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VOLUME 2

SEPTEMBER 1957

NUMBER 2

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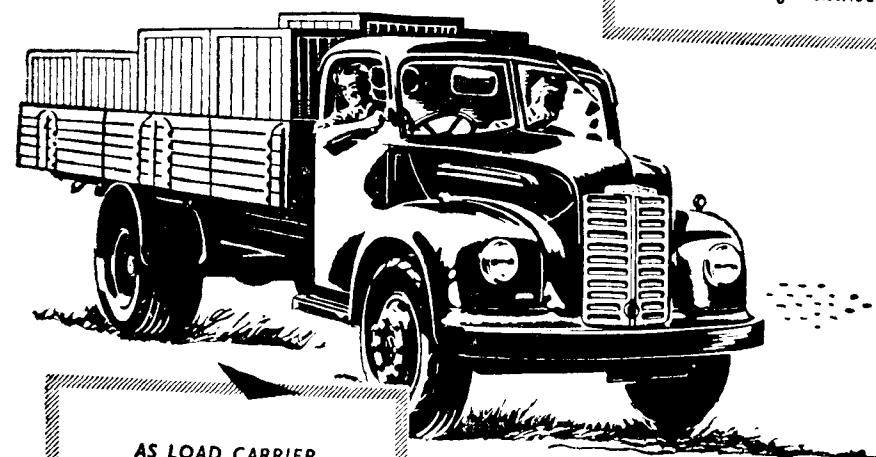
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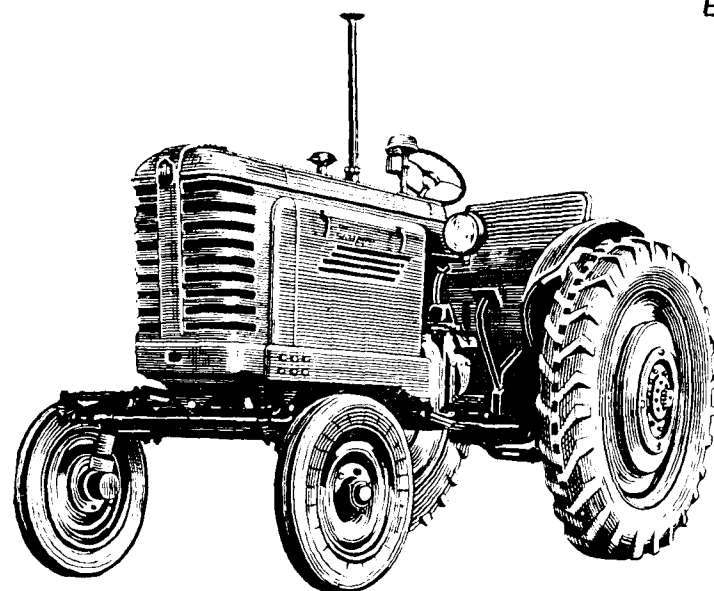
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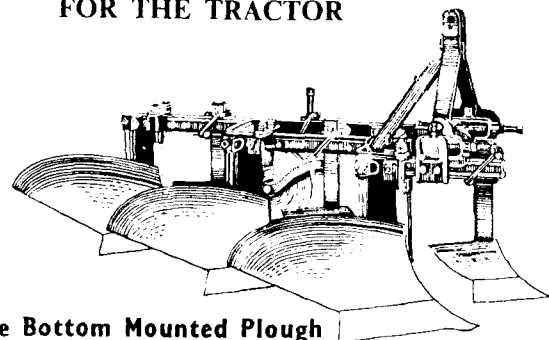
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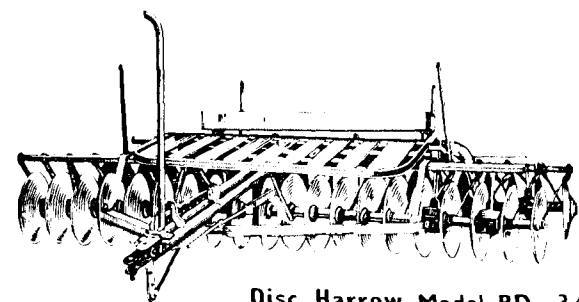
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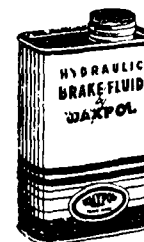


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MOTORINDIA

Vol. 2

SEPTEMBER 1957

No. 2

Editor: M. RAJAGOPALAN

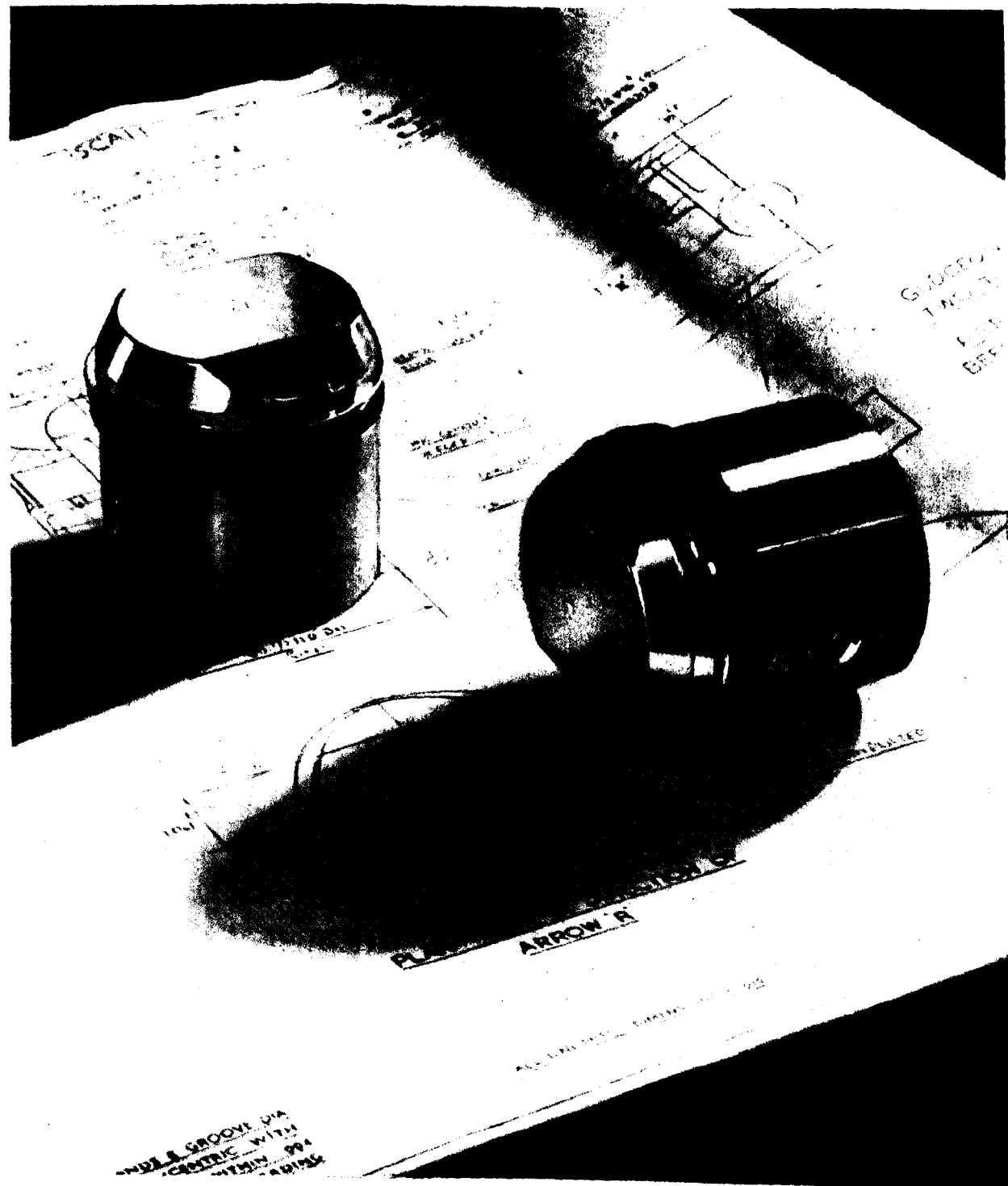
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*Letter to Editor
July
P. 10*

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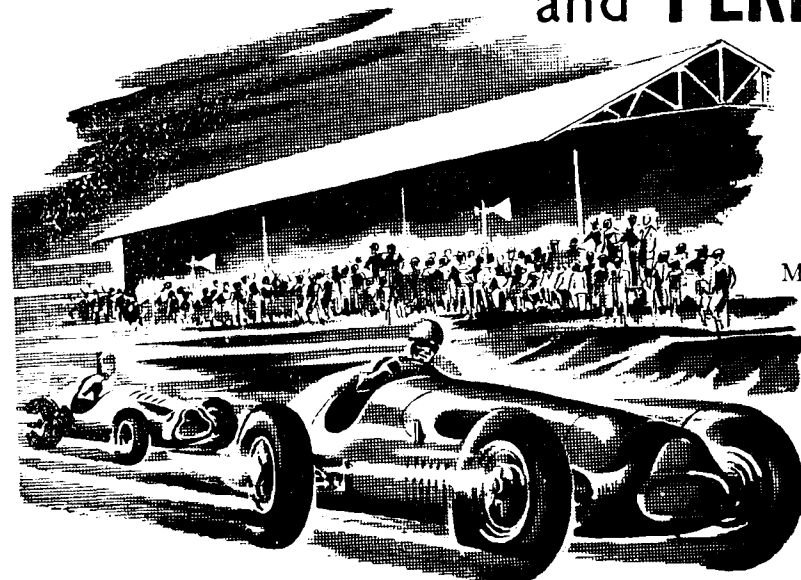
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EDITORIAL

At long last, the importance of Road Transport in the context of developing India has been recognised by the Central Government and we are glad to hear the Union Minister for Transport and Communications, Mr. Lal Bahadur Shastri declaring that "its importance has been generally accepted and that the only issue before the country today was how best this development can take place. Needless to say how much the success of our Plan depends on the development of our transport system and that includes Road Transport. It has to be geared up to its full capacity to enable the movement of all essential materials. Our efforts should, therefore, naturally be directed towards developing all forms of transport to the fullest extent." The operators of Road Transport vehicles whether of the buses or trucks in the various States of India will be glad to hear such an unequivocal declaration of the importance of that service to the country by such an august person as the Minister for Transport, and it should help to eliminate the fear that has rightly been dreaded by operators throughout India, especially during recent years, namely, the fear of nationalisation. It is unnecessary in this review to discuss the pros and cons of nationalisation as such. We have tried nationalisation in India in certain spheres and in some places in regard to road transport as well. There is no doubt considering the working of these nationalised transport departments, that the case for their extension has miserably fallen flat. And as any further nationalisation would mean an enormous inroad into the public funds of the country at a time when every effort is being made to save for the Second Plan and when even with all the ingenuity of a Finance Minister to increase and introduce new taxes the country is obliged to look to foreign aid whether it is from the West or from the East, it is absolutely necessary that no funds should be diverted for the purpose of following the policy of nationalisation which was embarked some years ago and which has gradually receded into the background in recent years. It is therefore essential that the fullest scope should be given to the private operator to come to the rescue of the nation in providing much needed facilities for the transport of men and materials during this critical stage of our nationalisation economy. It is no doubt a realisation of this urgent need that has made the Union Minister for Transport declare the importance he and his Government attach to the operation of road transport vehicles.

It is therefore a great pity that some of the States in India should still continue a policy which puts back the fear into the private operator which is indeed detrimental to the forward progress of the road transport industry. The recently announced decision of the Andhra Government to nationalise road transport services in the Krishna District is a point in example. There can be no greater folly and no bigger threat to the further progress of road transport than this announcement of the Andhra Pradesh Government. The Krishna operators have lost no time in presenting their case against the proposed nationalisation to the Government and they have recently presented a comprehensive Memorandum which analyses threadbare the position, vis-a-vis, nationalised transport and private operation. The details of this Memorandum published elsewhere in this issue will convince even the staunchest opponents of private industry of the futility of the plan that is now engaging the attention of the Andhra Pradesh Government. Andhra Pradesh fortunately have nationalised transport not far away from Krishna District and those who have had a knowledge of the conditions prevailing in the two sectors of this industry in Andhra Pradesh would not hesitate to condemn the proposed nationalisation move. It is our earnest hope that these small plans against the much desired expansion of road transport should stop and stop forthwith. It may be that it is only in one State such a move has recently been announced, but even a single move of this type which goes contrary to Government assurances in the past that there will be no nationalisation for a certain number of years to come will undoubtedly raise fears in the minds of operators whose duty to the nation now is to expand with confidence to serve the greater needs of the country.

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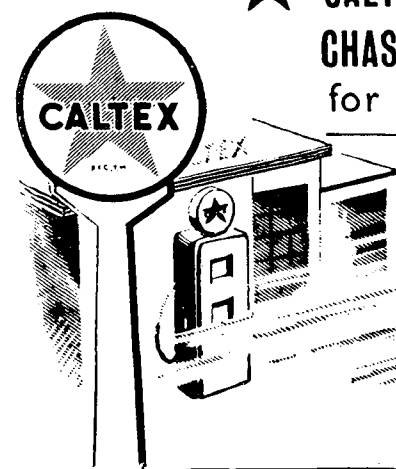
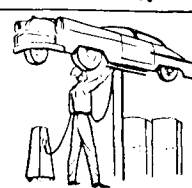
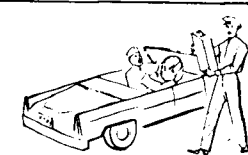
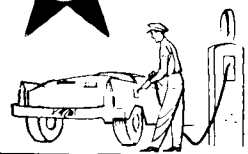
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MOTORINDIA

S-3 (B)

September 1957

Andhra Plan to Nationalise Transport

Krishna operators present protest memorandum

In a Memorandum presented to the Andhra Chief Minister, Mr. N. Sanjeeva Reddi, early this month the Andhra Pradesh Motor Unions' Congress refers to the recently announced decisions of the Andhra Government to nationalise road transport services in the Krishna District and deals with the various points that will arise in case of nationalisation of road transport in this District.

The Memorandum points out that fortunately for Krishna District, the private services now are very efficient and can be considered par excellence. The fares charged by private enterprise are never beyond 7 pies per mile and the position regarding replacement of vehicles has been very satisfactory indeed. Industrial relations are also fortunately good in that there are only two cases of industrial disputes during recent years.

The profits earned by operators are also not very high to warrant any nationalisation of the system.

Krishna District had 134 operators with 327 vehicles, single bus operators who numbered 54 predominating. There were 57 operators with two or three buses, 18 with four or six buses and 4 with over six buses.

There has been very good and healthy competition between the operators who were numerically far more in Krishna District than was the case in Hyderabad or in Madras, where on the eve of nationalisation the number of operators affected were only two or three.

145 out of the total of 327 vehicles in Krishna District were under Hire Purchase indebtedness to a tune of 30 lakhs so that any attempt to nationalise transport in the District will make the operators helpless and make them forfeit the vehicles to the money-lenders.

In spite of very low earnings and a heavy investment, the operators contributed to the Government by way of taxation about Rs. 25.3 lakhs per year, besides nearly one lakh to municipalities and panchayats, not to mention an income-tax of Rs. 4 lakhs to the Central Government.

Thus, the operators contributed nearly Rs. 30 lakhs for the Government coffers annually, and it would be extremely difficult for this money to be gained by the Government if nationalisation was attempted.

There were over 2,000 workers in the Industry and most of them may not be suitable for work under nationalised services, mostly because of their peculiar work habits and their age. Thus most of these people would be unemployed not to mention the operators themselves, if any nationalisation was attempted.

THE MEMORANDUM, THEREFORE, POINTS OUT THAT THE GOVERNMENT OF ANDHRA PRADESH WOULD BE WELL ADVISED TO DIVERT ALL POSSIBLE RESOURCES THEY HAVE AND THEY CAN ACQUIRE, FOR THE INDUSTRIAL DEVELOPMENT OF THE STATE WHICH WAS NOW WOEFULLY BACKWARD. IN RELATION TO OTHER STATES.

