truck of the 3-5-4 ton range produced by Daimler-Benz came off the production line at the Mannheim plant on 12-1-57. Part of the 8,800 workers of this factory witnessed the rolling off of this Jubilee-Truck destined for Denmark.



The Madhya Bharat Roadways had placed a large fleet of Tata-Mercedes-Benz buses at the service of delegates to the Annual Session of the Indian National Congress held recently at Indore. The above photograph shows one of the buses.



When the sleek, yellow-stacked SS 'Bodenstein' berthed at her pier in Los Angeles recently on her maiden voyage, she brought a 2,500-ton cargo, including 125 automobiles made in Germany and France according to Globe Service.

Here a Mercedes-Benz sports car, one of 125 German and French automobiles brought over by the New North German Lloyd motorship is going ashore.

LEFT:

Photo taken during the recent visit of the Dalai Lama and Panchen Lama to the Tata's Automobile Plant at Jamshedpur.

BELOW:

Sholapur Municipal Bus Service has now Fargo Diesel buses. Here is a newly built Fargo bus with the Chairman of the Bus Service Committee standing in front of the bus.



Check advance unit

To check on the vacuum advance mechanism, disconnect the line from the intake manifold and alternately suck and blow through it. The distributor, or the plate inside the distributor, should move. If it doesn't, you have a faulty diaphragm in the advance unit, or the control mechanism is worn or broken.

Simple thief-proofing

A drill, a padlock, five minutes' work—and you have taken a big step towards thief-proofing your car. All you do is drill a hole through the shank of the clutch pedal, then clip the padlock through it, making sure the padlock won't pass through the floorboards and is near enough to the floor to prevent the clutch being even partially depressed.

Mark your hub-caps

Hub-caps aren't hard to lose, but they're difficult to recover. If you paint your name and address or telephone number inside the cap, you'll have some chance of getting it back. And, while you've got the caps off, thoroughly clean the insides, and paint them if there is any likelihood of rust forming.

Faulty starter

If your starter doesn't have its usual pep, and the battery and wiring seem to be O.K., it might be that the armature is rubbing on the field coils. This can be checked by holding a razor blade close to the body of the starter and operating the starter. If the blade is magnetically pulled on to the housing it means the armature is touching the coils and a thorough repair job is indicated.

Safety reflection

Save a few small pieces of Scotch-

lite from the rear bumper and fix them on the inside edge of the car doors, so that when the doors are opened at night they will reflect the lights of approaching cars and reduce the risk of accident.

Fuel-gauge earthing

When a fuel gauge doesn't give proper readings, it is possible that the fuel tank is not properly earthed to the frame of the car. This is particularly likely to be the cause if flexible couplings are used between the tank and fuel pump. An easy remedy is to solder a piece of wire from the tank to the frame. When the tank isn't earthed, the gauge is likely to read "full" whenever the ignition is on, regardless of how much fuel there is in the tank.

Siphoning

One dark, wet night you might want to siphon some petrol out of your tank. It will help if you've marked the siphoning hose with a loop of string or a paint-line to indicate when it has reached the bottom of the tank. Incidentally, why keep using that old piece of rubber hose when transparent plastic hose is available? With the plastic type you can see when the petrol is almost through, and save yourself a possible mouthful.

Gets you home

This might sound strange to you, but it works. Should your fuel pump pack up, you can still get home this way if you have a suitable carburettor—any down draught type should work.

Take off the air-cleaner and stick a bottle of petrol neck-down in the carburettor throat. The bottle should have a cap firmly attached, with a hole in the cap large enough to allow sufficient petrol to drip through to keep the car going at a reasonable speed. Lash the bottle securely, so that it won't fall out. You might have to experiment with the hole size a few times to get a suitable flow; and, remember, you won't be able to accelerate or decelerate.

TROUBLE SHOOTERS

[TROUBLE SHOOTERS, by P. F. Lally is held up for want of space and will appear in the April issue.]

PROTECT YOUR RADIATOR

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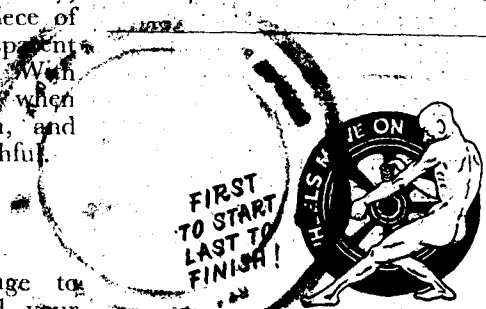
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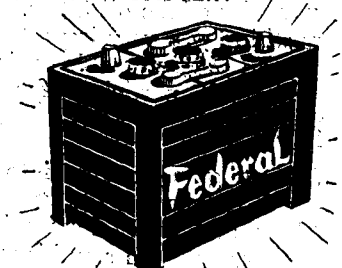
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ABOUT YOUR



By Robot

Just as important as the air-cleaner, about which I had discussed in my last article, is the oilfilter which is fitted to most modern cars. Filtering of the lubricating oil in your engine sump has gained much importance as the manufacturing methods and engineering knowledge improve, and also as knowledge of the chemistry of lubricating oil increases. Recent advances in all these fields tend to show that engine life depends to a large extent not only on the removal of large abrasive particles from the lubricating oil, but also on the by-products of combustion, oxidation and condensation. There are more number of motorists who are ignorant about the importance of the oil filter and I trust this article will help those to some extent.

When fresh oil is poured into an engine sump, it is in fact being poured into a chemical factory. It is subjected to the normal atmospheric temperatures as well as to hundreds of degrees of the cylinder walls and similarly to very high pressures in the bearings and that of combustion. Besides these the length of time the oil is exposed to these conditions and the interval between the change of oil, contamination with the by-products of combustion—all these have a direct effect on the oil. To combat these, the oil companies, in the recent past, have introduced "Additives", but this does not, however, eliminate the necessity of the oil filters. The filters still play a very important or rather an indispensable role to remove small particles of metal, dust and dirt.

Without going much into the technical details of the types of oil filters and other intricacies it would be enough if I say this much. In an average car engine holding about one gallon of oil, the entire contents of the crankcase is passed through the filter no less than 24 times in an hour, and that too

through an orifice which is about 1/16 inch in diameter. At this rate the dirt from the oil is being absorbed by the filter and the oil is maintained comparatively in a clean state.

As the filter cartridge takes more and more dirt, it is only natural that it gradually becomes choked and the flow rate of oil will be reduced. The oil will start to darken in colour indicating that the oil cleaner requires either a clean-up or change.

In certain modern engines the quantity of oil fed through the filter is much greater than what is mentioned above. In these engines the volume of oil varies from about 2½ to 5 gallons per minute, or say, about 5 to 10 times greater than the former. If the filter cartridge is choked up, it is quite possible that some amount of un-filtered oil containing small abrasive particles, soot, resins, etc. will remain in circulation, possibly resulting in serious damage to the bearings, cylinders, etc.

A major portion of the dirt that may get into the engine from air is checked by the Air Cleaner. However, in actual service, it has been found that the life of the oil filter element could give efficient service only for about 4,000 to 5,000 miles and it is very important to examine the filter at about this time and find out whether it could be of further service or whether it requires a cleaning.

The crankcase ventilation system is also equipped with an air filter and this must also be cleaned regularly if they are to do their work satisfactorily. Most of these are the oil wetted metal mesh type, and they only have to be washed in petrol and re-oiled, which takes very little time. However, these are items that rarely get the service they should have if engines are

to have the protection they need for long life and satisfactory service.

Effective filtration of diesel fuel is the best assurance of trouble-free operation of the injection equipment, such as injection pumps and spray nozzles. Once the close fitting lapped parts and assemblies contained in the injection units have been affected by erosion or corrosion, it is usually impossible to recondition them and they have to be replaced, which is expensive. The recommended filtering system for diesel fuel is a progressive one, consisting of two or three filters in series. These filters are capable of removing from the fuel oil any particles with sizes down to 3 to 5 microns (that is .00012 to .0002 in.) (a micron is one-millionth of a metre, or .000039 in.). Usually in this filter unit some are fitted with cleanable cloth or felt elements. But the last or final unit will be of a sealed and non-cleanable type, which is usually located immediately before the injection pump. It is extremely important to keep a periodic check on these filters to obtain efficient and trouble-free service.

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P. B. 1463

71-73 Apollo Street

BOMBAY-1

OF INTEREST TO MOTORISTS

Steps to reduce traffic accidents: Lay-byes for bus stops

arrangements in respect of a particular area.

Your headlights, please!

MADRAS

Lay-byes for bus stops on city roads, for the purpose of drawing and discharging passengers are being planned by Mr. R. K. Sukuraran, Deputy Commissioner of Police (Traffic).

In this connection, Mr. Sukuraran recently inspected quite a number of sites in the city accompanied by Mr. M. Meeran, Engineer of the Corporation.

It is understood that new lay-byes are proposed to be constructed in a number of places to start with, and proposals have already been made to acquire strips of vacant lands wherever they are available.

It is expected that these lay-byes will help in the orderly getting in and out of passengers in city buses.

MADRAS

The Government of Madras has issued an amendment to the Motor Vehicles Rules regarding headlights. The said amendment to be inserted after rule 303 reads thus:

"303-A. In addition to the arrangements for deflection of light contemplated under Rule 303, transport vehicles used in any public place shall have the panels of the headlights shaded by painting like bull's eye of a diameter of three inches, the centre of the bull's eye being exactly opposite the point where the reflector converges and where the bulbs are mounted."

Redex Club

BOMBAY

Members of the Redex Car Club are to meet in the evenings every Tuesday and Friday from 6 to 8 p.m. at the Backbay Garage, 141-B, Foreshore Road, Bombay to discuss matters of interest on cars and have informal meetings.

Some technically qualified members and the energetic Secretary Mr. Lally will be always present to discuss any matter a member brings up.

The Club's library books and magazines are kept at the Backbay Garage and issued to Members on days of meetings.

BEST Accidents

BOMBAY

The high incidence of accidents, which resulted in the death of 46 persons and injuries to 591 persons during 1955-56, should be traced to the following causes, according to Mr. C. L. Dudhia, General Secretary of the BEST Employees' Union:

(1) The running time of buses and trams on several routes is short, which resulted in the speeding up of vehicles by drivers on account of vehicular bottleneck and consequent delay, for which they are

taken to task; (2) the commission of old and unfit vehicles which are defective; (3) the lack of sufficient training to the drivers before they are sent on the line.

Mr. Dudhia, who was addressing press representatives here, said that three years had elapsed since the running time of buses was checked on several routes. Since vehicular traffic had increased by leaps and bounds during this period, the authorities should revise the running time and thus remove the dread among the drivers of possible suspension from service for late arrival at the terminus consequent on the delay on the road.

He cited several instances when drivers were compelled to take out vehicles on the road even though they pointed out their unworthiness. He pointed out that several drivers faced the prospect of suspension from service if they refused to do so. Thus unwilling but duty-compelled drivers were often driving the buses with perils in their hearts.

Mr. Dudhia also disclosed that the accelerators of buses were not provided with governors or locks to curb overspeeding. He further pointed out that the Albion type vehicles which have been in use for many years are provided with only three gears and they were handicapped in the matter of ascending gradients such as in Walkeswar Road and stood in danger of collision due to defective brakes.

According to the Administration Report of the BEST undertaking for 1955-56, the rise in accidents has been attributed to the increase in number of vehicles plying from 437 in the previous year to 492 at present and "the lack of road sense shown by drivers".

The cases of collisions had also risen from 2,422 to 3,258, besides 853 "minor collisions" which were not reported to the police.

The year had commenced with 17 suits pending against the BEST in the City Civil Court with claims over Rs. 8½ lakhs. Six of them had been settled for Rs. 53,400 as against the actual amount of Rs. 5,51,364. Eight fresh suits were filed during the year.

THE AMERICAN AUTOMOBILE SCENE

Fords to Build Propulsion Laboratory

Current interest in gas turbine and free piston engines for automobiles is prompting car manufacturers to step up development work on such engines. Almost simultaneous with the announcement that it is experimenting with a free piston engine, Ford said it plans to expand its laboratory facilities for testing gas turbine and free piston power plants.

The company will construct a 70,000 sq. ft. propulsion laboratory adjacent to its Research and Engineering Centre in Dearborn, Mich., which will replace a small pilot facility built several years ago. Representing one of the major units at the centre, the laboratory will include 12 main cells and at least 10 dynamometers for testing engine components and performance.

Individual cells will receive fuel from underground tanks located outside of the building. Floors of the building will be covered with spark-proof material, and a huge ventilation system will withdraw 41,000 cu. ft. of air per minute from each cell to keep it free of exhaust fumes. Work on the laboratory is scheduled to start in 1957 with completion planned about a year later.

Four-Wheel Drive on GMC Makes

GMC Truck and Coach Div. of General Motors Corp. is now offering six basic models of its truck line. Included are pickups, panels, suburban-station wagons and stake trucks in the half through one-ton weight range.

They are available with 130-hp, 270-cu. in., six-cylinder gasoline engines or 180-hp, 316-cu. in. V-8's, and either four-speed or Hydra-Matic transmissions.

The four-wheel-drive shift lever, separate from the conventional gear shift, has both a high and a low position. The low is for worst possible driving conditions; the high is for regular cross-country travel.

Regular gear shifting is used with both high and low four-wheel-drive settings to give the trucks four forward speeds in each range and a total of eight forward speeds in four-wheel drive. In vehicles with Hydra-Matic transmissions, the up and downshifts are automatic in each four-wheel-drive setting.

Overdrive unit on V-8 Trucks

Studebaker is first in the industry to offer an overdrive transmission on one-ton V-8 engine trucks. The overdrive had been offered through the light and medium duty V-8 truck lines. The one-ton units are equipped with five-speed overdrive transmission using a .798 to 1 gear ratio.

Car Painting by Radiation

Looking into his crystal ball at the recent Ford Engineering Forum, executive Vice-President Del S. Harder, foresaw the day when an electro-magnetic radiation gun will be used to paint cars. If and when such a technique comes to pass, cars shipped from the factory would presumably be painted with photo-sensitive pigments of a neutral shade. The dealer could conceivably then use such a radiation gun to bring about any colour a buyer might want.

Other possible developments were outlined for some 50 engineering educators present. Among them were: molten steel taken directly from the furnace and cast continuously through water-cooled copper molds into semi-finished slabs; control of machine tools by magnetic tape; all-aluminium radiators in the near future.

A million vehicles in 5½ months!

Chevrolet on June 15, last turned out its millionth vehicle of the 1956 calendar year, only nine days behind the same number of vehicles built in 1955. Trucks contributed importantly to the near-record volume in accounting for more than 22 percent of Chevrolet's total production. The

million vehicles included 821,043 cars and 184,319 trucks.

Novel Tubular Axle

Fruehauf is adopting a new tubular axle of its own design on air suspension trailers and certain special models. It has the same spindles, wheel bearings and brakes as the conventional I-beam axle, and was designed especially for air suspensions because torque is transmitted through the axle beam.

An additional reported manufacturing economy, advantage is the fact that it is better suited for special tread jobs, such as car haulways, because length can be varied merely by using a longer or shorter tube.