The Memorandum recall that the Andhra Minister for Road Transport had declared at the 9th Conference of the Andhra State Motor Unions Congress at Masulipatam in 1955 that the Andhra Government would not nationalise road transport during the second plan period. This assurance had created confidence in the minds of the Operators who had since gone ahead with programmes of extensive development. Besides, the Honourable Chief Minister who was also in

charge of road transport gave an oral assurance to a deputation of the Krishna District operators on the 2nd January this year that the Government would not hastily embark on nationalisation of road transport services purely on doctrinaire lines and that an Expert committee would be first appointed to go into the question.

Therefore, the recent announcement of the Government was quite contrary to all the above. Apart from anything else this violation of a solemn pledge expressed by a responsible Minister was ethically unfair and constituted a bad precedent in the realm of industrialists' psychological attitude to Government's pronouncements.

The Nationalisation of road transport, adds the Memorandum, would create unfavourable conditions of costs of operations and fares and service frequency.

The Andhra Pradesh area had the advantage of making a healthy comparison between the nationalised services in Telengana and the private services in Andhra in regard to road transport. This was a rare opportunity which might be best availed of at least for a few years. The conditions of the road transport in Telengana were far from rosy, whereas the private services of Andhra were more efficient and certainly more economical, though from the point of view of organization the road transport department were better placed.

The best solution, according to the Association, would be to allow these two systems to continue side by side so that people may benefit from a comparison of the two sectors with a view to improve both.

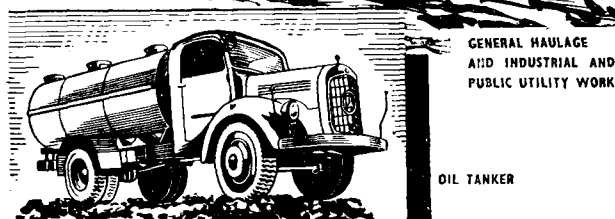
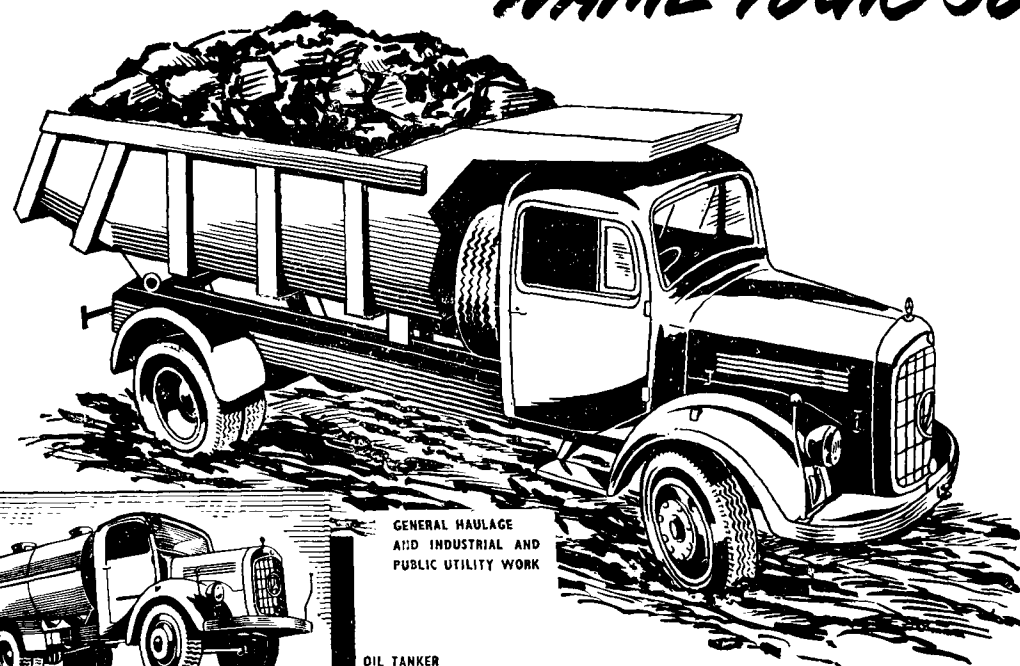
The above points clearly demonstrated the impropriety of nationalisation as contemplated

MOTORINDIA

September 1957

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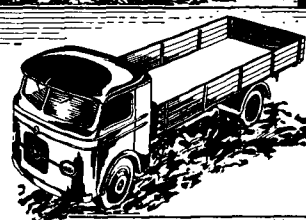


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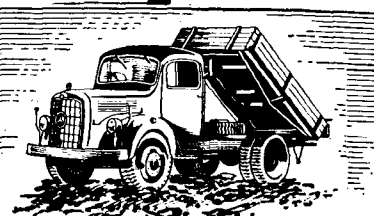
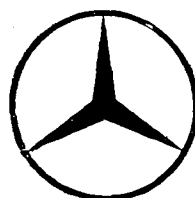
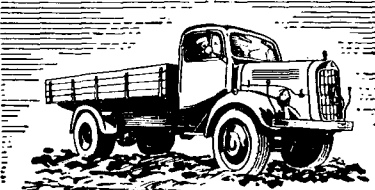


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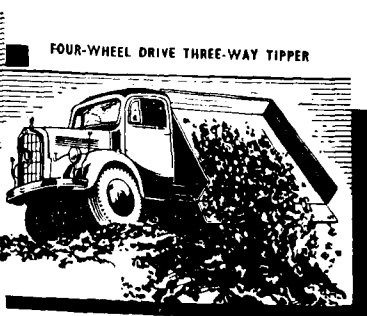


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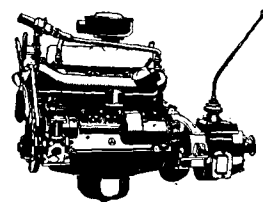


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by the Government in the last few weeks.

The Association therefore submitted that the Government should allow road transport to remain in private hands over the second plan period. This would primarily enable the investment of private operators to come to the fruition.

Further, Government ought to give definite notice of nationalisation which they might desire to introduce after the second plan period.

The Association felt that a few years delay was always preferable to an instantaneous wrong action. It was their fear that the Government had not given complete and dispassionate consideration to the various points raised above.

Concluding, the Memorandum requested the Government to have a thorough study of the bogie of profits by an Expert Committee, if necessary.

The Memorandum added that the argument that the nationalised transport would be able to earn a sizable profit and augment the general revenues of the State was a fallacy as illustrated by the figures of the budget estimates of the Andhra Pradesh Road Transport Department for the current year.

The Association therefore appealed to Government to consider more deeply the various aspects of the proposed measure and pleaded for a postponement of the proposed nationalisation till atleast the end of the second plan period. Such a decision would enable operators to adjust themselves financially, as otherwise the existing services would suffer very greatly at the hands of the unkind money-lenders.

The Association hoped that what they have demanded was not too much to ask for from a benevolent Chief Minister of a popular Government.

“IMPORTANCE OF ROAD TRANSPORT ACCEPTED”

—LAL BAHADUR

The Union Minister of Transport and Communications, Mr. Lalbahadur Shastri, said that preliminary action for the establishment of an inter-State Transport Commission was already in hand and that its personnel was expected to be announced shortly.

The needs for the development of road transport, Minister said, was no longer an issue for academic debates. “Its importance has been generally accepted and the only issue before us today is, how best this development can take place. Needless to say how much the success of our Plan depends on the development of our transportation system—and that includes road transport. It has to be geared up to its full capacity to enable the movement of all essential materials. Our efforts should, therefore, naturally be directed towards developing all forms of transport to the fullest extent.

Mr. Shastri said: “A factor has caused anxiety to the industry is that of taxation. As you would be aware, the Motor Vehicles Taxation Enquiry Committee has suggested that there should be a ceiling on Motor Vehicles taxes at the level of 75 p.c. of the total current Madras State taxes. I would avail of this opportunity to appeal to all the State Governments to accept this ceiling.

“There is also the question of Double Taxation. It is not necessary to say very much to show that this Double Taxation does impose heavy burdens and puts the operators in certain areas at serious disadvantage. It is essential, therefore, to give relief in this regard if we really intend to provide fuller opportunity to the operators to cover inter-State routes and carry long distance traffic. I hope and trust that in

view of the urgency of this matter, the State Governments would give it their early consideration.

“The industry would, I am sure, appreciate the various other steps which have been taken such as an increase in the permissible payloads, strengthening of roads and bridges to facilitate the operation of heavy duty vehicles and truck-trailer combination. I may also mention the recent amendment of the State Bank Act in order to provide for credit facilities for road transport operators. In the context of the amendment of the Act, it is expected that permits would now be issued more liberally. Another incentive to operators has been provided by the decision that the public carrier permits should be given for a uniform period of five years.

*

CREDIT FACILITIES FOR MOTOR OPERATORS

In reply to a communication by the AIMUC on the subject of making available to the road transport operators cheap credit facilities, the planning commission has since informed that provision had been made in the State Bank of India Act *vide* a recent amendment whereunder the State Bank could now advance and lend money and open cash credits upon the security of book debts or other assets of any undertaking engaged in the financing of hire-purchase transactions which are hypothecated to the Bank as security for such advances, loans or credits. This provision, according to the Commission, had been made mainly to provide facilities to small operators to purchase motor vehicles on credit.

September 1957

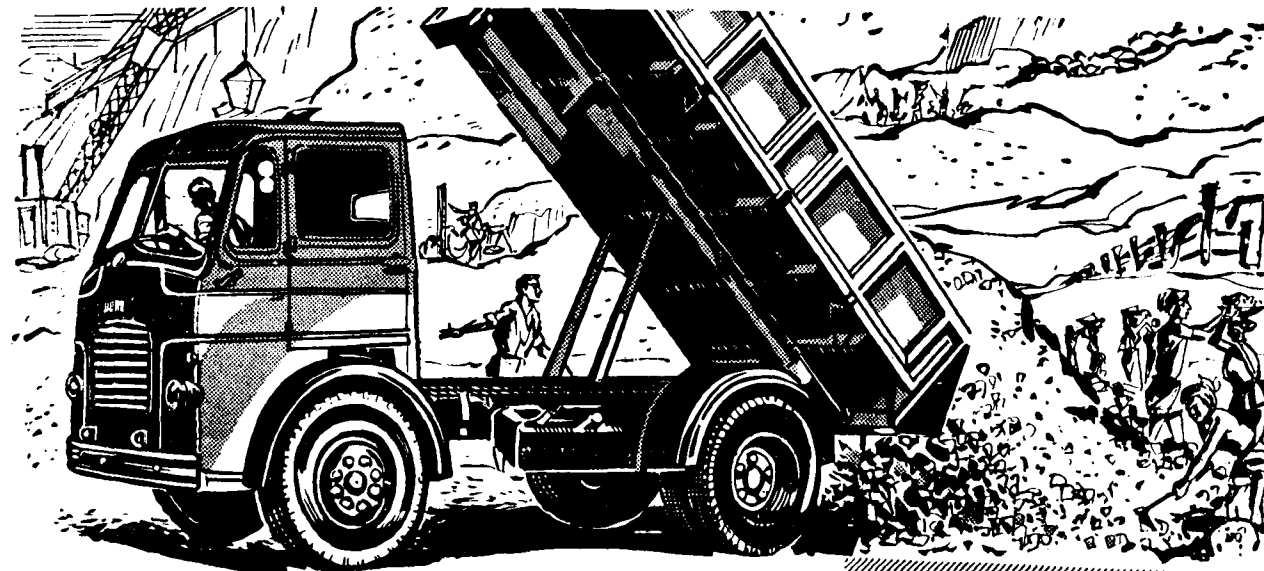
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MOTORINDIA

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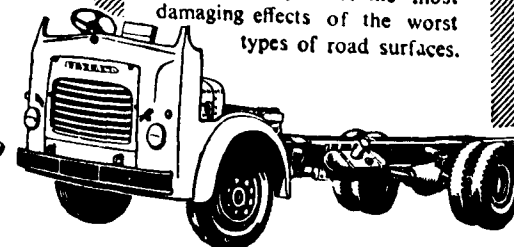
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Indian Roads and Transport Development Association

ANNUAL REPORT FOR 1956

At the Annual General Body of the Indian Roads and Transport Development Association Ltd. held at Bombay this month, the Report of the Council for 1956 was presented for consideration and adoption.

According to the Report, the year under review was characterised by a ceaseless endeavour to focus attention on the transport requirements of the Second Five Year Plan which commenced in April and efforts to secure the adoption of measures designed to enable road transport to fill the gap in the country's over-all transport capacity. To this end, the Association pressed for the acceleration of road development, for the removal of legislative restrictions on road development for types of road vehicles and truck trailer combinations, for the expansion of cheap credit to encouragement of behavior types of road vehicles and truck trailer combinations, for the expansion of cheap credit to road operators, for the creation of a sense of security in the transport business, for reductions in motor transport taxation and for a number of other measures for the expansion of road transport services. The results on the whole were very satisfactory in the context of the magnitude of the problems to be solved and particularly in the field of legislation, the Association's efforts to mould the Motor Vehicles Amendment Act of 1956 which was passed by Parliament in December, into a dynamic instrument for the promotion of road transport in the country have been successful.

The other activities of the Association described in the Report referred to the efforts made by the Association to point out that the Nagpur Plan gave India no more than one-fourth of a mile of road per square mile of

territory, as against 1.1 mile of road per square mile in the United States, 1.3 in Ceylon, 2.1 in Great Britain and France and 4.9 in Belgium. Even so more than 60% of India's mileage was unmetalled and incapable of providing all-weather communication while roads in other countries were hard-crust all weather roads capable of carrying even 20 to 30 ton vehicles. The Association therefore continued to urge that India must step up her road programme as soon as possible to make up the leeway at a faster pace and the country must also upgrade earth roads into hard-crust roads, modernise surface of all main traffic bearing roads with an improvement in their geometric design and strengthen all old bridges so that roads may be fit for modern motor traffic. Efforts were also made to secure increases in prevailing laden weight limits to encourage use of heavier vehicles.

A weight limit of 8½ to 12 tons for different classes of roads on 2 axles with a suitable increase for each additional axle was recommended by the Association.

In the matter of Road Transport, the need to foster expansion of road services, especially in view of the present shortage of transport was stressed in articles, features and Press conferences. An exhaustive study of the transport needs of the Second Plan was undertaken by the Vice-President, Mr. B. V. Vagh.

The Council of the Association met the Union Deputy Minister for Transport and Railways in June and submitted to him a number of recommendations designed to induce road transport to fill the transport gap. It was gratifying to note that the Deputy Minister agreed that the vehicles should perform not merely regulatory functions, but also cater for the development of the needs of road

transport and besides that he also shared the view that the Code of Principles and Practice should not come in the way of expansion of road transport.

A call to traders and road transport operators to employ truck-trailer combinations and articulated vehicles so as to reduce road transport costs was made by the Association during the year. The Association also urged on the Government of the need for a long distance road traffic free from all restrictions; and with this end in view urged the removal of impediments to road transport expansion. Certain claims by a Member of the Railway Board, Mr. K. B. Mathur on the ability or otherwise of road transport to provide relief to the Railways were torn to pieces in an analysis of the subject by Mr. Vagh, Executive Vice-President of the Association during the year.