Door Latches Hailed

How many deaths and injuries safety door latches on automobiles may have prevented probably will never be known. However, the merits of new door locks developed by car manufacturers continue to be cited by safety experts. They point to studies which show that opening of doors and ejection of occupants are the most important factors influencing injury in non-rollover automobile accidents. Wisely, manufacturers are increasingly safety-conscious in car design.

Road Test Instrument

Compact road test instruments for experimental cars used in research by oil companies and vehicle producers have been developed recently by Allen Electric and shown in a test car at Atlantic City. One of the most impressive of these is a small spark advance unit employing a transistor circuit, independent of battery voltage. It reads ignition advance in engine degrees from 10-deg retard to 50-deg advance directly on the dial. Accuracy is of the order of plus or minus ½ crankshaft degree. Four instruments constitute a pack which can be mounted directly on the instrument panel either singly or in a special holder.

(By Courtesy: Automotive Industries)

HIGH COST OF MOTOR VEHICLES DEPLORED

Mr. L. L. Narayanan's address at M. V. and Allied Merchants' Association

MADRAS

"There are six manufacturers of motor vehicles in India and even though the vehicle production had increased from 14,000 to 32,000 in 1956, we see only an increase in the price paid by the consumer. Volume production has not benefited the consumer."

Thus observed Mr. L. L. Narayanan, Chairman of the Motor Vehicles and Allied Merchants' Association, Madras at the 30th Annual General Body meeting of the Association held at its premises on March 22.

The meeting was very largely attended by prominent members in the City and a good number of representatives from the mofussil areas. Proceedings commenced with tea and refreshments.

The meeting at the outset received and adopted the report of the members of the Managing Committee and Audited accounts for the year ended 30th June 1956. The meeting also enrolled as members, the following:

M/s. Pasumarthi Cunniah Chetti & Son, M/s. Motor Finance Syndicate, Mr. F. C. Griccioli, M/s. T. N. Venkatasubba Reddy & Co., M/s. Diesel (India), M/s. India Motor Parts & Accessories Private Ltd., M/s. Hukumchand Insurance Co. Ltd., M/s. The Bharat Motor Service, M/s. Southern Transports, M/s. Jayalakshmi Automobiles, Sri D. Konda Reddy, Mr. W. Pattinson, M/s. Sundaram Transport, M/s. The Premier Auto Electric Co. (Private) Ltd., M/s. Garapathi Garage, M/s. Rajamani Transports (Private) Ltd., M/s. Sri Lakshmi-Saraswathi Bus Service and M/s. Bezwada Motor Stores.

Mr. Lakshmi Narayanan, Chairman of the Association, in his speech expressed the Association's deep sense of sorrow at the death of two of its members, Mr. P. V. R. Valasubramania Nadar and Mr. C. Cherutty.

Mr. Narayanan said, "The Annual Report, with accounts for the year ending 30-6-1956, was with you for some time. May I take it as read?"



Mr. L. L. Narayanan

The Annual Meeting of our Association is the proper occasion for expressing our views on our industry, its past, present and future. 1956 saw the new Motor Vehicles Act emerge after a great deal of deliberation by the Parliament and was passed into law last month. There are many improvements in the new Act which will benefit the road transport and automobile industry. I hope the State Governments will frame the rules thereunder in such a manner that it will help to achieve the target of the planners in realising an automobile production of 60,000 in 1961 and encouraging the road transport industry to play a useful and important role in the economy of our country.

The Tariff Commission has recommended and the Government have accepted, that protection should be extended to the indigenous automobile industry for a further period of ten years and that production of vehicles, particularly trucks, will progressively increase and reach 40,000 per year by 1961. There are six manufacturers of motor vehicles, and even though vehicle production has increased from 14,000 to 32,000 in 1956, we see only an increase in the price paid by the

consumer. Volume production has not benefited the consumer.

There is a good case for ancillary industries being encouraged and the motor vehicle manufacturers should be persuaded, if not compelled, to buy their requirements from independent parts manufacturers so that the industry will grow on healthy lines and vehicles can be produced at an economic cost.

The emphasis should be on the manufacture of trucks which are necessary for transport of agricultural produce and industrial commodities, particularly today when the railways are unable to carry all the traffic offered and it would not be out of place to mention that the Government should devote greater attention to the manufacture of trucks rather than the manufacture of passenger cars, considering the demand in our country and the paying capacity of the car-owners. Passenger car is not an urgent necessity.

My reasoning for this suggestion is the ever-increasing price of the motor car, particularly the small car, over the past ten years, and also the percentage of the over-aged vehicles in our country which is a direct consequence of the high price. Out of 340,000 motor vehicles, all kinds, on the roads of our country, over 60% are ten years and more of age. Normally most of them should have been replaced and this will be possible only if vehicles are produced at a price within the reach of the average consumer.

Coming back to the role of truck and bus, which will have to play a greater part in the economy of our country, I should say that every encouragement should be given by the Government, both at the Centre and in the States, to develop and expand Road Transport so that it will be cheap, rapid, and efficient as recommended by the various committees that have enquired into road transport and taxation thereon. For this purpose, Government should fix high priority for improving road surface, increase road mileage, permit greater loads to be carried by trucks, and remove all restrictions with regard to operation of goods



Mrs. Satyanarayana presenting the Trophy to Mr. P. S. Hariharan.



Photo taken at the conclusion of the Madras Motor Sports Club Races shows (L to R) : Messrs. Raja Sinnadurai, Z. Deen, Govind Dass, Dayanidhi, Mrs. Satyanarayana, Parson, P. S. Hariharan, V. K. Gupta, Gajendran, Vijaya Pal and Hari Rao.



Group Captain Satyanarayana congratulating the winners at the sports at a dinner held at Hotel Oceanic.

Fiat 600 excels at Poona Show

POONA

The Wakefield Trophy for the best performance of a car was annexed by a 1956 model of Fiat 600 entered by Soli H. Commissariat (Bombay), which came out unscathed in the W.I.A.A.'s reliability trials over the gruelling 382-mile course.

The latest prototype Italian Sporting Car, Dr. Cacsare Rossi's 1957 model Alfa Romes, was adjudged the best in the concourse d'Elegance. This car, however, broke down at Khed during the reliability trial from Poona to Kolhapur and Dr. Rossi could not complete the entire circuit.

In the motor cycle class Mr. N. N. Mehta emerged victorious in the 250 c.c. and below class trial with his Jawa 1955. The same Jawa won for him the Noble Challenge Trophy for the best performance. Incidentally, Mr. Mehta was the only competitor to arrive in time after having completed the hazardous and gruelling course.

Twelve competitors completed the distance of the reliability trial in the scheduled time and they were subjected to elimination tests. These tests involved driving between hurdles reversing into a narrow enclosure without knocking down the fixed pins, etc. The Redex Challenge Trophy for cars from 750 c.c. to 1,100 c.c. went to Mr. B. Jondhale who with his Hillman 1952 impressed considerably.

The following were the results :

Motor cars—750 c.c. and below—Soli H. Commissariat's Fiat 600 (1956) ; 751 c.c. to 1,100 c.c.—Bipni M. Patel's Fiat 1,100 (1955) ; 1,101 c.c. to 1,500 c.c.—B. Jondhale's Hillman (1952) ; 1501 c.c. to 2,000 c.c.—M. R. B. Captain's Citroen (1947) ; 2001 c.c. and above—Minoo N. Nanavaty's Frazer (1947).

Motor car with best performance—Soli Commissariat's Fiat 600.

Motor car team with best performance—Motorized Home guards, Bombay (Frazer 1947) ; Citroen (1947) ; Hindustan (1956).

Motorcycles : 250 c.c. and below : V. N. Mehta's Jawa.

at Bangalore

The races at Bangalore proved most popular of all races held in various centres in India and a crowd of nearly 25,000 witnessed the races and cheered the winners amidst deafening noises from roaring engines. The chief event, the R.M.D.C trophy for racing class 500 c.c. motor cycles attracted a good number of entries. At the conclusion of the meeting, which was held at the Yelahanka airstrip about 12 miles from Bangalore, Mrs. G. Webb distributed the cups to the winners.

Following were the results :

President's Cup—(Clubman's handicap unlimited race for motor cycles—12 miles)—R. K. Singh (Triumph) 1st. M. K. Anantaraman (Royal Enfield) 2nd. M. M. Anandaram (M.S.U.) 3rd. Time 15 m. 29 s.

L. M. O'Leary Trophy—(Junior Championship for 350 c.c. motor cycles 20 miles)—1. B. S. Borukar (Norton), 2. Dean (Ceylon) (Norton Special), 3. V. K. Gupta (Royal Enfield). Time 20 m. 10 s.

Wakefield Trophy—(Enthusiasts race, cars unlimited—12 miles in six laps)—1. Dayanidhi (Standard), 2. P. S. Hariharan (Jaguar), 3. S. C. S. Ubhayakar (Morgan Plus 4). Time—18 m. 4 s.

Doraiswamy Trophy—(Handicap race for motor cycles—125 c.c. to 250 c.c.—12 miles)—1. C. H. Dove-

ton (Triumph Tiger Cub), 2. Z. Dean (N.S.U.), 3. M. M. Anandaram (N.S.U.). Time—20 m. 20 s.

Lambretta Trophy—(Lambretta scooters upto 150 c.c.—4 miles)—1. C. H. Dove-ton, 2. U. K. Krishnamurthy.

R.M.D.C. Trophy—(Racing class motor cycles, 500 c.c.—30 miles)—1. J. B. Wilks (B.S.A.), 2. Baroocha (Triaster K.C.) 3. K. S. Vijayapal (B.S.A.)—Time—28 m. 27 s.

Addison Trophy—(All comers, handicap for cars—14 miles). Event was abandoned after an accident.

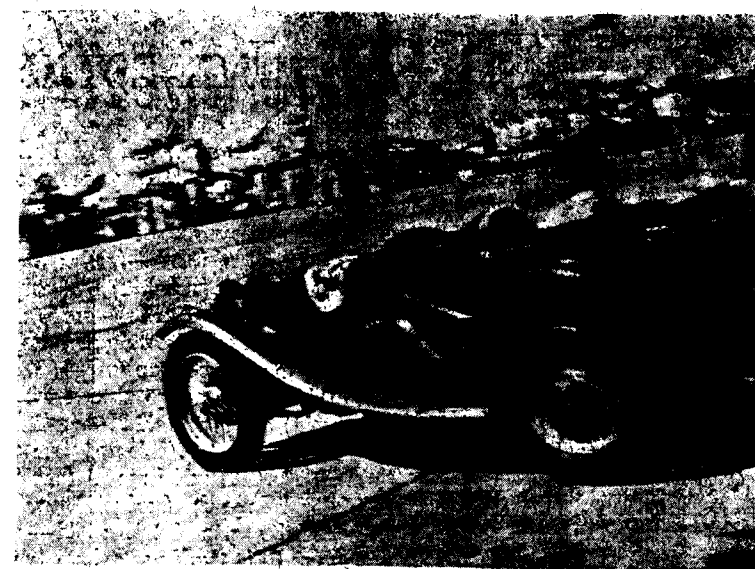


Photo taken at the Bangalore Motor Race shows Mr. Cherian driving just a few seconds before the unfortunate accident when his car capsized.

at Coimbatore

At Coimbatore the Second All India auto race meet, organised by the Coimbatore Auto Sports Club was held at Sulur airstrip, 14 miles from the town.

Six events were gone through and were keenly contested.

The junior event over a distance of 24 miles in eight laps was won by Z. Dean of Ceylon Motor cycle sports club who clocked 23 m. 46 s.

The Wakefield Trophy was annexed by Mr. K. S. Vijayapal of the Bangalore Motor Sports Club.

The open handicap motor car event for the G. K. Mani trophy was won by J. W. Webb of Bangalore.

The rolling gold cup for the best motor cycle performance of the day was awarded to Z. Dean and the rolling cup for the best car event to N. Soundararaj.

Prizes were distributed to the above winners by the District Superintendent of Police, Mr. S. M. Diaz.



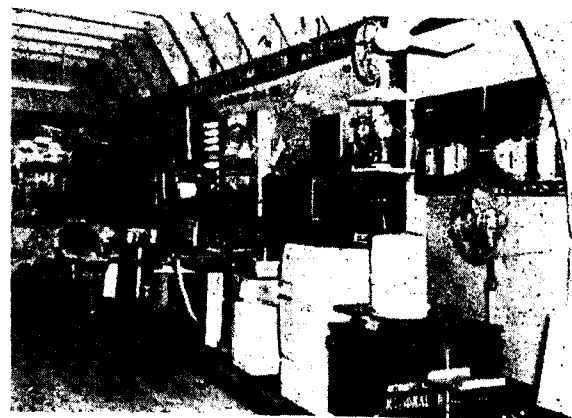
Lucky escape : Cherian walking along nonchalantly after his car turned turtle at the Bangalore races.

(Photos by B. ISENBERG)

Japanese Machinery Floating Fair



Auto Parts manufacturing section of Japanese Floating Fair.



National Electric Trading Co. of MATSUSHITA exhibit manufacture of Balhery parts and electric items.

By our Special Correspondent

The Japanese are an ingenious nation and they have given the lead even to the industrially advanced West by arranging a novel form of display of a representative cross-section of their industrial and export potential. Known as the Japanese Machinery Floating Fair, this unique venture in the history of trade exposition demanded a mobile ship-board exhibition in which was on view the cream of Japan's machinery products ranging from the smallest nut and bolt to the highly industrialised atomic engineering. In fact the Fair has provided a base for a peep into modern Japan.

The Rs. 1 crore project—ambitious in its purpose of capturing the still unexplored regions of South-East Asia—has been sponsored by the Japan Machinery Exporters' Association, an organisation composed of manufacturers and exporters which was set up with the avowed object of ensuring fair trade practices and publicise the nation's produce and thus expand world trade in general. I learn that in view of the immense significance attached to this sort of exhibition the Japanese ministries of International trade and industry, Foreign affairs and Transportation have given considerable assistance to the project. One wonders why even industrially backward countries like ours should not sponsor similar projects instead of merely opening trade exportation

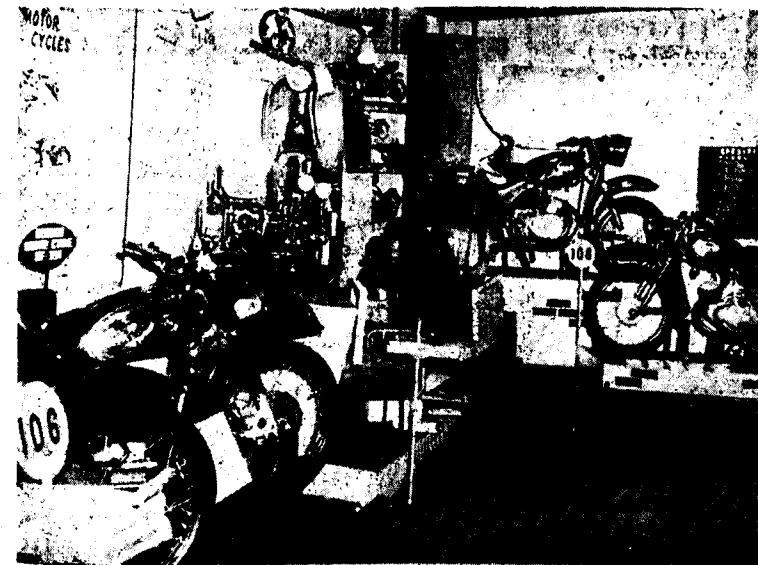
in important centres. A Japanese official abroad the 8,800 ton cargo passenger vessel, NISSHO MARU, which is the Floating Fair, explained to me that in the changing context of pattern of trade the goods must be shown at the doors of the prospective consumers, not merely exhibited at some capitals and trade centres. Another thing that struck me was the provision made for "card boxes" wherein an inquisitive or prospective importer or information seeker can drop his visiting card and expect a reply from the manufacturer or export principals of the product concerned. This is a system which we should also adopt even in our local industrial exhibitions to the mutual benefit of both the viewer and the producer of exhibits.