The Association expressed the view to the Tariff Commission which enquired into Fair prices of automobiles that although the object of the present enquiry was examination of the price structure of automobiles, the main issue was the promotion of sales of vehicles commensurate with the country's requirements as well as the steps required to ensure the production of the number of vehicles envisaged under the Second Plan. It was claimed that a solution of the price factor alone however satisfactory would not be sufficient to produce the desired results. Therefore, the Association urged that there should be no excise duty on tyres, tubes and batteries supplied as original equipment of new vehicles; Sales-tax on vehicles should be at the same rate as for other essential commodities; there should be a drastic reduction in import duties on raw materials and unfinished products going into

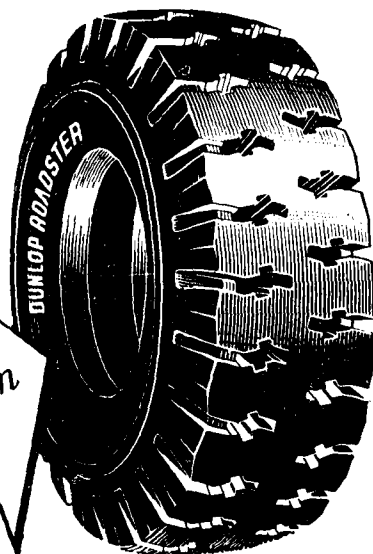


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the manufacture of vehicles; adequate supplies of raw materials should be made available to manufacturers; a minimum average reduction of 15% in the present cost of vehicles to operators should be aimed at; facilities for the Credit purchase of new commercial vehicles should be provided through the Finance Corporation; a development rebate should be granted to buyers of new commercial vehicles; incidence of taxes affecting the running cost of vehicles should not be more than about 20% of the cost per ton-mile instead of the present about 33%; limits of permissible laden weights of commercial vehicles should be raised to as close as possible the optimum of about 27,000 lbs. suggested by the Indian Roads Congress in 1949 on National and State Highways; trailers should be encouraged by excluding their laden weights from the laden weights of the main vehicles; surfaces of main traffic-bearing roads should be modernised as early as possible; present restrictions on road transport imposed by Chapter IV of the Motor Vehicles Act, 1939 and the Code of Principles and Practice should be withdrawn more particularly as regards the following:—

- (a) Liberal issue of permits;
- (b) Period of operators' permits;
- (c) Inter-State travel;
- (d) Distance regulation.

The Association did its best and directed to promise all interest to road transport by making representations to the Estimates Committee of Parliament, to the International Bank Mission which visited India, to the Railway Freight Structure Enquiry Committee etc.

The introduction of a tax of 4 annas per gallon on diesel oils by the Government of India was opposed as most harmful to the country's economy. The Association also expressed its considered opinion about Motor Vehicles Amendment Act of 1956 and was grateful that the Act has been finally passed and had accepted

TRANSPORT AUTHORITIES IN HYDERABAD

Under the provisions of the Motor Vehicles Act, the Government have constituted the transport authorities for the regions of Hyderabad and Medak districts. The Regional Transport Authority, Hyderabad District including Hyderabad and Secunderabad cities, will consist of the Collector, Hyderabad District (Chairman); Deputy Commissioner of Police in charge of traffic (member, Secretary); District Superintendent of Police, Hyderabad District, Divisional Engineer, Public Works Department, (Roads), Hyderabad; City Engineer, Secunderabad Municipal Corporation and City Engineer, Hyderabad Municipal Corporation.

The Regional Transport Authority for Medak district comprises the Collector, Medak District, (Chairman); District Superintendent of Police, Medak District (member, Secretary) and Divisional Engineer, Public Works Department (Roads and Buildings).

many of the suggestions made by the Association within its scope.

The Membership of the Association progressively rose and as a result the income from all sources of the Association during 1956 was very nearly a lakh of rupees. It was hoped that this amount would rise to at least 1,50,000 by the end of 1958 by the enlistment of more members interested in the road transport problems. During 1956 the Association has had 191 supporting members, 66 associate members, 349 ordinary members and 299 life members.

The Association's Balance Sheet for the year showed a net income of Rs. 99,444 and a balance of excess income over an expenditure of Rs. 3575.

Floating Garage Delivers 1,000 Fiats

Turin, Italy: A floating garage left the nearby Port of Savona recently with 1,000 Fiat cars abroad bound for the West Coast of the United States.

The "Italterra", owned by the Societa Italnavi, an associate of the Fiat Motor Company, touched Los Angeles and San Francisco discharge the mass shipment of Fiats to the American market.

According to a spokesman for the company, the "Italterra" is the first of two identical motor ships which Italnavi has equipped with Fiat diesel engines and converted into enormous floating garages to accommodate 1,000 Fiats.

A decided advantage of the new ship is that the uncased Fiats will be rolled on to the ships docks in the same fashion they come off the production lines in Turin—and almost as fast.

Fiat Motor Company is the world's biggest manufacturer of baby cars and has captured sizable markets in most parts of the world. The big exception is the U.S. To date, only a trickle of Fiats has entered that country, most of them purchased abroad by Americans.

But if the company's entrance into the lucrative American market is somewhat belated, compared with other European makers, Fiat given every indication it will wage a full-scale campaign to get its share of sales.

It has set up a service organization and is offering special technical courses in various parts of the U.S. Sales efforts, now concentrated on the West and East coasts, will soon extend inland.

Meanwhile, large shipments of Fiat vehicles—rear-engined 600s six-seater Multipla baby cars and Fiat 1100s—are leaving Italy by regular cargo vessels for New York and eastern markets.



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MOTORINDIA

PORTRAIT OF AN AUTO INDUSTRIALIST

HE PRODUCES MOTOR CARS BY THE MILLION

BY
Ralph Feilden

Always a realist, fearless in speech and action—at times perhaps impetuously outspoken—Sir Leonard Lord, chief of the vast British Motor Corporation, can be ruthless in decision, but a genuine friend capable of almost embarrassing kindness.

Many a person inside and outside his vast organisation can testify to a kindly deed which he would hate to have recounted, or even mentioned.

Like all self-made men, "L.P." (as he is known to all) had to fight hard for all the success he now so deservedly enjoys. But success has not changed his character or outlook. Alike to those in high or humble positions, he is still the same L.P. Lord who never forgets comrades of the drawing office or work bench.

A STEP AHEAD

He does not suffer fools gladly. Gifted with a phenomenally keen brain and analytical, quicksilver mind, he is usually one step ahead of others. His clear mind is revealed in rapidity of speech.

With controlled quick temper, at times his tongue can be as pen sharp. But he is equally generous in his admission of a fault or an injustice, while a simple "well done" to an employee in high or lowly position carries the full implication of appreciation of a job well done.

Sir Leonard is acknowledged as one of the most capable planning and production experts in the motor industry. This was well revealed in the early stages of the post-war years, when the machine tools of the Austin plant were repositioned and augmented without disturbing or slowing down output.

He has the important distinction of being both an industrialist and a highly qualified engineer,



SIR LEONARD LORD

while on the drawing board he can compete with the best. With those characteristics his value to the British Motor Corporation is that of a man equally at home with an involved balance sheet, or with the problem of tackling a vast scheme of reconstruction or launching a new model.

HIS FIRST JOB

In early youth his life was not easy. But fighting qualities, and courage, and a tenacity of purpose not always associated with youth, laid the foundation upon which he built success. Reflecting over his eventful career Sir Leonard would be justified in the claim that he progressed by his own endeavours, and not by influence or outside help.

With a widowed mother hard-pressed financially to keep him at school, 'teen-aged Leonard Lord had to earn some money. His first job in the drawing office of Courtaulds in Coventry earned him 4sh. 6d. a week. During the evenings he continued to study intensively.

At 19 he blandly added two years to his age, and 30sh. to his

income, by teaching higher mathematics to night classes at the Coventry Technical College.

RETIRED AT 40

In those days Lord's ambition was to retire at 40 and see the world. The realisation that this involved the earning of a great deal of money spurred on the youthful aspirant to further endeavours. After a vain search for an opening in the machine tool industry in London, he returned to Coventry and took up a temporary post as a jig and too designer in the drawing office of the Hotchkiss firm, who made petrol engines. He progressed and W. R. Morris (now Lord Nuffield), who had purchased Hotchkiss and Wolseley Motors of Birmingham, moved "L.P." to the latter firm as works manager.

After that, promotion was rapid until in 1932 he was appointed managing director of Morris Motors Ltd. Despite his high office Mr. Lord did in fact keep to his resolution to retire at 40 and he then travelled extensively abroad. Friendship and regard still remained between him and Lord Nuffield. So, as retirement soon palled, he took over the administration of the £2,000,000 Nuffield Trust Fund to aid the "Special Areas" the industrial areas especially hard hit by the Depression of the 1930s. He did a fine job, but for an ambitious technician it was not the right occupation.

RECALLED FOR WAR TASKS

In 1937 the clouds of war were gathering. Lord was therefore well pleased when his old and esteemed friend, Lord Austin, feeling the advance of years and the imminence of war, suggested something more active. So, in March 1938, Leonard Lord went to the Austin Motor Company at Longbridge as Works Director.

When Lord told Lord Nuffield

MOTORINDIA



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CW 68

of the proposition, the latter showed the typical reaction of a great man. "What fun we shall have", he said, "cutting each other's throats".

Rearmament got under way. Then in June 1940, Mr. Lord was asked by the Government, in addition to his Longbridge activities, to expedite the production of "Defiant" night fighter aircraft. As the war advanced, with the gigantic problems of switching production to special vehicles, tanks, trucks and aircraft, production engineer Leonard Lord was in his rightful environment.

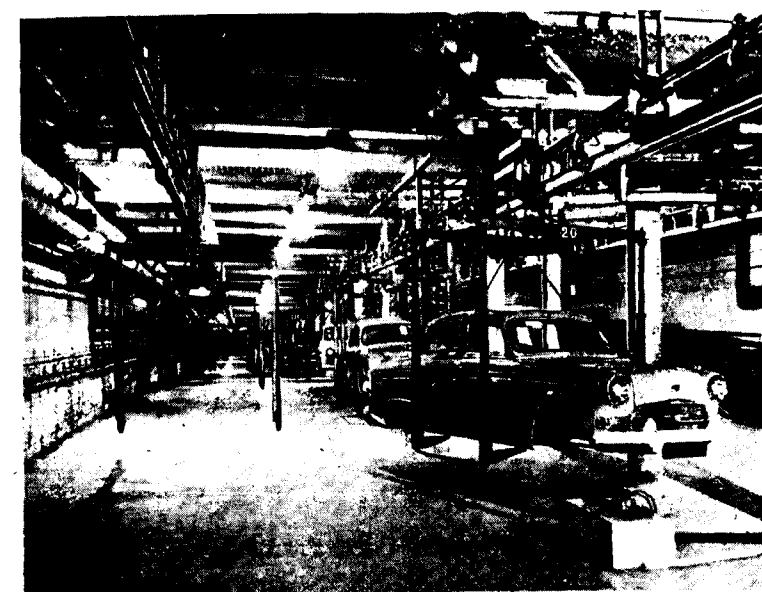
Lord Austin died, and his successor, E. L. Payton, retired. In 1945 L.P. Lord took over control of the huge Austin plant as Chairman and Managing Director.

POST WAR CHANGE-OVER

With the change-over from war to peace, Austins were soon exporting more cars than any motor manufacturer in the world. But huge production brought its problems. New machinery and a new lay-out was needed. So, in 1952, a new assembly line at Longbridge was installed, which was claimed to be the most advanced of its type in the world. Today it has been replaced by even more efficient methods incorporating electronic control, with fewer men producing more cars.

In 1947, ever aware of the need for larger exports to bring in foreign currencies for Britain, particularly dollars, Mr. Lord attacked the vast North American market, booked orders for over 3,000,000 dollars worth of cars, appointed dealers, and inaugurated a 24-hr. spares-by-air service. This pioneering effort induced other British manufacturers to enter the U.S. market.

At a later date Mr. Lord's drive and foresight earned a further reward. The Nash Company of America arranged with Austins to build a special car, the "Metropolitan", solely for the American market, and powered by the Austin A40 engine. That Longbridge-built car is the second largest in sales of imported cars in the United States, and has brought millions of dollars into



Electronic sequencing ensures automatic track delivery at the Austin Car Assembly Building at Longbridge.

the British Treasury.

THE BIG MERGER

Later came rumours of working agreements and exchange of technical information between Austin and Morris. The wisdom and caution of this approach was later revealed in a merger resulting in the formation of Britain's largest motor enterprise—the British Motor Corporation, with world-wide ramifications. Today the B.M.C. own assembly plants in Australia and South Africa, among other countries, brings vast sums in foreign currencies to the Treasury, and gives employment direct and indirect to a veritable army of people. Sir Leonard is in supreme command of the B.M.C., with Lord Nuffield Honorary President of the Corporation.

For years the Honours Lists came and went with no mention of Mr. Leonard Lord. When knighthood came, in 1954, it was singularly appropriate that he was created a Knight of the Most Excellent Order of the British Empire. Sir Leonard is a fervent upholder of everything best in the British tradition and way of life.

He can be impetuous. In the shattering winter of 1946 a team of Austin cars visited seven Euro-

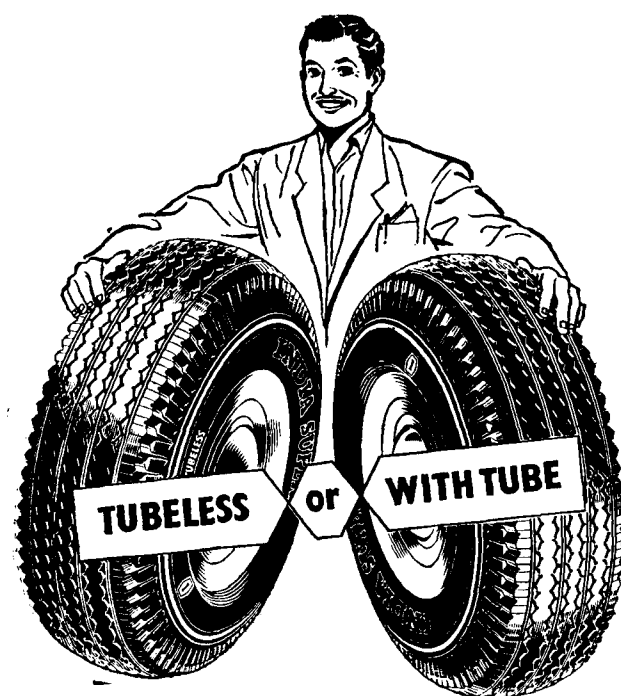
pean capitals in seven days, finishing at Geneva on the eve of the first motor show held after the war. To show his appreciation, Mr. Lord, as he then was, presented three of the team with a car each, much to the dismay of the publicity people who wanted the models for display.

As an orator Sir Leonard says in plain language exactly what he thinks, and holds and keeps the attention of his audience. Good-humouredly the Press are advised to take down a quickfire delivery "in shorthand if they can write it", while a photographer whose flash bulb misfires earns a specially potent remark.

HIS SECRET

What is the secret of a man who in 30 years has risen from a practical engineer to a business magnate controlling vast capital and huge plants? To a very limited extent chance has favoured him; but in his ability to turn an opportunity to advantage he has shown his sheer genius.

A realist, Sir Leonard is always aware of the practical side of his business. As a production expert he has a flair for design, and knowledge of the requirements of motorists and transport operators. At acceptable prices he provides



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a wide range of motor vehicles for world conditions.

His ability to assess the potentials of world markets is matched by an acute financial sense so essential in a huge organisation with world-wide connections. More than 10,000 cars, trucks, and tractors are produced by B.M.C. every week; the Austin side has earned close on £300,000,000 since the war, and is now on the way to the production of its two-millionth post-war car. The first-millionth Austin emerged after 40 years of production. Sir Leonard made the second million cars in 7½ years.

LOYALTY ON BOTH SIDES

So much for achievements. Sir Leonard would say that he presses buttons while others do the work. But that, of course, is one of the world's understatements. With supreme faith in his work, he has the gift of picking the right men and enthusing them to greater endeavour. A conscientious worker can look confidently to a rise in status and responsibility. For it is Sir Leonard's policy to promote from within his organisation. He believes that loyalty should be given as well as accepted.

Sir Leonard enjoys life. Once

Sweden has one car for every 10 Persons!

That private motoring is a highly sensitive indicator of economic prosperity is clearly brought out in a new study on long-term consumption trends in Sweden, published by the local Institute of Industrial Research. This reveals that during 1931-

he indulged in farming and owned a herd of Hereford pedigree cattle which won many prizes at agricultural shows. Now he is too busy. For relaxation he paints in oils.

The fertile brain of the B.M.C. chief is seldom at rest. He makes vehicles for the present and designs for the future.