The floating fair is intended for exhibition in nine ports for two or three days in each. Leaving Kobe on December 16 last, the Tokyo Shipping Company's vessel arrived in Bombay on Republic Day after covering four important Capitals—Saigon, Bangkok, Rangoon and Colombo. The completely renovated NISSHO MARU has its five folds remodelled to accommodate two exhibition rooms each, containing 450 booths in all, approximately 5 ft. by 5 ft. each. The total floor space for exhibits covers about 24,000 sq.ft. Although some 70 technicians and expositors are to have answered business and other inquiries aboard, I could hardly

spot a few to explain the intricacies of working of some exhibits. In fact the liaison with the local press was far from satisfactory. Pressmen who wanted some pictures and material were denied enough facilities and the enterprising few had to make their own arrangements to get at the matter or get some exhibits photographed.

I was, however, struck by the arrangement made aboard the liner for ventilation, lighting and air-conditioning for which special diesel generators were employed. Exhibits representing more than 650 manufacturers and exporters included the following items: Automobiles, auto accessories and parts, motorcycles, scooters, too-wheelers, vessels, rolling stock (railway and industrial), internal combustion engines, agricultural implements, electrical equipments, communications equipment, machine tools, cottage industry machines, precision machines, optical equipment, time-pieces, physical and chemical appliances, meters measuring apparatus, textile machinery, sewing machines, windmill, hydro-electric equipment, engineering machinery, printing equipment, refrigeration appliances, various types of valve cocks, plastic devices, bearings, office equipment, radio and television sets, atomic engineering models, etc.

The automobile division of the exhibition is located in the first fold of the Fair, its two rooms showing respectively (1) bicycles and auto-



Lightweight scooters and motorcycles on display by NISSHO Co. Ltd., at the Japanese Floating Fair.

mobile parts; and (2) large and small model automobiles. Even a casual look at some of these exhibits is apt to instil the belief that "Japan can not only make it but can also sell it against all odds". One has to revise the time-honoured opinion that Japanese goods should be dismissed as such. As one interested mostly in automobiles and allied industries I had had occasion to take some exhibits and even "feel them". I looked at engine valves, shackle and spring pins, grease retainer oil seal, kit repair universal joint, mission gears, etc., produced by the famous exporters and Manufacturers, Japan Motor Parts manufacturing Co. Ltd., the high quality Riken piston rings and pipe fitting made by Riken Piston Ring Co. K. K.; the clutch disc for several types of vehicles made by Osaka Clutch Ind. Co. Ltd., the tierod end, propeller shaft assembly, steering knuckle, steering gear and shaft front axle manufactured by Koku-saku Kogyo Company Ltd., the engine valves, piston pins, valve guides and Rocker Arm shafts made by Japan Engine Valve Manufacturing Co. Ltd.; other automobile parts such as studs, sea screws, wheel hub bolts, spring center bolts, spring U bolts for cars, buses and trucks, manufactured by Sanyo Jidosha Buhin Seizo K. K. the famous DS automotive electrical parts such as voltage regulator and relay, ignition parts, starting parts and switch, generator and parts and

lighting parts, made by Nippon Denki Seisakusho Ltd.

Hokoku Chain Manufacturing Company has displayed best quality HKK chair which, it claims, has linked the whole world! Their principal products are motorcycle chains, bicycle chains, standard roller chains for power transmission and steel roller chains for conveyers and escalators. Japan's most durable, light and cheap bicycle is represented by Sunstar Bicycle Co. Ltd. The "great" saddles for bicycles and motorcycles are displayed by Taiyo Works Ltd. The quality of Japanese bicycles, particularly of racers, particularly of a

weight of some 10 to 20 k.g. and capable of running at 50 km./hr. with a load of over 80 kg. is indeed remarkable. In the past the greater part of bicycles produced for domestic use has been designed chiefly for transportation. However numerous, light-weight vehicles for comfortable sports rides are now being produced to meet overseas demand.

Peak production by Daimler-Benz in 1956

At the traditional New Year's reception of the Daimler-Benz AG, Dr. Fritz Könecke, the President of the Company, reported on the activities of the year 1956 and pointed out that at the beginning of the year 1957, in contrast to many other firms in the automobile industry, full employment continues at the Daimler-Benz AG. Almost all production branches of the firm have at present orders for a two months' production; work is therefore being carried on at full capacity without dismissals or short time work.

The report delivered by Dr. Könecke points out the very satisfying business situation of the Company and underlines at the same time the success of the prudent Daimler-Benz planning.

In the year 1956 the 50,000 workers of the company have produced 108,000 private cars, trucks, buses and special vehicles.

Although final figures are not yet available, the total turn-over for 1956 will be 1,640 million D-Marks (including 620 million D-Marks for exports).



Directors and members of the staff of Central Motor Parts & Accessories Private Ltd., Calcutta on the occasion of the Republic Day celebrations.

LATEST TRENDS IN AUTO PRODUCTION

"ATOMIC AUTOMOBILE, A TANGIBLE POSSIBILITY."

By T. Sushkov

.... Can we make a car that would have a turbine instead of a piston engine? Yes, we can. Gas turbine car models have already been made. These are mainly racing cars. This means the point here is to make a small reactor which could be put inside a car.

Apparently a reactor with a liquid metal cooling agent in which highly enriched uranium, or to be more exact its salts, is dissolved, would suit an atomic automobile best. This type of reactor employing not solid but dissolved uranium and uranium salts, is called a homogeneous reactor.

We can build a powerful and light reactor. But how are we to shield men from its dangerous irradiation? At atomic power plants, for instance, the reactor is walled in by tons of concrete and pig iron, which cannot do for an automobile.

But a way out can be found. In choosing various combinations of protective material we can make the shield much lighter than it would be of concrete or steel.

Let us examine one of the possible nuclear-powered gas-turbine installations for an automobile. Its driving principle is not complicated. Air compressed to a pressure of several atmospheres is fed to a heat exchanger where after being heated up in the flash of a second, it drastically expands, revolves the turbine and then is thrown out into the surrounding air. The automobile will have two turbines, one to rotate the compressor, and the other the wheels via a reductor and gearbox.

The reactor will be shaped as a sphere filled with molten metal bismuth, in which uranium 235 is dissolved.

The heated metal is channelled from the reactor to the heat exchanger, where after heating the air it is pumped back to the reactor.

The atomic automobile will be

larger than the cars we are accustomed to. Calculations show that so far until new protective materials are invented, there can be atomic automobiles weighing not less than 50 or 60 tons. These will be "atomic-powered roadsters" with no less than 3 driving axles and able to take several heavily loaded trailers....

The atomic motorcar train is not a fantastic notion but a quite tangible possibility. Motorcar trains are already carrying loads now in roadless places. An atomic motor car train of 50 metres-long could take a load of around 50 tons.

Atomic automobile designing has still not left the realm of engineering thought but nevertheless we can already say that an atomic lorry may take shape in the next few years.

Can we make an atomic passenger car? At the present standard of nuclear power development this is so far an improbability. However the rapid progress of nuclear engineering and atomic-powered means of transportation suggests that the daringmost dreams may see realisation far sooner than we anticipate.

Synchromesh transmission for tractors

Beginning this month, the Unimog German tractors, can be equipped upon request with a synchromesh gear-box. Unimog is the first tractor to be available with synchromesh transmission, and thus again ahead of its time. Tractor drivers, too, will be able to enjoy the benefits of modern engine ring which have already become a matter of course to the motorist of to-day. The synchronized gears further enhance the driving comfort offered by the two well-sprung axles, the two foam-rubber seats, the standard drivers cab top and the high driving speed of the Unimog. The new synchromesh transmission has been released for practical use after a long and thorough testing. It is synchronized in all six gears and gear shifting is absolutely noiseless.

AUTOMOBILE PRODUCTION IN W. GERMANY REACHES MILLION MARK IN 1956

The German Automobile industry has remarkably recovered in the post-war period with the result production is increasing by leaps and bounds every year.

The total production of the ten West German companies manufacturing passenger cars aggregated to 960,000 units in 1956 as compared to 851,400 units in 1955.

The figures for the preceding years were: 1954—649,000 units; 1953—460,000 units. In other words, production has more than doubled since 1953, whereas the increase from 1955 to 1956 was 110,000 cars or 13%.

Volkswagen produced 395,211 vehicles in 1956 as against 330,120 in 1955 including 332,917 and 280,216 passenger cars in 1956 and 1955 respectively.

Opel produced 207,010 vehicles in 1956 as against 185,340 in 1955 including 163,143 and 167,208 passenger cars in 1956 and 1955 respectively.

Daimler Benz produced 108,000 vehicles in 1956 as against 93,311 in 1955 including 70,000 and 63,683 passenger cars in 1956 and 1955 respectively.

Borgward Gruppe produced 95,017 vehicles in 1956 as against 110,000 in 1955 including 76,876 passenger cars in 1955.

Ford produced 86,068 vehicles in 1956 as against 80,376 in 1955 including 52,654 passenger cars in 1955.

Auto Union produced 58,890 vehicles in 1956 as against 45,061 in 1955 including 51,063 and 38,016 passenger cars in 1956 and 1955 respectively and Porsche produced 4,246 vehicles in 1956 as against 2,955 in 1955 including 4,246 and 2,955 passenger cars in 1956 and 1955 respectively.

Including delivery van, trucks, lorries and buses, the West German automobile industry has for the first time, tipped the million mark in 1956.

German Trade Fairs

The Trade fairs held in Germany during the past year set new records in attendance, number of exhibitors, square metres of display space and amount of business transacted. With *de facto* convertibility of the mark and substantially liberalized trade, the outcome of the various fairs were always "very good," "good," or "satisfactory." All the fairs have become more international in character.

The most important fairs all take place within a period of a few weeks in the spring and autumn and the small distance between the various locations of the fairs makes it easy for visitors from abroad to attend several of them, thereby procuring an overall picture extend-

ing beyond individual branches of industry of what West German and international exhibitors have to offer.

List of Fairs in 1957

BERLIN Droga Show, April 5-8.

MUNICH, Inter-European Household Economy Exhibition-Home and Technology, April 12-22.

SAARBRUCKEN, Eighth International Samples Fair, April 13-28.

FRANKFURT, Frankfurt Fur Exhibition, April 28-May 1.

HANOVER, German Industries Fair, April 28-May 7.

COLOGNE, Federal Horticultural Show 1957, May through October.

DUSSELDORF, Second International Confectionery Fair, May 5-12.

MUNICH, Ninth German Handicrafts Exhibition, May 15-26.

DUSSELDORF, Fourth German Camping Exhibition with International participation, May 25-June 2.

DORTMUND, German Agricultural Society Cattle Show, May 27-30.

BERLIN, Interbau-International Building Exhibition, 1957, July 6-Sept. 29.

FRANKFURT, Great German Radio, Television and Phonographic Exhibition, August 2-11.

OFFENBACH, International Leather Goods Fair, August 31-Sept. 9.

FRANKFURT, International Autumn Fair, September 1-5.

COLOGNE, Household Goods and Hardware Fair, September 6-8.

BERLIN, International Building Exhibition 1957-German Industrial Exhibition, September 14-29.

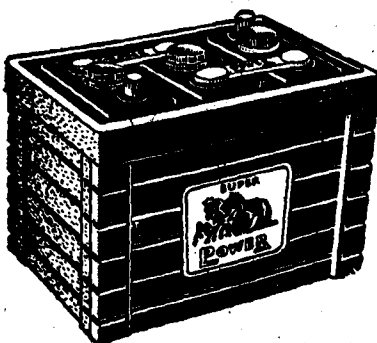
COLOGNE, Textiles and Clothing Fair, September 15-17.

HANOVER, European Machine-Tool Exhibition, Sept. 15-24.

FRANKFURT, 38th International Automobile Show, Sept. 19-29.

MUNICH, Eighth German Federal Show of the Hotel and Restaurant Trade in conjunction with the International Confectionery Exhibition, Sep. 26-Oct. 6.

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Last To Finish



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THE OPPORTUNITY PAGE

1. Messrs. Francis Stephens Ltd., London, E.C. 2, England, require agents for German motor cycles, accumulators and plastics.

2. The Controllor of Stores, State Transport, Central Stores, Santa Cruz, Bombay 23, invites applications/tenders for the supply of lubricants to the Road Transport Corporation for 1957-58. Forms can be had from his office on payment of Rs. 2.

3. Flamingo Industries Inc., One Broadway, New York, N.Y., U.S.A. want to appoint sales representatives for their products such as tractors, motor cycles, tyres, and other auto accessories.

4. The Iraqi Government calls those interested in purchasing all or part of the following quantities of Iraqi Crude Oil produced from Kirkut, Ain Zalah and Zubair fields, to apply to the Ministry of Economics, Baghdad, or Iraqi Embassies, Legations or Consulates for terms and conditions.

New address of licensing area

The Office of the Deputy Chief Controllor of Imports, Central Licensing Area, Delhi which was located at 16, Faiz Bazaar, Darya Gang, Delhi-7, has been shifted with effect from 26th February 1957 to 'N' Block, Raising Road, New Delhi.

Applications, correspondence, etc. should with effect from 27th February, 1957, be addressed to the Deputy Chief Controllor of Imports, Central Licensing Area, at the new address.

Tyres, tubes, batteries

The Central Board of Revenue considers that as Tyres and tubes and batteries are specifically excluded from the scope of item 75 (2) Indian Customs Tariff, they should be assessed to duty separately under the appropriate items whether they are imported along with motor cycles completely assembled or with motor cycles in C.K.D., S.K.D., or unassembled condition. The

Board's ruling contained in its letter dated the 13th June, 1950, may be deemed to have been modified accordingly.

Auto cycle chains

The Board of Revenue has held that 'Auto cycle chains (of size $\frac{1}{2}$ in. $\times$ 3/16 in. and 104 links would be assessable to duty under item 75 (2) of the Indian Customs Tariff and that "Engine rear support" would be assessable to duty under item 75 (10) (iv).

Spraying machine

The Central Board of Revenue has held that spraying machine comprising of engine, pump, pipeline and nozzle which is not specially designed for agricultural purposes but is a multi purpose pumping set cannot be assessed under item, 72 (8) Indian Customs Tariff. The pumping set, the engine, pipe and fittings and the nozzle should be assessed to duty separately on their own merits. If however the engine required to work the pump is of more than $\frac{1}{4}$ B.H.P., the set with the engine should be assessed to duty under item 72 (b) Indian Customs Tariff and the pipe, fittings and nozzle imported with the set should be assessed to duty under proviso to item 72 (3) Indian Customs Tariff.