Since 1945 the output and sales of Austin and Morris, and now B.M.C. vehicles, have made a vast contribution to Britain's post-war recovery and development. At 60, and with no mention of a second retirement, Sir Leonard, the active and alert fighter, is needed to help maintain the position of Britain's motor industry as the world's leading exporter of motor vehicles.

1955, annual expenditure on the operation and maintenance of privately owned cars has risen nearly seven-fold, and expenditure on car purchases nearly thirteen-fold. It has increased far more, rapidly than on any other comparable group of goods or services. A closer analysis shows that in the absence of changes in relative costs, any increase in the average net personal income (after taxes) in Sweden can be expected to lead to an increase at about twice the same rate in expenditure on cars and motoring. Similarly, leaving out of account any changes in the level of income, the Institute finds that any reduction in motoring costs normally leads to a substantial increase in total car expenditure, at approximately twice the rate of the cost of reduction. Over the last few decades, while the standard of living has rapidly risen, car prices and operating costs have in fact tended to decline relatively to other prices, as a result of continuous technical progress in car manufacture, motor fuels, etc.

There are to-day, in Sweden, about 750,000 cars, or on average, more than one for every 10 inhabitants. This is a higher ratio than anywhere else in Europe—a fact which is well in line with Sweden's claim to have the highest standard of living among European countries. In 1931, only 100,000 cars were in use in Sweden, but in the ensuing 25 years, about 870,000 new cars were sold in the country while over 200,000 were scrapped. In each of the years 1954 and 1955, sales of new cars totalled about 126,000 and in 1956 exceeded 130,000 notwithstanding the motoring restrictions temporarily introduced in November-December. The volume of sales in the second-hand market is usually about 50 per cent higher than that of new car sales, the money turnover in both markets being approximately equal. Most cars change hands about four or five times during their lifetime.



Engines and Bodies, after testing, are automatically marshalled and selected in correct sequences at Longbridge where automation plays a prominent part in the production of Austin Cars.

September 1957

MOTORINDIA

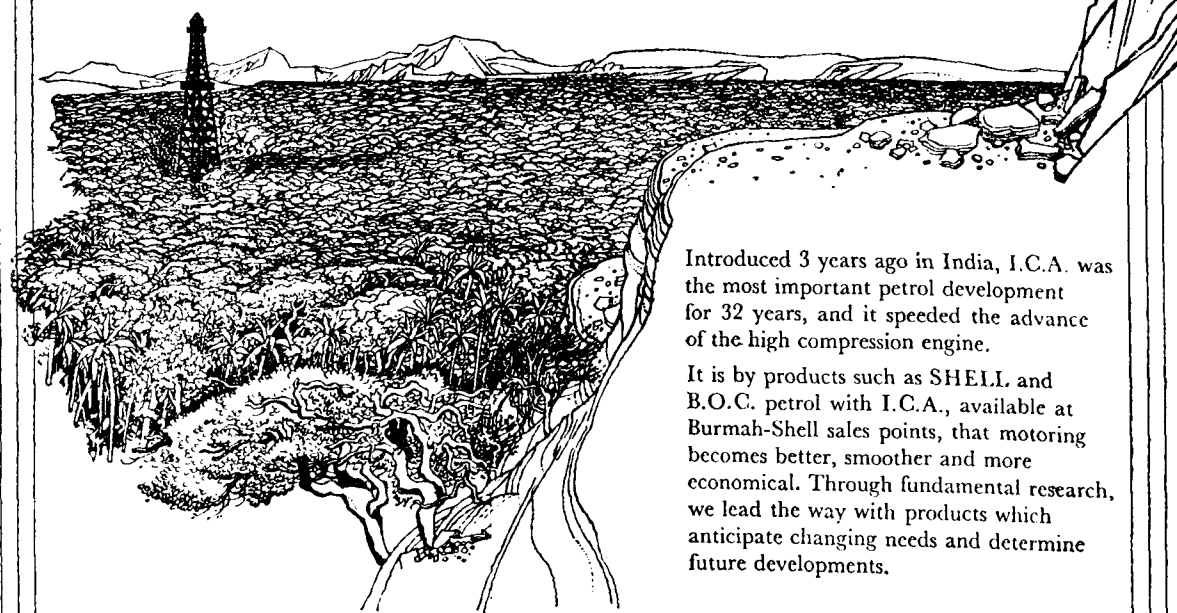
“Fill her up..”

Every motorist knows this phrase. You yourself probably use it hundreds of times. But have you ever thought where the petrol that flows into your tank *begins*, and what happens to it before you get it?

It begins, most likely, in some outlandish spot. Nature has unkindly deposited the largest supplies of oil in the most difficult places. To find oil, you have to penetrate jungles, explore deserts and even delve under the ocean bed. And you may be unlucky. More than a million exploratory wells have been drilled over the last 90 years and only a fraction has yielded oil.

Crores of rupees are spent each year on searching for the oil which the modern world needs increasingly. Once located, and brought to the surface, it must then be carried thousands of miles by pipe-line and tanker to world refineries.

But this is only a start. To turn the crude oil into modern high power petrol such as SHELL and B.O.C., new refinery processes are employed which produce, at an economic cost, fuels far superior to those obtainable before. Chemical ‘additives’ with a power-boosting effect are also used increasingly to step up performance without adding to the cost per gallon. A notable example is the SHELL ignition control additive— I.C.A.—which overcomes problems of faulty ignition caused by engine deposits.



Introduced 3 years ago in India, I.C.A. was the most important petrol development for 32 years, and it speeded the advance of the high compression engine.

It is by products such as SHELL and B.O.C. petrol with I.C.A., available at Burmah-Shell sales points, that motoring becomes better, smoother and more economical. Through fundamental research, we lead the way with products which anticipate changing needs and determine future developments.

BURMAH-SHELL... in India's life and part of it

New Peak in World Oil Production

The recent months' gradual return towards normal in the Middle East oil producing countries, except in Northern Iraq, and a record rise in output in Venezuela, brought the free world's crude output in the first half of 1957 to a total of about 381 million metric tons, exceeding all previous half-year periods. In most other countries in the free world, output rose, Mexico being, however, a notable exception. Output in the U.S.S.R. continues sharply upward.

Despite the big drop in Middle Eastern production caused by the Suez crisis and the consequent restrictions on consumption in Europe, the free world in the first half of 1957 had over 13 million tons more oil available than in the corresponding period of 1956. The Communist world had seven million tons more, so that total world production has risen to a new record figure of about 435 million metric tons of crude oil in the first six months of 1957. Compared with the same period of last year, this is an increase of about 5 per cent. Not surprisingly, this rate of increase is well below that in preceding years. In 1956, world production was affected by the Suez difficulties during the last quarter but went up by 8.5 per cent, while in 1955 it rose by as much as 12 per cent. With the Suez crisis now out of the way, world production appears to have resumed the pace of expansion of recent years. At present, output is at a rate equivalent to nearly 880 million tons annually, and we may expect a continued advance during the remainder of this year.

The emergency supply arrangements operative during the first few months of this year imposed marked changes as between the world's main production areas. In the Middle East there was a 14 per cent decline in January-June 1957 compared with January-June 1956, while production went up spectacularly by 22 per cent or nearly 14 million tons in Venezuela. Output also went up, over the same period, by 3.4 per cent or 6 million tons in the U.S.A. and by about 23 per cent or 2½ million tons in Canada. Contrary to recent trends, the share of the Western Hemisphere in the free world's total production rose substantially, from 72 per cent in January-June 1956 to 75 per cent in January-June 1957.

That in the face of the big, yet proportionately small, call for exports, production in the U.S.A. did not go up more is due to the fact that with a mild winter, production there was already high in relation to normal demand and stocks were also high. As the abnormal exports have now ceased, and inventories continue to be large, production has

tended to decline from June onwards. In Texas, production allowables were raised sharply earlier this year, but have now been drastically reduced. In California, where production has tended to go down for several years, this trend has now become more pronounced.

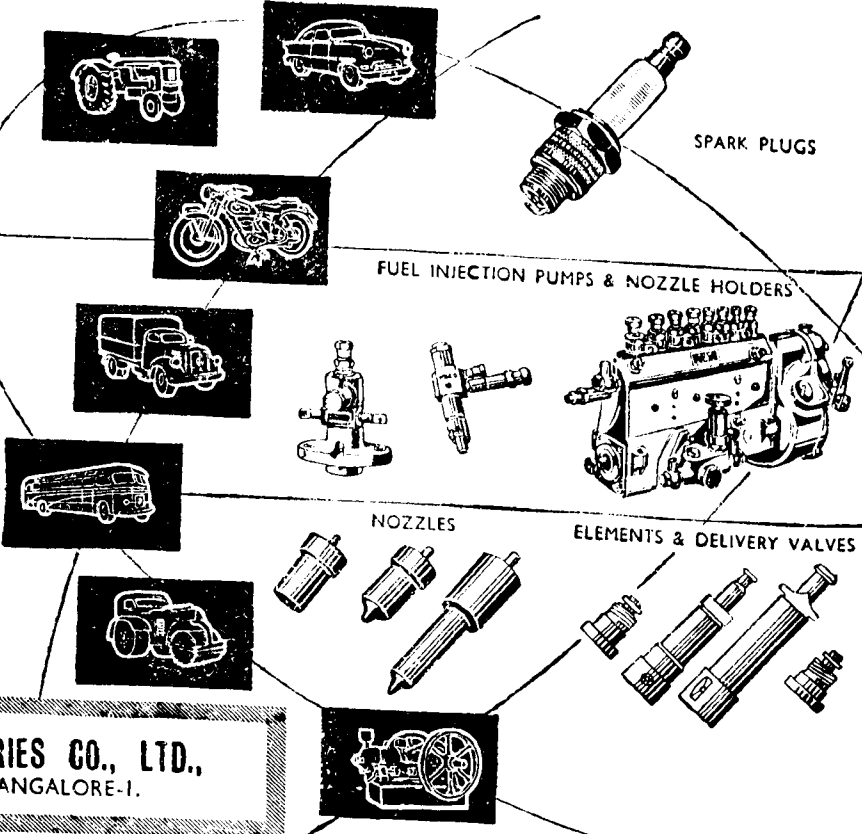
Helped by new pipeline outlets, Canadian production continues its uninterrupted progress. It reached about 25.6 million tons in the year ending June 1957 (with a slightly higher rate towards the end of this period), compared with 20.3 million tons in the preceding twelve months. A significant feature has been the very rapid climb of production in Saskatchewan. Westward export shipments of Albertan crude are at present below pipeline capacity, being checked by the present low level of ocean tanker freights for imports of Middle East crudes to the U.S. Pacific Coast. Next autumn, however, another new eastwards outlet will be created for West Canadian crude, by the extension of the Inter-provincial Pipeline to the Toronto area.

The most remarkable recent expansion has occurred in Venezuela, where the increase in volume in the first half of 1957, partly occasioned by the Suez emergency, was higher than in any comparable period in the country's history. By far the highest oil producer outside the U.S.A., Venezuela in recent months has reached a level of output well exceeding 2.9 million barrels daily, or a rate equivalent to over 150 million tons annually. This is nearly half the rate of output of the U.S.A. east of the Rockies. Production remains at a high level even after the reopening of the Suez Canal. In the interior of Western Venezuela, two new fields will come into production this autumn, while the country's long-term prospects have significantly improved by the recent granting of extensive new concessions.

Contrary to the trend over recent years, Mexico's output, which showed only a small increase in 1956 has declined in recent months by several thousand barrels daily, though this has been compensated by



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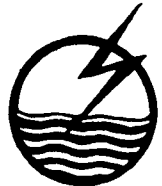
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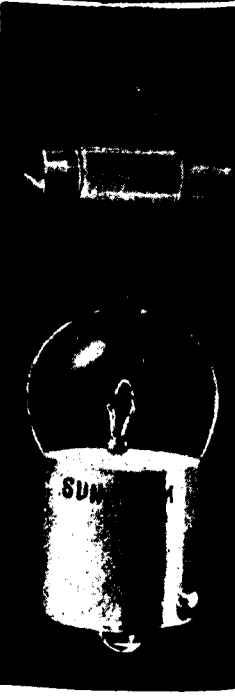
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WORLD : ESTIMATED CRUDE OIL PRODUCTION
(Thousand Metric Tons)

	Jan.-June 1956	July-Dec. 1956	Jan.-June 1957	Jan.-June 1957 % Increase over Jan.-June 1956
North America				
U.S.A. : California	23,717	23,659	22,740	
East of California	152,011	153,462	159,000	
Canada	175,728	177,121	181,740	3.4
	10,549	12,577	13,000	23.2
	186,277	189,698	194,740	4.5
Latin America : Caribbean Area				
Venezuela	61,650	67,273	75,400	
Colombia	3,064	3,220	3,200	
Trinidad	1,968	2,161	2,300	
	66,682	72,654	80,900	21.3
Latin America : Other Countries				
Mexico	6,246	6,550	6,250	
Argentina	2,162	2,246	2,400	
Peru	1,186	1,273	1,300	
Brazil	160	370	600	
Chile	212	248	260	
Ecuador	232	240	240	
Bolivia	202	215	230	
Cuba	35	35	35	
	10,435	11,177	11,315	8.5
Middle East				
Kuwait	28,842	26,140	25,600	
Saudi Arabia	25,661	22,961	21,795	
Persia	12,425	14,105	16,830	
Iraq	17,085	14,228	8,190	
Qatar	3,013	2,863	2,960	
Kuwait Neutral Zone	750	920	1,215	
Bahrain	748	759	750	
Egypt	968	650	200	
Turkey	142	154	160	
Israel	10	20	30	
	89,644	82,800	77,730	dec. 13.3
Far East				
Indonesia	6,192	6,460	6,800	
Br. Borneo	2,720	2,838	2,850	
India	194	186	204	
Western New Guinea	185	190	180	
Burma	102	123	167	
Japan	157	157	155	
Pakistan	145	145	148	
	9,695	10,099	10,504	8.3
W. Europe				
Germany	1,687	1,819	1,900	
Austria	1,727	1,701	1,623	
France	577	684	724	
Netherlands	510	584	690	
Italy	218	349	550	
Yugoslavia	134	158	180	
U.K.	33	34	41	
	4,886	5,329	5,708	16.9

larger imports. The decline is mainly the result of lower production from fields in the Poza Rica and Ocotepec-Ordoñez areas which is not yet offset by rising output in the new nearby field of San Andres, or in Tabasco in the south. Argentina's small but much-needed increase in output all comes from YPF fields. In Brazil, output continued to expand sharply in pursuit of Petrobras's goal of an output of 1½ million tons for 1957, all of which will come from the Bahian fields.

The spectacular post-war growth of crude oil production in the Middle East was, of course, brusquely interrupted last November by the shut-down of the Suez Canal and the cutting of IPC pipeline in Syria. Having reached a peak rate of about 180 million tons a year, it dropped abruptly to a rate equivalent to only about 100 million tons annually. With the redeployment of shipping, production quickly began to recover again, helped by the reopening in March of the IPC pipeline (still only operating at part of its pre-crisis capacity). Following the resumption of oil shipments through the Canal in May this year, production reached in June a rate of well over 190 million tons a year, thus considerably exceeding the pre-crisis rate.

As the accompanying chart shows, the crisis affected the individual Middle Eastern countries in different degrees. The two largest producer countries, Kuwait and Saudi Arabia, were producing at annual rates of about 60 and 50 million tons respectively before the crisis, and in both cases production was reduced by something like 30 per cent over the five months November 1956-March 1957, but has quickly climbed back to normal, reaching new record rates in June. Persia, whose oil is mainly marketed east of Suez, suffered only a mild and short-term setback, production reaching in May-June this year a record rate equivalent to over 35 million tons annually, and there is every prospect that the Consortium's production plan, calling for a minimum output of 30 million tons in the whole of 1957, will be exceeded.