Mascots

'Mascots for motor cycles' are to be assessed to duty under item 75 (2) of the Indian Customs Tariff. However, such mascots when capable of use on cycles also should be assessed under item 75 (8) Indian Customs Tariff.

The Central Board of Revenue considers that belts which have an internal circumference between 29 inches and 60 inches with included angles varying from 28 to 42 (the angle formed by extending the tapering sides of the belt) and correspond to A, B and C sections should be assessed to duty under item 75 (9) (1) of the Indian

Customs Tariff. Such belts may also be deemed to have been excluded from the scope of the Board's ruling contained in its letter D. Dis. No. 1145-Cus. I/34, dated the 29th January, 1935.

Attention, importers

A Public Notice issued by the Government of India in the Ministry of Commerce and Consumer Industries, New Delhi, on the Utilisation of Soft Currency licences issued for the period January-June 1957 for import on Dollar area, states :

"Attention of the importers is invited to Paragraph 31 of Section I of the current Red Book defining the extent to which Soft Currency area licences can be utilised for import from the Dollar area."

As a result of certain representations made by trade, the position has been reviewed and it has been decided that Soft Currency licences issued in respect of January-June 1957, licensing period, can be utilised for import from the Dollar area upto 50% the face value of such licences (or any higher percentage provided for utilisation in remarks column of Section II of the current Red Book or Rs. 5,000 whichever is higher. Para 31 of Section I of the Red Book may, therefore, be deemed to be modified as shown below :

"All soft currency area licences issued for the period January-June 1957, will be valid for imports from the dollar area upto 50% (or any higher percentage provided for dollar utilisation in the remarks column of Section II) of the face value of such licences or Rs. 5,000/- whichever is more. Licences with a face value of less than Rs. 5,000/- will be permitted to be utilized to the full extent for import from the dollar area.

Importers desiring to utilise a higher proportion of these licences for import from dollar areas may apply to the licensing authority concerned stating the grounds for their request and furnishing particulars of the comparative c.i.f. prices of the commodities from the two areas."

This concession is restricted to licences issued for the January-June 1957 licensing period only, and will not be applicable to licences issued during the earlier period or periods, even if they be still valid.

MODELS AND THEIR Prices

RS

	Rs.	as
nouth Car, (Sundaram Motors Private Ltd.) Ex. remier Automobiles Factory, Kurla	20,270	0
6 Model Plymouth Suburban	22,646	0
dustan Landmaster 1956		
South India Automotive Corporation Private Ltd.)	9,845	0
plant Uttarpara	20,371	0
lge kingsway sedan		
lge Suburban (Addison & Co. (P) Ltd.) ex Bombay	22,899	0
y Hindustan 1956 (Addison & Co. (P) Ltd.) ex Madras including S.T. & import charges	9,550	0
ndard Super Ten Saloon Union Co. (Motors) Private Ltd.) on the road	10,022	2
ndard Estate Car (Union Co. (Motors) Private Ltd.) on the road	14,889	2
debaker 'Parkview' station Wagon 1956 model [Reliance Motors Ltd.] ex plant Calcutta	20,280	0
debaker 1956 Commander V.S.T. Motors Private Ltd.) Including S.T. & Delivery Charges	19,850	15
debaker 1956 President Classic [V.S.T. Motors Private Ltd.]	22,237	13
e Fiat 1100 The Elegant [Sundaram Motors Private Ltd.]	8,847	0
llys C.J. 3B Universal Jeep [Sundaram Motors Private Ltd.] ex plant Bombay	12,160	0
llys Model 4 $\times$ 4-75 Station Wagon [Sundaram Motors Private Ltd.] ex plant Bombay	18,150	0
sp 1 ton truck	13,046	0

MOTOR CYCLES

oyal Enfield [The Madras Motors (Private) Ltd.]—		
"150 Ensign"	1,890	0
"350 Bullet" with spring frame	3,430	0
499 c.c. Model 'j2'	3,500	0
"500 Bullet" with spring frame	3,950	0
"500 Twin" with spring frame and with Magdyno or coil ignition	4,450	0

	Rs.	as.
"700 Super Meteor" with spring frame and with Magdyno or coil ignition	4,650	0
Matchless 350 c.c. with rear suspension [Addison & Co. (P) Ltd.] ex Madras	3,675	0
Triumph Terrier [Addison & Co. (P) Ltd.] ex Madras	2,175	0
Triumph Tiger Club [Addison & Co. (P) Ltd.] ex Madras	2,325	0
The New Bina Peugeot 48 c.c. [The Union Co. (Motors) Private Ltd.] on the road.	970	3
B.S.A. Motor cycles. [The Union Co. (Motors) Private Ltd.]—		
125 c.c. Bantam on the road	1,880	4
150 c.c. Bantam Major on the road	2,212	0
250 c.c. Model C. 11. G. on the road	2,736	8
350 c.c. Model B. 31. on the road	3,978	11
650 c.c. Plunger type on the road	4,629	13
50 Swinging Arm on the road	4,892	8
Jawa (S.P. Ratnam & Sons) 2.5 H.P. with spring frame, dual seat, with unique kick starter and gear change lever in one	2,660	0

VANS

Standard Delivery Van. [Union Co. (Motors) Private Ltd.] on the road	10,628	9
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TRUCKS & COMMERCIAL CHASSIS

[George Oakes Ltd.]		
Leyland Comet "203" WB Passenger Diesel Chassis including S.T. & dely. charges.	36,000	0
Leyland ECPO 2/2R-176 WB full forward control Passenger Chassis S.T. & dely. charges	35,500	0
Leyland ECOS 2/1R-163 WB goods chassis including S.T. & dely. charges	34,700	0
Leyland ECOS 2/2R-118 full forward Tipper chassis including S.T. & dely. charges	34,500	0
[Ranc. (Madras) Ltd.] Studebaker 1956 Diesel Truck Chassis		
2E 38B-155 W.B. Chassis with Diesel Engine ex plant Calcutta	21,317	0

	Rs.	as.
2E 38B-155 W.B. E.H.D. Chassis ex plant Calcutta.	16,208	0
Willys Model 4-75 Wheel Drive one ton truck chassis 118" W.B.		
[Sundaram Motors Private Ltd.] ex plant Bombay	13,935	0
Jeep Trailer ex plant Poona or Madras	1,800	0
[V.S.T. Motors Private Ltd.] Tata-Mercedes-Benz Diesel Truck and Bus Chassis L 312/42 165" W.B. 5-Ton Truck Chassis ex Works Jamshedpur	26,430	0
LP 312/42 165" W.B. Full Forward Control Truck Bus Chassis ex Works Jamshedpur	27,295	0
LP 312/48 190" W.B. Full Forward Control Bus Chassis ex Works Jamshedpur	28,085	0
L 312/36 142" W.B. 5-Ton Truck Chassis ex Works Jamshedpur	25,905	0
LK 312/36 142" W.B. 5-Ton Truck Chassis ex Works Jamshedpur	29,475	0
Fargo (at Sundaram Motors Private Ltd) Dodge (at Addison & Co. (Private) Ltd) prices ex factory Premier Automobiles Ltd., Kurla, Bombay :		

DODGE/FARGO PETROL TRUCKS

	Rs.	as.
C3D6-116" WB	11,615	0
C4D6-126" WB	12,662	0
C3PW6-126" WB	17,974	0
C4G6-129" WB	16,370	0
C4G6-155" WB	16,391	0
C4G6-153" WB	16,762	0
C4H6-171" WB	17,008	0
C4H6-153" WB	17,710	0
C4H6-153" WB	17,979	0
C4H6-171" WB	18,536	0
C4H6-171" WB	18,805	0
C4H6-193" WB F/F	18,116	0
C4H6-193" WB F/F	18,385	0
C4H6-193" WB W/S	18,479	0
C4H6-193" WB W/S	18,748	0