On the other hand, the impact of the crisis has been especially severe for Iraq, whose main oilfield, at Kirkuk, in Northern Iraq, then producing at a rate of about 26 million tons a year, is almost wholly dependent on the pipelines to the Mediterranean. From the beginning of November until March 10th, production at Kirkuk was reduced to a rate of little more than 1 million tons annually, all for the country's own consumption. Now in use with a capacity of only about 9 million tons annually, the line will probably be in full use by the end of this year. In contrast to Northern Iraq, production from fields in southern Iraq was more or less fully maintained at the precrisis rate of about 9 million tons annually.

Production in the Kuwait Neutral Zone, though

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Africa ...	53	44	38	
Morocco ...	—	9	25	
Angola ...	21	13	10	
Algeria ...	74	66	131	77.0
FREE WORLD				
Western Hemisphere	263,394	273,529	286,955	9.0
Eastern Hemisphere ...	104,299	98,294	94,073	9.8
	367,693	371,823	381,028	3.6
Eastern Europe and China				
U.S.S.R. ...	40,000	43,800	47,000	
Rumania ...	5,400	5,520	5,600	
Hungary ...	800	400	300	
Albania ...	135	145	150	
Bulgaria ...	110	120	130	
Poland ...	90	90	90	
Czechoslovakia ...	70	70	70	
China (a) ...	550	626	700	
	47,155	50,771	54,040	14.5
WORLD TOTAL				
...	414,848	422,594	435,068	4.9

(a) Including shale oil.

temporarily cut last November, is now racing forward in pursuance of a goal of 100,000 b/d. Production in Qatar and Bahrain was more or less maintained at normal rates throughout the duration of the crisis. In Egypt, production from the Sinai fields was interrupted during and after the fighting in the Sinai peninsula and production facilities suffered some destruction, but output is gradually being restored. Lack of transport facilities imposed the restriction of production in south-east Turkey to about 300,000 tons a year, although established reserves justify a bigger output. Thanks to intensive search, output in Israel has been gradually raised to the equivalent of 70,000 tons annually at mid-year, and a new small discovery has recently been announced.

There has been a useful increase in Indonesian production over the past few years, mainly due to the development of Caltex's Minas field in Central Sumatra. Output of the Seria field in Brunei shows no change from the level of about 5.7 million tons reached in 1956. Output in India—all from Assam—has risen thanks to the discovery of the new Nahorkatiya area, the full development of which awaits the provision of pipeline facilities to the seaboard, also refining capacity. In Burma, output has been considerably expanded to meet the needs of the Syrian refinery near Rangoon, which came on stream last February. Production in the other Far Eastern countries remains small.

* * *

Always seeking optimum production, Western Europe's oil output reached the equivalent of 11½ million tons annually during January-June 1957, or 1¼ million tons more than a year previously. Austria has suffered some contraction following the former excessive rate of production under the Russian occupation regime, but output in all other producing countries has gone forward, the most rapid advance occurring in Sicily where production, which started in 1955, will soon reach a rate of about 1.5 million tons a year.

A milestone in African development is the recent commencement of regular oil production in Gabon, French Equatorial Africa—expected to reach about 300,000 tons a year—closely following the start of production in Portuguese Angola. The list of producing countries in the world has thus been lengthened to forty-nine. The first shipments of Gabon and Angolan crudes went to Le Havre and Lisbon respectively. In the face of declining production from the small fields in Morocco and Algeria, the prospect of substantial production, in a year or two, from new fields in the Sahara is encouraging. Production tests are under way in Southern Nigeria.

The continued sharp rise in the U.S.S.R. is chiefly due to further developments in the Ural-Volga area. Total production went up from 70.7 million tons in 1955 to 83.8 million tons in 1956, and it is hoped to achieve an output of 97 million tons this year, en route to the goal of 130 million tons in 1960. In Rumania, following the rapid growth in output from new areas in the early 1950s, output remains of the order of 11 million tons a year. Hungarian production last year suffered a major setback through water encroachment in the important Nagylengyel field and the plan for the current year provides for an output of only 630,000 tons compared with the former peak production of 1.6 million tons in 1955. China's production of natural crude and shale oil totalled last year 1,126,000 tons. Crude oil output is rising and total output may reach some 1.5 million tons this year, while a more significant rise, to between 5 and 6 million tons, is forecast for 1962, depending on the completion of various railway projects.

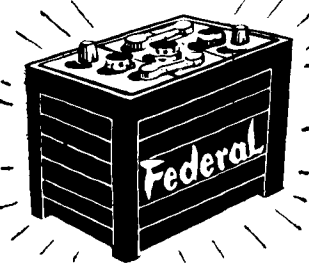
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Though, recently, oil consumption in the U.S.A. has been somewhat below expectations, the strong upward trend of world demand as a whole persists. Recent major discoveries in the Middle East and the prospects of big developments in Venezuela provide added foundations for the rising higher crude output. These, however, should ultimately be reinforced by the search for oil, which has now reached unprecedented proportions both in the old-established producing countries and in many countries which are not yet producing. The need is for still more diverse sources of supply.

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HIGHEST PRODUCTION FIGURES FOR CYCLES FOR SIX YEARS

For some months now there has been a petrol shortage in many countries as a result of the Suez. This has induced many drivers of larger cars to look around for a vehicle which will make the most of the precious fuel. Not only, is petrol in short supply: it has also become dearer. These facts have caused more attention to be paid to the West German miniature car than would have been under normal circumstances. As is well-known, the vehicles we are talking about are cars with really small engines—175 to 300 c.c., whose names of "miniature cars" and "cabin scooters" show very clearly what their purpose is: a development of the two-wheel motor-scooter with a view to giving the passengers the same all-weather protection that they would get in a car. In spite of this—and this is an important point—the purchase price and running costs do not have to be any higher than for a motorcycle or motor-scooter and sidecar.

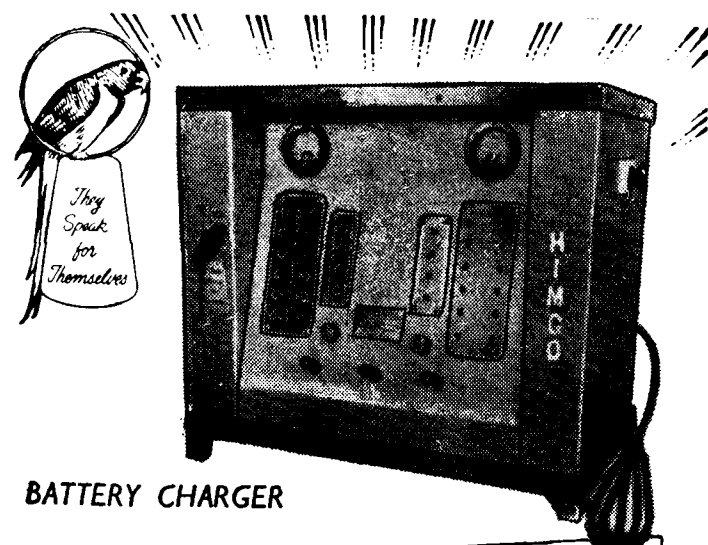
A few days ago we had an opportunity to see what is going on in this field, when we drove in a cabin scooter from Southern Germany to Northern Germany. Over a distance of 285 miles, our car did 67 miles to the gallon of petrol, at an average speed of 34 m.p.h. On the Autobahn we had no trouble whatever in keeping up a cruising speed of 53—56 m.p.h.—and all this on a mere 300 c.c. engine! We did not keep

up top speed all the way, because the car was still rather on the new side. At the end of this trip we were able to confirm that although the running costs and performance were those of a modern motorscooter, a vehicle like this can give you many of the comforts and facilities which up to now could only be got from a "proper" car.

We are quoting this example just to show why there has been such a change-round in the manufacturing range of the West German Cycle Industry. During the course of the last twelve months there has been a particularly striking upsurge in this branch of the motor industry. In producing 71,049 vehicles this branch is able to report that it has doubled the output of 1955. If we take into account the fact that mass production only started very recently in a large number of West German factories, we can see that there is every chance of still further development in the field of miniature cars. Demand has remained steady in Western Germany, whereas it has received a fresh fillip in other countries as a result of the petrol shortage. Up to now there has been a tendency not to take these dainty "lightweights" of the motorcar world seriously. After all, what can you expect from them? Well, there is no doubt that their performance is considerably greater than what is generally expected.

In city traffic they are at least on a level with larger cars. In fact, their easy manoeuvrability makes their advantages more outstanding, the more congested the traffic happens to be. We should also not lose sight of the fact that West German designers, despite the small proportions of these vehicles, have still managed to incorporate a considerable degree of travelling comfort. Even on long trips, the passengers' fatigue is less than you get on a motor-cycle or motor-scooter. Rain, mud and cold no longer upset the passengers' comfort and the performance of these tiny cars is staggeringly high. They represent an entirely new departure in motor vehicles, and one in which the usefulness stands in very high proportion to the initial outlay and running costs.

It was—and, for that matter, still is—the West German motor-cycle industry which set its stall out to design and develop the miniature car. In this task, experience gained in the construction of motorcycles has stood the industry in good stead: the components of the miniature car are more like those of a motorcycle than of a standard car. It goes without saying that the great advances made by these miniature cars have perforce, meant a setback in the sales of motorcycles and motor-scooters. As in many other countries, this setback was also felt here. It started compara-



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tively early—soon after motor-cycle and motor-scooter production figures reached their peaks of some 417,000 and 440,000 in the years 1952 and 1953. It was found possible to compensate to some extent for this setback in West German sales by increased exports. It is evident that in this class of vehicles the peak has already been passed in Western Germany. In spite of all this, the factories did not let up on their efforts to build their motorcycles on a level dictated by the very latest knowledge and experience in the field. Both frames and engines reached ever higher degrees of perfection. These developments were given added impetus by the constantly increasing competition, which spurred the makers on to better achievements in all directions—much to the benefit of the customer! Naturally the foreign buyer also profited by this. Today West German industry can offer him motorcycles and motor-scooter which represent the very last word as regards design, equipment and workmanship. The steady demand from many different countries, both from old customers and new, proves that German motorcycles can stand up to competition from any quarter, and that they are well worth their money.

It is food for thought to note that in Western Germany the motorcycle, despite its high level of development, has lost many friends who have deserted in favour of the motor-scooter. This brings us to the conclusion that there are no appreciable drawbacks which have to be put up with when choosing the advantages of the scooter, such as the far and away better protection against dirt. This is perfectly true so far as the scooters made by

West German factories are concerned. Anyone who is used to a motorcycle calls for the very best in riding qualities, springing and road-holding, because West German motorcycle design is something really tip-top. Since the motor-scooter first began to get a foothold (or should we say, a wheelhold?) developments have been made here, too, which in many cases are nothing short of a pioneer achievement. In output, comfort, springing and performance, to all intents and purposes the motor-scooter no longer lags behind the motorcycle. This is true so far as ordinary running in town and long distances is concerned. Moreover, the numerous successes obtained by scooter riders in reliability tests and cross-country trials have demonstrated that this highly-developed vehicle is capable of astounding performances, despite the drawback of its smaller tyres. All in all, little wonder that more motor-scooters than motorcycles were built in West German factories in 1956. On the whole, the production of scooters has not dropped by any appreciable amount since the good year of 1955.

This year the range of miniature cars offered in Western Germany is greater and more diverse than ever before. We cannot fail to mention the evolution of a vehicle of a very sporting character, such as is much preferred by the young bloods in many countries. In the latest miniature motorcycles with 50-cc engines which can develop up to 3 H.P. there is a marked tendency to put a high-grade vehicle on the market which is light and extraordinarily cheap as regards initial outlay and running costs. Good business is expected by the industry and by the trade with this

new type of vehicle.

Not all the miniature cars which make the 1957 production range will be of the sports type. The rainy summer of last year, which had a marked effect on West German scooter sales last year, showed very clearly the importance of protection from wet and dirt. Much has therefore been done in scooter design to achieve a really high degree of protection, the most obvious outcome of this endeavour being the enclosing of a great part of the engine and wheels. In the wide range of truly handsome vehicles of this kind which West German firms are offering, we can expect that the production figures of last year will be maintained and perhaps even surpassed. In 1956 about 619,000 scooters were built. In 1955 the figure was approx. 778,000. In 1954 it was only 446,000. It is to be expected that exports, which have been constantly on the increase, will reach even higher figures than in any previous year.

From the production figures we have given above it is already possible to see the extent to which the proportion of the various types of vehicle has developed within the picture of West German production as a whole. A point of particular importance is that there has been no decrease whatever in the overall production. In the year 1956 West German factories produced 2,060,000 complete bicycles, autcycles, motorcycles, motor scooters and miniature cars. This figure is rather on a level with that for the year 1955, in which no account was taken of the very large proportion of cycle frames etc. which were supplied for the assembly of cycles outside the factories.

To Test Cars & Drivers

10,500 miles
round-Australia Rally

Melbourne, Australia

One of the world's greatest motor rallies began from Melbourne on August 21, with a strong field of international drivers, more than £A16,000 in prize money and an arduous 10,500-mile route around Australia.

The fixture, restricted to stock model automobiles, is the 'Mobilgas Rally'. Cars are of closed-saloon models of no earlier make than January, 1950. Contestants are allowed 19 days to complete the course.

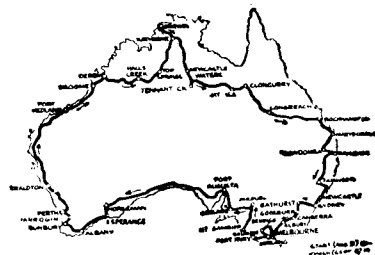
Roughly following the outline of continental Australia, the route is : head westward along southern Australia, northward on the western fringe, then east across the northern portion, and finally south to Melbourne, where the rally is to end on September 8.

Valuable Prizes

The Mobilgas rally is the second rally staged by the present organisers. It replaces an annual event known as the Redex trial, which also covered a round-Australia route.

The Vacuum Oil Company and 38 co-sponsoring firms in four of the Australian States are providing cash prizes, goods and trophies of total value over £A16,000.

A trip to Europe to represent Australia in the 1958 Monte Carlo rally, £200 towards the air fare to Europe, a 10 day holiday in New Zealand and a large number of trophies and manufactured products are among the prizes in the various sections.



Route map of the 10,500 mile round-Australia Rally.



A field of 100 cars contest the 10,500 miles round-Australia rally for £16,500. Ray Crawford, entrant from the United States who drove an Australian-built Ford in the Mobilgas Rally is seen in the picture above.

The winner can take out £ A6,460 in prizes (if an Australian), and £ A6,925 if an entrant from outside Australia. There are class awards, teams prizes, overseas awards, special prizes for New Zealand and Papua-New Guinea crews, and prizes for women participants.

The route, which the organisers claim is tougher than anything contested in Europe, alternate between large cities and great deserts, snow-capped mountains and tropical swarms, dusty cattle plains and flooded inland streams.

Round-Australia motoring along this bone-shaking course was first tried successfully in 1925, when a missionary, Mr. N. R. Westwood, encircled the continent in a seven h.p. Citroen. The historic journey from Perth (Western Australia) back to starting point took 147 days, or nearly eight times as long as the schedule for the 1957 Mobilgas rally. This year's course, or a route somewhat similar, has been traversed during half a dozen reliability trials in recent years, but the thrill of a big rally, as well as the generous scale of the prizes, has attracted overseas drivers for the first time from the United States, Germany, Thailand, Britain, Japan and New Zealand.

Many leading Australian drivers, veterans of the Round-Australia route, also compete.

Prominent among these is Stan

Jones, who drives a Holden instead of his familiar £12,000 crimson Maserati, Jones has won many events, including the New Zealand Grand Prix in 1954. He was third to Stirling Moss in the same event last year, and runner-up in this year's Australian Grand Prix.

Brothers Lance and Eddie Perkins, winners of last year's Mobilgas Round-Australia Trial, use one of the most-travelled cars in the Rally. Their Volkswagen was originally shipped from Germany to Australia, where Eddie prepared it for the 1956 Monte Carlo Rally and shipped it back to Europe. When the Rally was abandoned because of petrol rationing, the car was returned to Australia. In July, 1957, it came second among 79 starters in the 6,000-mile Ampol Reliability Trial, losing 5 points compared with the winner's loss of 3 points.

"Stunt" Entries Barred

The organisers have been careful to ensure that the rally will be a serious test of cars and drivers and have taken steps to avoid any 'stunt' entries. Also, the age limit has been raised to 19, and crew members under 21 will need the consent of their parents.

The rally is conducted under a permit granted by the Confederation of Australian Motor Sport, representatives in Australia of the Federation Internationale de

BACKFIRES

We took some work home from the office the other night and made the bad mistake of going through a file of old newspaper clippings just before going to bed.

This particular file contained Press interviews given by spokesmen of various firms and organisations concerned with motoring. Quite a few of them were devoted to the subject of price rises, and to the benefits the motorist-customer would derive from these.

The promises of a bright new world that shone from those clippings must have stuck in our mind. For, as we slept that night, we dreamt...

...A ROSY DREAM

The price of petrol had been raised a few annas, and we were attending a press conference called by the Senior Spokesman for All Service Stations. Beaming as he passed out handfuls of ten-inch Havana cigars, the Spokesman said:

"Although this extra profit margin is to be retained solely by the retailer, it will not be used to increase his own profits. Rather, it can be regarded as a type of benevolent fund, the proceeds of which will be used entirely to provide added facilities for the motorist.

"We believe that the Indian motorist has not been receiving the type of service he wants, but

l'Automobile.

Every car carries rations sufficient to last one week, a gallon of water for each member of the crew, a first aid kit and a fire extinguisher. Though the route is described as the toughest ever, longer rest periods are enforced, and the number of control points exceed 70.

Car club members around Australia are staffing the control points, and a vast system of telephone and telegraphic communications linked with an information office in Melbourne is in full swing.

from now on things will be different. For a start, all drive-way service will in future be provided by attractive models who are being specially trained for the job by one of India's leading model agencies. A team of six models will attend to each customer and each girl will be a specialist in her own particular field.

"Two of the girls will be in charge of petrol service. In keeping with the modern trend to color harmony, a beautiful blonde will serve the pale standard petrol, while a ravishing redhead will be in charge of all super petrol sales. A brunette with nursing experience will look after engine service, and an absolute guarantee will be given that all oil sold in future will be pasteurised, and completely sterile. Distilled water will be dyed to match the color of the car.

"The fourth glamorous assistant will be in charge of tyre inflation, and a wide range of free air will be available—scented in Chanel No. 5, Shocking by Schiaparelli, or one of several other perfumes to be nominated by the customer. A girl holding a special proficiency diploma from one of India's leading domestic science schools will dust the interior of the car, while the sixth young lady will carefully clean all windows and chrome-work, using antiseptic cloths never touched by human hand and sent back to a central cleaning depot after every use.

"All service station and garage decor is to be immediately altered. We have already commissioned some of the nation's leading designers and decorators to work out details of architecture and color schemes.

Tonings of lilac, mauve and horizon blue are favoured, but great care will be taken to see that every station is as unobtrusive as possible, and blends perfectly with its surroundings.

"Facilities for men drivers will include coin-in-the-slot Scotch dispensers, electric shavers to remove that five o'clock shadow,

and a free cigarette-lighter refill service. In addition to a spotlessly clean toilet room, each out-of-town station will have hot and cold showers. A resting lounge, complete with racks of magazines and pocker machines, will also be provided.

"For the lady driver there will be a special free make-up bar, with sample packs of all the latest cosmetics; a beauty parlor, a creche, and a conversation room where friends can meet and amicably discuss their mutual acquaintances.

"All repair work will be carried out in the most hygienic conditions. Trained nursing sisters will assist mechanics and lubratorium practitioners, who will first be given a concentrated course in operation-theatre practice at one of India's leading medical institutions.

"The nurses, incidentally, will all be experts in resuscitation work, so that a complete service can be given when the final account is presented to the customer..."

At these words we woke up, bathed in cold sweat, and leapt out of bed to take a look at our wallet. It was empty as usual... Ah, well! Let them heap benefits on us—we have nothing to lose.

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Spring Cleaning — the Car —

Points that need attention in order to obtain trouble-free Motoring during holiday months.

By A. Green

Very often, especially with the modern low-fronted car, the bottom part of the radiator becomes covered with road mud which is thrown from the rear wheels of other vehicles. The deposits are quickly dried into hard incrustations which most effectively reduce the radiating area. If this is not removed during the warmer weather, overheating is very liable to occur, which under the circumstances can be difficult to diagnose.

The hard mud should not be forcibly removed, otherwise the radiator may suffer damage. The procedure that is recommended is to soften the deposits initially on the outside of the radiator by playing a gentle flow of water from a hose on them for a minute or so, then doing likewise from the engine side of the radiator. When the mud is sufficiently softened, the pressure of the hose can be gradually increased and the deposits removed and washed away with the water (Fig. 1). Note that for the final removal of the mud the hose must be applied from the engine side of the radiator, otherwise the water may flood the electrical system and cause considerable trouble.

Chassis Damage

Queries often arise as to the possible damage the underneath of the chassis sustains during severe winter weather. Providing that due precautions have been taken to protect the chassis with one of the specialised plastic rubber compounds, or by a bitumastic paint, very little corrosive

damage should ensue. The points to look for, however, are the cables, where fitted, which actuate the brakes and clutch mechanism. These cables, unless galvanised or similarly protected when new, are very susceptible to the attack of rust, which eventually causes the disintegration of the strands and breakage.

Even where the chassis has been protected as mentioned above, the accumulations of mud, etc., on its underside—especially beneath the wings—can result in considerable dead-weight, and its removal by hosing is advised. All mud should be removed from the leaf springs and, providing the springs are not interleaved with rubber, they should receive

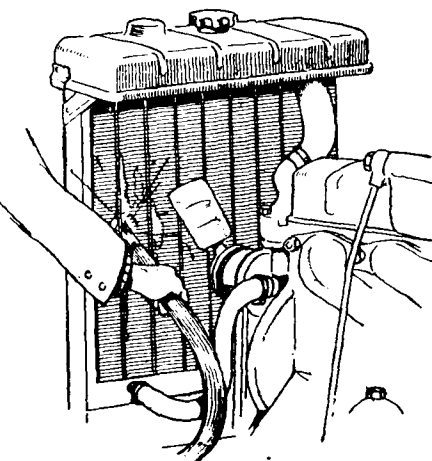


Fig. 1

Deposits of mud upon the radiator can be removed after initial softening, by means of a hose as illustrated.

an application of penetrating oil applied either with an old brush along the sides of the leaves, or by a force-feed oil can.

Where the underside of the chassis has received no additional protection other than that provided by the manufacturers, rusting and corrosion is often evident after winter, especially where

snow- and ice-bound roads have been salted and gritted by the authorities. Unless the accumulations of salt-impregnated mud are hosed away at the close of winter the corrosive action is renewed at every wet spell due to the reactivity of the salt content. The treatment of the chassis with a protective medium or paint after the thorough removal of all mud, etc., is a sound proposition and can avoid needless expenditure in repairs later.

Cleaning the Windscreen

Where the screen has been scratched by grit beneath the wiper blades there is little that can be done to rectify matters, and in order to prevent trouble of this nature occurring it is a wise precaution to remove the wiper blades periodically and to wash the segments in water, applying a small stiff brush such as a toothbrush to each to remove any deep-seated grit (Fig. 2). After one or two seasons' use the wiper blade loses some of its effectiveness due to the wear and deterioration of the rubber, in which instance an early replacement is desirable.

Maintenance of the Headlamps

In the older type headlamp, which has a cork sealing ring between the outer rim and reflector the cork becomes hard and compressed or suffers damage, which allows dust and moisture to form upon the reflector which considerably diminishes the efficiency of the lamp. Many readers are uncertain as to the method to adopt to restore the reflector to its original condition. It should be explained that the silvered surface is protected from the tarnishing effects of the atmosphere by a thin, invisible coat of lacquer, and if this coat has been destroyed or damaged by the effects of the weather nothing can restore the surface

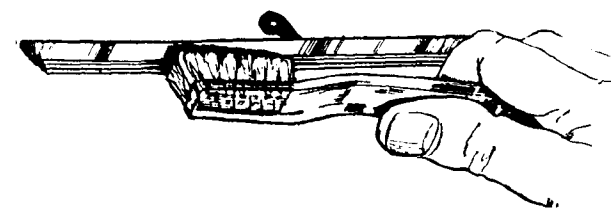


Fig. 2

The wiper blades should be periodically removed, then washed and brushed to dislodge grit and mud.

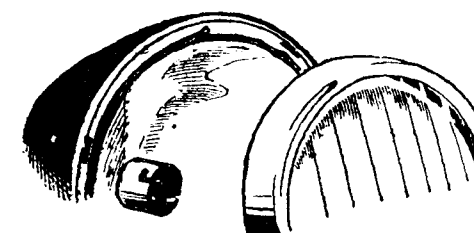


Fig. 3

The cork seal in some older types of headlamps eventually hardens and cracks and allows the weather to damage the reflector.

except replacing. Where, however, the reflector is soiled by dust or grime and the plated surfaces are intact, a gentle rub with a chamois leather slightly moistened with methylated spirit is the only safe restorative method to adopt. A replacement cork sealing ring should be fitted to preclude the further ingress of foreign matter.

Protecting Chromium Plate and Bodywork

Chromium plating, unless protected by lacquer or Vaseline, suffers badly during the winter months, and here again many queries are raised as to the best method to adopt to restore the plating. Unfortunately, when once the plating is attacked by rust, it will always recur in bad weather as the chromium in that particular part has been destroyed, but the trouble can be obviated by applying a thin transparent coat of protective lacquer or clear cellulose.

If the rusting is not too severe, a good chromium cleaner will restore the surface, or failing this a brisk rub over with a soft cloth soaked in paraffin. In really bad cases a really effective method is to use a nylon pot scourer together with paraffin and methylated spirits. A further extremely efficient method is to remove the rust chemically by means of a suitable rust remover. In all instances where the plating has been damaged and has necessitated restoration, it should be protected from further attacks by lacquer.

Damage to the bodywork should be restricted as soon as possible by "touching-in" the

Arab-American Car Designer works to break own speed mark

Whittier, California. George Salih, owner, builder and mechanic of the race car that set new speed records in this year's Indianapolis memorial day 500-mile race, is already at work on an improved model for next year's classic.

The 43-year-old Arab-American said he was thrilled about this year's win but was more interested in the future. "I don't think there is a design that can't be improved," Salih said. His entry in this year's race set a course record of better than 135 M.P.H.

Salih, who spends eight hours a day or more on his job as foreman of the Meyer and Drake Engineering Company here and

affected spot with a finish to correspond. The correct method is to remove completely all rust from the affected area, apply a primer and undercoat, allowing each to dry thoroughly before applying the next, then finally the finishing coat.

Where a heavier viscosity lubricating oil is advised for summer use the draining of the sump of the lighter winter grade oil and refilling with the summer grade is, of course, necessary with the return of warmer days.

then hurries home to work on his improved race car, credits his father for his success in the automotive field. The elder Salih came here from the Levant where he was born.

"I've been interested in motors since I was a kid. My dad encouraged me to take things apart to see what made them run—and to put them back together again. If they didn't run then, he insisted I keep trying until they did," Salih recalled.

"My dad's motto was 'a wish-bone is no substitute for a backbone.' I still go by his philosophy. If I want something done, I just keep at it until it is accomplished. Around our home, determination was a household word. My father could say it in seven languages and my mother in two," he said.

Salih was born in San Francisco in 1914. Most of his boyhood was spent in Pueblo, Colorado. His family moved to Los Angeles when he was high school age.

He was 13 when he built his first hot-rod. "It was an old model-T Ford with an Epperson engine. All the parts came from junk shops and it ran beautifully. All my friends used to ride to school in it.

"On Saturday's we used to tear it down and work it over. I've been doing the same with all my cars since," he said.

Wooing the Tourist

From a British Correspondent

August is the traditional holiday month in Western Europe and North America. Of those going on holiday during the next few weeks, many will seek change and relaxation outside their native lands. Indeed, it is safe to predict that the number of tourists visiting foreign countries this summer will break all previous records: for tourist traffic has grown steadily with the continuous advance in living standards, and foreign travel is no longer regarded as an expensive luxury reserved for the favoured few. Besides being a pleasure which more and more can enjoy, tourism, especially tourism abroad, has become an important economic activity, which governments are eager to promote. Since the resultant demand for transport services of all kinds is bound to be reflected in a higher consumption of liquid fuels and lubricants, this taste for travel is as welcome from the particular standpoint of the oil industry as it is on more general grounds.

The growth in foreign travel in recent years, especially by the relatively prosperous citizens of Western Europe and the U.S.A., is certainly remarkable. According to statistics published by the O.E.E.C., Austria received almost 80 per cent more tourists last year than she did in 1953, Italy almost 60 per cent more and both France and Germany about 50 per cent more; Switzerland, long possessing the most highly developed tourist industry in the world, showed a gain of 20 per cent. Probably over 30 million Europeans went abroad for their holidays last year—an increase of 10-15 per cent compared with 1955—though most of them naturally visited neighbouring countries. U.S. travellers to overseas countries last year totalled 1,239,000 of which no less than 912,000 went by air. About half the total came to Europe.

Within the European continent, there is a notable movement of

holidaymakers southwards, in search of the sun. Hence, although each country has its inward as well as its outward traffic, it is mostly the southern countries that show a net inflow. Thus, although well over a million tourists visited the British Isles last year, this influx was more than counterbalanced by the outward flow; and the same is true of the Scandinavian countries.

From the oil industry's standpoint it is significant that this striking growth in tourist traffic has been paralleled by an increased tendency for holidaymakers to go touring rather than to stay in one place. Motor coach tours are increasingly popular, but more and more road users are taking their own cars, motor cycles or scooters on their travels abroad. For example, roughly 175,000 British motorists are expected to take their cars overseas this year, a figure roughly double that recorded only four years ago. Once on the Continent, the motorist seems determined to travel as widely as possible, for the OEEC figures show that the average visitor stayed only about 3 nights in Switzerland, 4½ in Italy, 5 in Austria, and 7 in France. But the corresponding figure for the U.K. was 10 nights—excluding Commonwealth visitors, who stay much longer; this suggests that if Britain is the tourist's choice he tends to spend his whole holiday here—a decision in which geography naturally has a voice.

The growth of the tourist trade clearly reflects the high level of prosperity which has prevailed in Europe and North America since the war: it is successful full-employment policies and holidays-with-pay which have made possible this flood tide of tourism. But travel has to compete for the consumer's spending money with other objects of expenditure—e.g., refrigerators, washing machines and television sets; and the fact that so many people have opted for travel rather than additional material goods is due to a variety of causes. One is the rising standard of education and the mental curiosity it arouses. Another is the enticing publicity

undertaken by travel agencies, official and semi-official bodies, railways, airlines, shipping companies, etc. Yet another is the improvement in the service offered by transport companies, and notably the development and cheapening of air travel, with deferred payments schemes for air fares. A fourth factor is the improvement and extension of available accommodation, including the provision of camps, hostels and motels (special hotels for motorists).

To these causes must be added the deliberate attempts made by Governments to woo the foreign tourist. For example, frontier formalities have been eased in many cases: passports are no longer required for travel within certain groups of European countries, while many Governments have dispensed with visas. Currency restrictions have also been relaxed, the most notable recent example being the extension of the U.K. travel allowance to include the U.S.A., for the first time since the war. Again, a few countries in Latin America, as well as the U.S.S.R., offer a special rate of exchange to visitors from abroad, while the Russians have just relaxed other restrictions to enable motorists from the West to travel through the U.S.S.R. by road. Finally, some European countries—France, Italy and Yugoslavia—seek to attract the motorist by enabling him to obtain his gasoline at a cheap rate; in France the rate is as low as 50 francs a litre, compared with the high price of 96 francs now normally charged for premium gasoline. Thus, although there are still some obstacles to long-distance foreign travel—not the least being the sheer lack of cash—the position has been greatly improved during the past five years.