PETROL TRUCK WITH CAB AND PICKUP

C3D6-116" WB	15,012	0
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DIESEL CONVERSION

C4G6-153" WB	21,298	0
C4G6-171" WB	21,575	0
C4H6-153" WB	22,668	0
C4H6-153" WB	22,937	0
C4H6-171" WB	22,903	0
C4H6-171" WB	23,172	0
C4H6-193" WB F/F	22,992	0
C4H6-193" WB F/F	23,261	0
C4H6-193" WB W/S	23,298	0
C4H6-193" WB W/S	23,567	0

DIESEL TRUCKS

105P6-165" WB	22,018	0
105P6-165" WR	22,287	0
105AP6-165" WB	22,820	0
105AP6-165" WB	23,089	0
87P6-190" WB	23,962	0
87P6-190" WB	23,617	0
87AP6-190" WB	24,410	0
87AP6-190" WB	24,752	0

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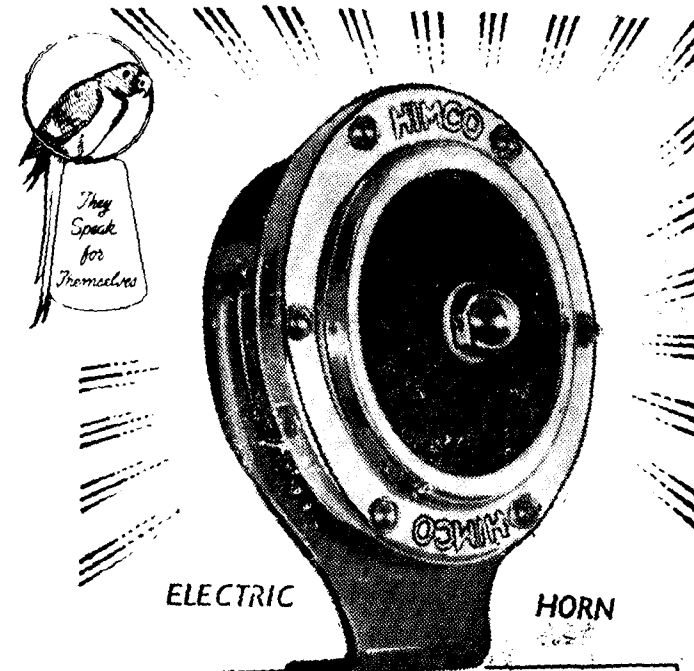
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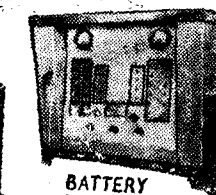
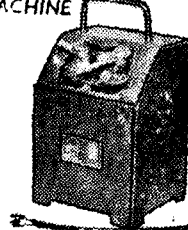
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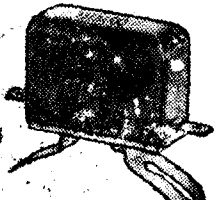
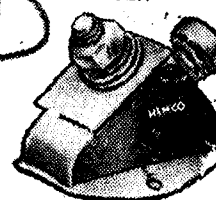
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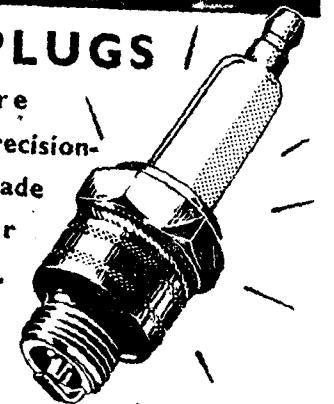
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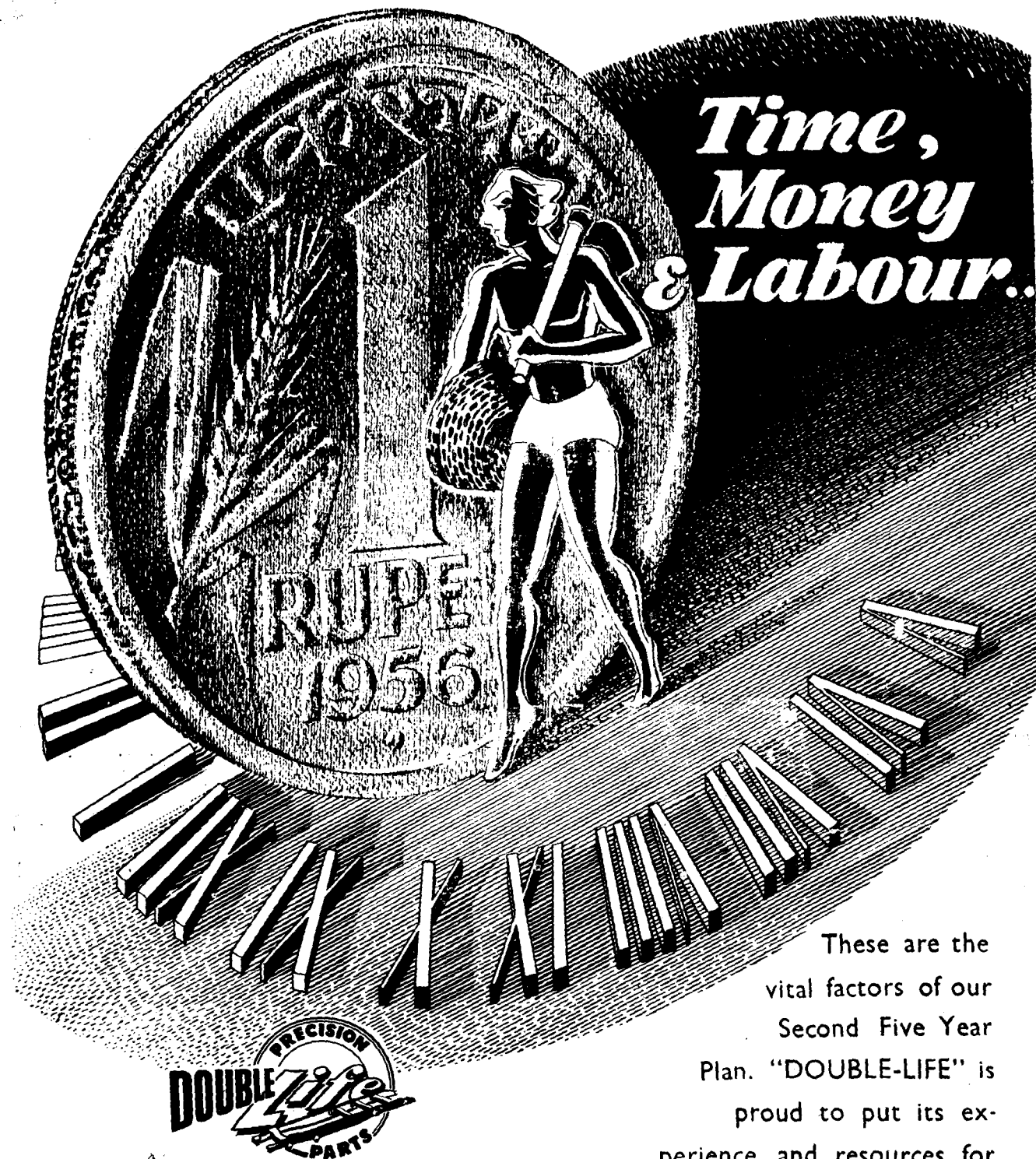
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