For some countries, tourist traffic has become not only a major local industry but also a most important source of foreign exchange; it is therefore especially fostered by Governments pre-occupied by balance of payments problems. The American tourist is particularly welcome in these

days of dollar shortage. Expenditure by U.S. tourists abroad last year totalled \$1,275 million (10 per cent more than in 1955 and more than double the 1947 figure) while they also paid at home \$238 million in fares to foreign carriers. Of their expenditure abroad, nearly half went to Canada and Mexico—\$316 million and \$279 million, respectively. In the main, this expenditure represents relatively short trips in the border areas, and contrasts sharply with the other trade, which comprises longer holidays overseas. The 521,000 U.S. citizens who visited Europe and the Mediterranean area last year spent \$473 million (against \$430 million in 1955.) The three main beneficiaries were Italy (\$94 million), France (\$85 million) and the U.K. (\$82 million). In addition, 631,00 U.S. travellers visited the West Indies, spending \$134 million, while 42,000 went to South America, spending \$29 million.

In Europe, the country with the biggest net income from tourists is Italy (\$190 million in 1955). Next in order of net earnings come Switzerland (\$135 million in 1955), Germany (\$67 million), Austria (\$62 million) and France (\$33.5 million). Other European countries have large earnings from this source—the U.K. has the biggest gross income of all—but these are offset, or more than offset, by the expenditure of their own nationals abroad. If it were not for the currency restrictions imposed on British nationals holiday-making abroad, the U.K. would certainly have a larger deficit on tourist account.

All this movement from country to country and from place to place naturally puts up the demand for shipping, rail and air services; and it thus increases the sale of petroleum products. Moreover, motorists taking their cars abroad almost certainly use considerably more gasoline than they would if they spent their holidays touring at home: for the natural desire when visiting foreign parts is to try to see

as much of the country as possible in the time available. Tourism also creates a taste for movement and further travel which, though not an unmixed blessing, is likely to increase the demand for oil products. Incidentally, it is one of the factors which have stimulated oil companies to provide more or less uniform grades of branded products throughout the European market and to promote good service to the motorist; this convenience, in turn, helps to encourage more motorists to travel abroad.

The influx of foreign tourists into countries like Italy and Switzerland during the summer months helps to bring about marked seasonal fluctuations in the demand for gasoline in some regions and gives rise to high demand over short periods in some localities. To this extent it creates problems for the distributor, just as the peak of the tourist season does for transport concerns, hoteliers and others. Consumption by foreign tourists does not, however, account for a large proportion of any country's total demand for motor fuels: in Italy, for example, it is about 5 per cent.

Will the tourist trade, with its many tangible and intangible benefits, continue to grow as it has in recent years? Assuming political stability and further economic progress on both sides of the Atlantic, continued growth may be taken for granted. And it is noteworthy that the European Travel Commission is optimistic enough to envisage a rise in U.S. visitors to Europe from half a million last year to one and a half million in the early 1960s. If this forecast is at all realistic, it implies the need for a big extension of transport and hotel facilities in the European countries mainly concerned. The needed investment could be minimized and the level of charges reduced, if something could be done to extend the holiday season over

Super G's More Popular

TWA'S CLAIM

Record breaking travel on both its domestic and international division, was experienced by TWA over the weekend August 30th—September 2nd, according to Jules C. Gindraux, TWA's District Sales Chief in India.

An all-time single day record was established on August 29th when TWA planes flew 1,441,100 domestic passenger miles, showing an increase of 3.5% over the previous daily record established on June 27th of the same year.

A daily international record of 489,999 passenger miles was marked on September 1st showing a 23% increase over the previous figure of July 28th, 1956.

The record breaking weekend figure of 13,797,000 passenger miles for the last weekend in August, flown internationally by TWA exceeded the all-time high of June 27th weekend by 6%.

Mr. J. W. Letzkus, TWA's Regional Vice-President for the Middle & Far East, attributed much of this record breaking travel to the increasing popularity of the Super-G Constellations now operating on TWA's Eastern routes.

more months of the year. At present Europe receives half its visitors in June, July and August and another fifth in May and September. If some of the load could be shifted from the peak months, more traffic could be handled with the existing facilities. But this is probably a vain hope; until man has learned to control the weather, it will be difficult to woo the tourist except in the summer months.

MOTORING IN THE SOVIET UNION

What The Tourist Will Miss Seeing

BY
Maurice Latey

This is the time of year when the motorists' fancy turns to international driving permits, green insurance cards, and all the apparatus of international travel. Thousands in Britain have booked on the air and sea ferries to cross the Channel to the Continent. With petrol rationing over, people in Britain are looking forward to seeing a good many foreign cars with the Union Jack and "Visitor to Britain" sticker on their windscreens.

Some adventurous souls will be sighing for fresh roads to conquer; and this year they may be able to find them in the uncharted territory of the Soviet Union.

Until this year only one foreign private motorist, as far as I know, has managed, during the past 20 years, to drive his motor-car to Moscow—an American dentist in a British Land-Rover who "gate-crashed" the road from Leningrad to Moscow in 1955. However, at the end of May the British Automobile Association reached an agreement with the Soviet authorities to allow private motoring on certain routes. Since then the Automobile Association has been receiving inquiries at the rate of about 100 a day. Whether these adventurers have been satisfied by the answers is a different matter.

It will not be simply a matter of just taking a map and the necessary papers and setting out to explore. For the motorist will be allowed to take only one of two routes, and he will have to keep a seat free for an Intourist guide and interpreter.

The two tours offered by Intourist are Brest-Litovak to Moscow (13 days) and Brest-Litovak to Yalta (27 days). These tours particularly the longer one—cover some very beautiful country, but they exclude some

of the places which the motorist would most like to visit, such as Leningrad and Kiev.

TIGHT SCHEDULE

Besides, the motorist is to be kept to a very tight schedule, in which his timetable of activities is laid down in great detail. There are such instructions as "leave for Smolensk 08:00, arrive 15:00 hours". Visits to museums, theatres, and collective farms are prescribed, and the first free time is allowed on the 22nd day, on which the motorist will "leave Kursk for Moscow 08:00, arrive 15:00 hours. Dinner. Free time".

At his elbow will always be his Intourist guide, keeping him to his schedule and to the straight and narrow path; it is not yet clear whether the motorist will also have to pay for his extra passenger.

Doubtless, these restrictions are well meant. The English motorist, accustomed to excellent secondary roads and a petrol pump every mile or two, might well find himself in difficulties if he strayed into the wider and more primitive open spaces of Russia. However, being an adventurous soul, he perhaps would not mind the difficulties, and in any case he could, as is apparently the Russian practice, take a reserve stock of petrol. Besides, there are certainly other first-class roads such as those to Leningrad and Kiev and the Georgian military highway from which the motorist is excluded.

The restrictions, then, are only partially for the benefit of the tourist. Like other conducted tours, these are designed to keep the foreigner under the eye of the authorities, to control his contacts with the Soviet people, and, of course, to keep him out of military areas.

However, a good many motorists, will doubtless avail themselves of these restricted facilities. Others equally adventurous will prefer to seek their excitement on lands where they can go where they like and do as they please.



Mr. A. L. Blackwood, Chief Chemist of Firestone and Leader of the Indian Delegation to the 7th meeting of 150/TC 45 Rubber held under the auspices of International Organization for standardization in Zurich early this month. Mr. Blackwood has been with this world famous organization for over 30 years.

West German Record

In March Western Germany's production and exports of AUTOMOBILES at 103,700 and 48,300 units reached a new record high. The so far highest monthly results (104,400 and 47,800 units) achieved in October 1956, the last month before the outbreak of the Suez Crisis, were thus surpassed for the first time. In the first quarter of 1957 the production of automobiles rose by 29,100 units (-10.9 p.c.) to 297,300 units as against 1956. The additional production was for the most part taken up by foreign countries which increased their imports of automobiles from Western Germany during the same period by 20,200 units or 16.9 p.c. to 139,800 units. In the domestic business a further rise in sales was only recorded with regard to passenger cars.

The total Western German production of MOTORCYCLES, MOTOR SCOOTERS and MOPEDS which in December 1956 at 32,800 units had reached a low in January 1957 increased again to 45,000 units and in February to 47,500 units. In March the production rose to 70,900 units, being however, still 24.8 p.c. lower than in the same month of 1956. In the first quarter of 1957 there was another decrease in the motorcycle production as compared with the production declined by 31.6 p.c. to 15,280 units; motor scooter production declined by 31.6 p.c. to 24,780 units and moped production by 32.2 p.c. to 123,400 units.

NEW AUTOMOBILE SHOP OPENED IN THE CITY

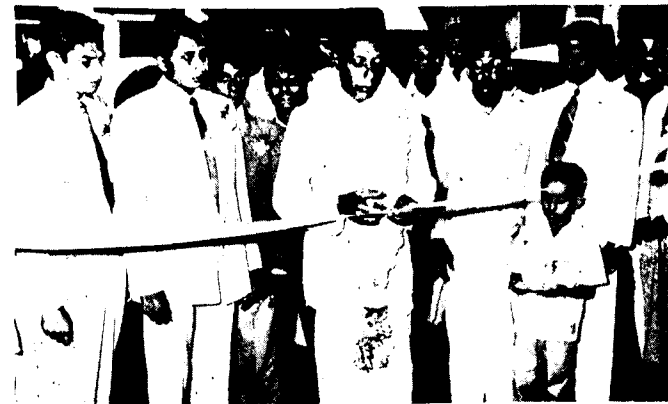


Photo shows Mr. K.T.M.S. Hamid, opening the Majestic Motor Parts, a new automobile shop in General Patters Road by cutting the ribbon in front of the show.



Photo shows Mr. Hamid along with the partners and staff of Majestic Motor Parts.

Majestic Motor Parts

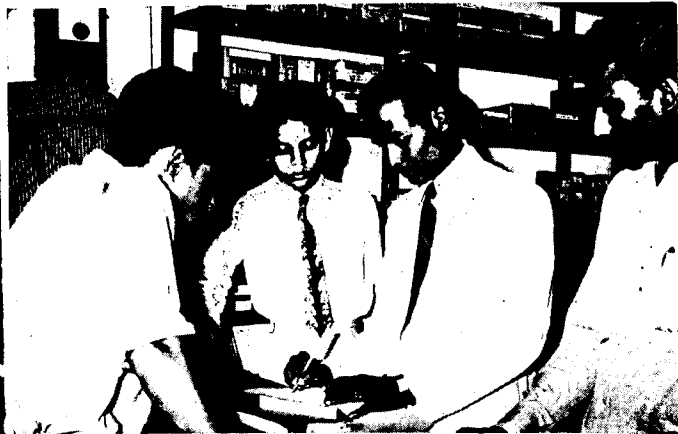
A new automobile spare parts business was opened at 15, General Patters Road on 21st September when the elite of the automobile spare parts Trade was present. In connection with the opening function, a reception was held in the evening which was very well attended by members of the Trade besides the Deputy Speaker of Madras, Mr. Alla Pichai. Mr. K. T. M. S. Hamid opened the business by cutting a tape across the front.

Named Majestic Motor Parts, a name which so aptly suits the stock position in the interior, the show-room on the sales depot is very nicely displayed and contains all spare parts and accessories for all British cars.

The guests were received by Mr. M. Syed Sadakatulla and others and entertained to tea and refreshments. The arrangements for storing spare parts which is almost from the floor to ceiling was very well appreciated by those present on the occasion.



Another photo taken on the occasion of the opening, shows Mr. Hamid and Mr. Sahul Hameed while those standing are Messrs. S. H. Ameer, K.T.M.A. Hussain, K.T.M.S. Ahmed, and S. M. Hamid.



Mr. Rathnasingam of Majestic Motor Parts making the first bargain after the opening function.

ALL ABOUT NEW PRODUCTS

Automobile Air Conditioners

A. R. A. Manufacturing Co. manufactures five different models of vehicle air conditioners. The President model fits compactly in the rear of the trunk. The Direct-Aire unit is under the instrument panel, while the Station Wagon unit is designed for inconspicuous installation on the inside top contour where it doesn't interfere with passengers or baggage. The Ambulance unit has two evaporator cases, producing controlled air conditioning separately both in front and the rear of the ambulance. A.R.A. also manufactures the custom built Ford Thunderbird unit. In addition, they now build and install custom installations for mobile scientific and petroleum exploration equipment used in many arid, hot parts of the world.

A.R.A. units are sold for factory and field installation by garages, specialised service shops, automobile supply stores, automotive jobbers and new car dealers. Exports are by F. R. Schwanke Co., Inc., 100 South Jefferson Street, Chicago 6, Illinois.

✱

New Type Adhesive

Stick-N-Seal, a brushable, rubber-based liquid, which is said to have outstanding initial tackiness and adhesion, has just been introduced by Permatex Company, Inc. The quick setting new adhesive is designed for use where gaskets or other material to be assembled must be held in place by a cement until the mechanic can place and tighten screws.

Stick-N-Seal is not affected by gasoline and lubricants, therefore, it can be used as a permanent seal to seal out gasoline and

oils. It is also resistant to water, glycol and kerosene. Stick-N-Seal will take pressures up to 500 pounds per square inch and withstands temperatures from -40°F. to 200°F.

The adhesive is available in 2-ounces, ¼-pint, 1-pint, gallon and five-gallon containers. The two-ounce, ¼-pint and 1-pint containers come with applicators. Exports are handled by John Prior, Inc., 44 Whitehall Street, New York 4, New York.

✱

Retaining Rings

"Spirolox" retaining Rings, known in the U.S. for over 10 years for their "easy-in, easy-out" characteristics, are now being made available to manufacturers in all parts of the world for original equipment application, according to Harry Liss, Foreign Sales Manager of Ramsey Corporation, 3693 Forest Park Boulevard, St. Louis 8, Missouri.

"Spirolox" positions and locks moving parts—pinions, bushings, bearings, and the like—on shafts and in housings, eliminating nuts, caps, machined parts, pins, keys and such locking and positioning means. This new retaining ring is made by the edgewise coiling of flat spring steel strip. Each ring is composed of two complete single turns of the strip. Elimination of the gap does away with the dynamic unbalance encountered in conventional horseshoe-shaped retainers.

Patented "Spirolox" rings are offered in standard catalog sizes, and are also available in special sizes designed for specific applications. The ring was developed from the patented Ramco 10-Up continuous "Spiro-Seal" piston ring segment. Free copies of the latest "Spirolox" Engineering Bulletin are available by writing to the Ramsey Corporation.

Amco makes another stride

We are glad to announce that Indian Standards Institution has granted a license to Messrs. Amco Batteries Private Ltd., a member of the Amalgamations Group at Bangalore for the use of the standard certification mark of the I.S.I. on led acid storage batteries for motor vehicles, conforming to I.S. 395; 1952.

This recognition of the development that is taking place in the production and management of Amco Batteries marks an important stage in their growth. Amco Batteries is managed by Mr. K. G. Parameswaran who is the Managing Director of the firm and whose name is so wellknown in the battery and automobile field.

✱

More Brake Profits Through Inspection

Whenever a customer brings his car into the shop for a brake relining—are you getting that extra business? By that we mean are the brakes just relined as per request or does the service manager ask the customer if the shop can overhaul, rebuild or replace wheel cylinders. Brake linings usually last at least 30,000 miles before relining is necessary and during that amount of miles the wheel cylinders are constantly in use and also suffer worn rubber cups, pistons, etc.

Wheel cylinders need to be inspected each time the lining needs service. Perhaps all they need is a honing or replacement of rubber cups, but you can be sure of one thing—they do need attention. When the worksheet states to inspect wheel cylinders, that does not mean an appraisal by appearance. It means a close examination. As shown in the photograph, note mechanic slipping off the rubber boots to see if the cylinder is leaking or has leaked. After boot removal, the piston will be examined along with the push rod ends that actuate the shoes, then the cylinder bore will be carefully inspected—don't leave anything to chance. Remember—additional service is where you find it. It doesn't find you.



One of 20 Volvo H-20 buses ordered by the Stockholm municipal transport system.

ELECTRONIC DOOR CONTROL FOR STOCKHOLM BUSES

An unusual feature of the Swedish Volvo H-20 bus (of which 20 are on order for the Stockholm municipal transport undertaking to supplement their 181 Scania-Vabis Capitol buses) is the employment of photo-electric cells and relays for automatic operation of the double exit doors in the middle of the bus.

After halting the vehicle at a recognized stop, the driver opens the double front doors which are situated ahead of the front axle. The closing of the switch for this operation simultaneously energizes the electronic switchgear for the exit doors and, when the light beam is interrupted by a passenger's legs, the doors open, remaining open until the beam is again restored. Closure of the front doors switches off the circuit.

The H-20 will be the first bus used by Stockholm to be fitted with automatic chassis lubrication. The specification also includes power-assisted steering and a fully automatic hydraulic transmission built by Volvo to the designs of Svenska Rotormaskiner AB.

'SHARP'S STRATOCRUISER'

This name appears on the side of a coach operated by Sharp's Motor Services (Manchester) Ltd., of Longsight, Manchester. It is a 1947 vertical-engined Leyland rebodied by Hulton Products (Lancs) Ltd., of Chequerbent, and seating 34 passengers.



QUALITY CONTROL OF AUTO ENGINES

Detroit, Michigan—A new electronic brainchild of General Motors Research Staff expedites quality control of auto engine assembly lines by detecting and correcting unbalance to lower limits than ever before.

Known as the General Motors Research Pulse Synchronized Unbalance Indicator (or PSUI), the new device literally takes the engine's "pulse" at any running speed. It permits the measurement and correction of engine unbalance to a greater accuracy than heretofore possible.

Already in limited use on GM assembly lines, PSUI is scheduled for expanded service, giving GM the finest balance limits in the industry.

Thomas C. Van Degrift, Head of GM Research Staff's Special Problems Department, said the electronic balancer:

1. Provides improved quality control over engine production.
2. Balances on engine faster than any former type of GMR balancer.
3. Simplifies the entire engine unbalance detection routine.
4. Saves floor space because of its greatly reduced size. It can be installed at the end of a production line where each engine is mounted on a simple test stand for final run-in. It is less expensive than earlier types of balancers and it is portable.

The new PSUI unit is mounted in a control cabinet and is capable of detecting both amount and location of any engine unbalance, both at the flywheel and the fanbelt pulley at the front end of the crankshaft.

When an engine reaches the end of the assembly line, it is put on a stand for its final 'hot' test. Seismic magnetic pickups at each end of the engine detect un-

balance. Timing or synchronized pulses from the engine ignition are employed to determine the location of the unbalance.

When the engine gets its final run-in adjustments at various throttle settings, the operator of the new PSUI unit simply checks two pairs of dials on an instrument panel.

Each set of dials informs him simultaneously both the amount and location or angle of unbalance at one or both ends of the engine.

Both the flywheel at the rear and the fanbelt pulley at the front of the engine have evenly spaced holes near their outer rims. Thus, any unbalance is cancelled out simply by riveting small weights in the holes opposite the 'heavy' side of the flywheel or fanbelt pulley.

Although each rotating part of a GM auto engine (crankshaft, flywheel, pulley, fan, etc.) is balanced to fine tolerance before an engine is assembled, the complete engine must receive a 'totalizing' or overall balance to cancel out any 'stacking' of unbalance by its individual rotating parts.

Mr. Van Degrift pointed out that the improved quality of this new balancing technique is due in part to the elimination of other rotating equipment that was required on earlier balancing machines.

He said the same technique of electronic balancing appears feasible for other specialized balancing problems of individual engine parts.

Exhaust Fumes of Diesel Engines do not produce Cancer

With the growing density of road traffic the problem of the contamination of the air by the exhaust fumes of internal combustion engines has assumed an ever increasing importance. The development of obnoxious black smoke by the exhausts of diesel-

powered trucks and lorries resulting in a serious molestation of the public has imperiously called for prompt and efficient remedial action. This was all the more necessary because of rumours circulating far and wide among the public to the effect that the exhaust fumes of diesel engines contained substances apt to produce cancer. Among these were certain hydro-carbons whose presence in the exhaust, fumes of diesel engines was suspected and proved.

The first results of the ample tests undertaken in Germany in this field are now available. These tests conducted under the auspices of the German Ministry of Transport were to establish whether there existed a relationship between the density of diesel engine exhaust smoke and the content in 3,4-benzpyrene. Automobile producers have supplied a number of diesel truck engines of different makes and models for these investigations. The test programme covered all the conditions ordinarily occurring in operational practice. Conscientious analysis of the findings revealed that for all engines under test and for all operating conditions the content of 3,4-benzpyrene was below the identifiable limit, or, in other words, 500,000 c.c. of exhaust gas contained less than one millionth gram. Therefore, no relationship between the density of smoke and the benzpyrene content could be established.

This result is merely the first phase in the study of an interesting field. Further investigations to be undertaken with the aid of more delicate methods of analysis will cover practically all dangerous substances. It is expected that they will furnish valuable additional information which will be of great interest to the automobile industry, the public health authorities and the general public.

MOTORINDIA NEWS SECTION

(BY OUR SPECIAL CORRESPONDENTS)

A pre-view of Motor Cars at Leipzig Autumn Fair

Big developments in the motor-industry of the German Democratic Republic will ensure that interest in the display of cars organised by the principal makers in the German Democratic Republic at the Leipzig Autumn Fair will be as great, if not greater, than ever.

The "Wartburg", produced by VEB Automobilwerk AWE of Eisenach, has already established itself in the saloon, convertible and estate car versions which have been in production for some time. The new sports-coupe marketed as the "Bellevue" on the same chassis and with a modified engine has been an instant success, its graceful, flowing lines being universally admired. The normal 3-cylinder 900 c.c. "Wartburg" engine of 37 b.h.p. is fitted with two carburetors on the "Bellevue" version, and output is boosted to 50 b.h.p. at 4,200 r.p.m. Top speed of the coupe is in the region of 90 miles per hour. A "hard-top" which is quickly removable is available if required.

A sports car based on their "P 70 Zwickau" model has also been developed by VEB Automobilwerk AWZ of Zwickau. This like the saloon, is distinguished by having a moulded-plastic body, and it retains all the pleasant driving characteristics of the earlier model. The two-stroke two-cylinder engine is of 700 c.c. capacity, and develops a maximum output of 22 brake-horsepower, giving a top speed of around 55-miles per hour to this very attractive-looking car.

The Leipzig Spring Fair is scheduled for March 2nd, 1958.

You May Win a Car!

IF YOU VISIT THE TURIN SHOW

The 39th International Motor Show will be held in Turin from Wednesday 30th October to Sunday 10th November 1957. The majority of motor vehicle manufacturing countries will attend this Exhibition and Italy will naturally be present in total force, with all her motor and allied industries, great and small.

One of the main features of the Turin Motor Show will undoubtedly be the exceptional number of handsome "custom-built" luxury models, which yearly represent one of the principal attractions. Each paid admission ticket entitles the holder to participate in the daily draw of a car. The Italian State Railways grant visitors a 30% reduction on fares from any station in the country. In the entrance hall of the Exhibition, there will be a special Information Office, with interpreters for the principal languages.

New Refinery for Bihar

The INDIAN Central Government has announced that an inland refinery for eastern India, of 1½ million tons annual capacity, will be built at Barauni, in the State of Bihar, to treat oil from the producing areas in Assam (in which the Central Government has a one-third interest), whose potential output of 2½ million tons a year is much beyond the market needs of Assam State. However, the Government of Assam too has announced that a 1½ million ton refinery will be built at Gauhati in the state, about 300 miles south-west from the producing fields. It is not yet known whether the Barauni refinery

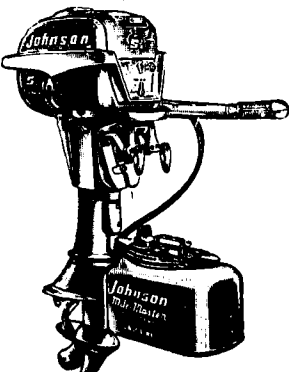
will be a wholly government project or whether the Assam Oil Company (Burmah Oil Company) will participate. As regards the Gauhati project, it is not at all clear what financial and technical arrangements the Assam Government would be able to make.

The Government of India have appointed a tripartite expert committee to finalise the draft of the Motor Transport Labour Legislation.

This was stated in Lok Sabha today by the Union Deputy Minister for Labour, Shri M. Abid Ali, in reply to a question by Shri Punnoose and Shri Vasudevan Nair.

The Deputy Minister said the committee was appointed to consider the draft proposals for legislation and the comments received thereon and to make its recommendations to Government. The committee was expected to submit its report about October.

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16 TYPES OF PASSENGER CARS & LORRIES

Gorky produces half of Russian Cars

By D. Sasorov

The Gorky Motorcar Works holds a special place in the Soviet motorcar industry. In the 25 years of its existence the plant has produced more than half of all the Soviet-made motorcars. Its cars can be found in all parts of the Soviet Union. The Gorky Works exports its cars to China, Burma, Greece, the Lebanon, Norway, Austria, Yugoslavia, Bulgaria, Poland and a number of other countries. In manufacturing cars for these countries, as a rule, the local conditions under which they would have to operate, were taken into account.

Now the plant is producing 16 types of passenger cars and lorries. The type of cars it puts out, like the other plants in the Soviet Union, is determined by the needs of the national economy.

Gorky lorries are medium sized (carrying a pay load of up to 2.5 tons), and noted for their durability and good road performance. The most widespread among them is the GAZ-51, which is powered by a 6-cylinder 70 h.p. engine. It consumes 20 litres of gasoline per 100 kilometres. On the basis of this car the motorcar industry puts out buses, auto-cranes, food lorries, fire-engines, first-aid ambulances, etc.

Last year a modernised model of this machine, the GAZ-51-A, was produced. All the three side-boards of this car can be opened, and it has a central brake and heater for the cabin. An experimental model of the GAZ-52 lorry, which is to replace the GAZ-51, has already been produced. It is powered with a 6-cylinder engine with pre-chamber ignition. It consumes about 12-15 per cent less fuel than the old models. It also has a synchronized gear-box, which makes for easier driving. A cam differential and strengthened springs considerably enhance its road ability.

The GAZ-53 is also distinguished for its road performance, hav-

ing a four-wheel drive. It can be used with a semitrailer, which makes the over-all length almost 9 metres, and its load capacity 4 tons. Recently a one and a half ton lorry, the GAZ-56, has been put out at the plant. It is a more economical and dependable machine than its forerunners.

In recent years the Gorky Works has also produced several models of small-tonnage lorries. The GAZ-69 enjoys great popularity in areas with poor roads. Powered with a 4-cylinder, 55 h.p. engine, the car develops a speed of 90 km.p.h. and can pull a trailer with a payload of 0.5 ton. At the present time a more powerful machine, the GAX-19, with better road efficiency, has been built on its basis. This year the road tests of the small car GAZ-47, which can traverse the worst roads have been launched. It easily takes steep inclines, and crosses marshes and quagmires. It has light caterpillar tracks instead of wheels, with a hermitically sealed body. It easily swims across rivers and lakes. The caterpillars ensure the car good traction on water.

Among its light cars the 6-passenger ZIM-112 is very popular. Its 90 h.p. engine develops a speed of up to 120 km.p.h. For many years it has also been putting out the comfortable 5-passenger Pobeda (Victory) car with a 50 h.p. engine. It consumes little fuel and easily develops a speed of over 100 km. Now the Pobeda is due to be replaced by the comfortable Volga car, whose 70 h.p. engine makes possible a speed of 130 km.p.h. The plant has only launched on the mass production of this model, but the plant's designers have already produced a medium class machine, the ZIM-113. Many of the parts of the new car are identical with those of the Volga. A new gasoturbine 140 h.p. engine is being designed for this ZIM car. The engine will use kero-

Oil in South India Exploration Proposed

There was a large alluvial tract on the coasts of Southern India where marine sediments occurred, said Shri K. D. Malaviya, Union Minister for Mines and Oil, in reply to a question by Shri M. Valiulla in the Rajya Sabha.

Some of them might be suitable for formation of oil and the coastal regions of Andhra, Madras and Kerala would have to be systematically surveyed, further stated the Minister and added:

"Exploration work in these areas is proposed to be taken up towards the end of the Second Five Year Plan. Where the exploration will commence first will be determined after detailed proposals are formulated."

Oil Refinery for Pakistan

The PAKISTAN Government has asked Burmah Oil, Shell, Caltex and Stanvac to submit joint proposals for setting up an oil refinery in the country. The four companies are studying the project and will be putting forward proposals. Neither location nor capacity have yet been determined. The only refinery in the country is a small one at Rawalpindi in the Northern Punjab.

sene, consuming 18-19 litres per 100 km.

The Gorky Motorcar Works has designed a completely new type of car with a turbo-jet engine. This is a frameless machine whose wheels are not connected to the engine. The dynamic emission of gas from the outlet forces the car forward. Tests have shown that a car with a turbojet engine (provided there are appropriate road conditions) can develop a speed of 500 km.p.h.

SOARING WORLD DEMAND FOR JET FUELS

It is barely more than ten years since the air craft turbine—after its memorable debut in Britain's skies towards the close of the second World War—began to enter military aviation on a worldwide scale. It is only five years since its first introduction in commercial air transport by the United Kingdom's air corporations. And yet to-day turbine power entirely dominates the military aircraft scene, while in the sphere of civilian air transport it is well on the way to bringing about no less revolutionary changes. Though the present world fleet of some 4,500 commercial airliners is still predominantly piston-engined, the 200 turbo-props now in regular operation and the more than 800 jets and turbo-props ordered in the last two years by airline companies all over the world, bear witness that the swing towards turbine power in commercial air transport is now rapidly gathering momentum. Its effects on future demand for aircraft fuels in general, and on turbine fuels in particular, are bound to be far reaching.

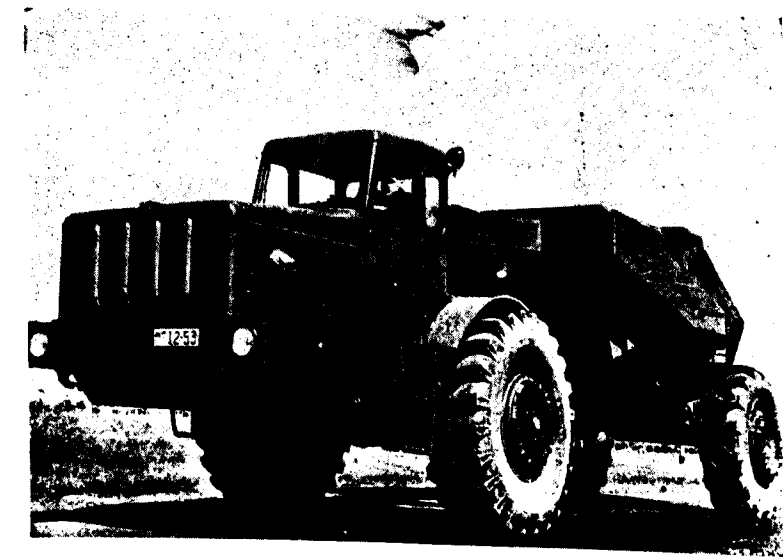
In a recent article in the Caltex publication "Oil Progress", Mr. H. A. Murray of the company's Aviation Sales Department ventured to predict that world consumption of aircraft turbine fuels, which last year already surpassed that of aviation gasoline by a small margin, may be twice that of avgas by 1963 and nearly three times as high in 1968. Global demand for turbine fuels has risen seven-fold between 1951 and 1956, viz., from 15 to 105 million barrels a year, while consumption of aviation gasoline went up by 40 per cent, viz., from 73 to 102 million barrels. But whereas the increase in avgas demand was accounted for by air force and commercial requirements in about equal proportions, the steep rise in turbine fuel consumption was almost wholly attributable to mounting military needs.

From now on, however, the quickening advance of turbine power in commercial air transport will make itself sharply felt in the future growth, as well as in the changing overall pattern, of aircraft fuel demand.

Mr. Murray's figures, though differing in some points of detail from previous estimates of other forecasters, none the less fully confirm the general anticipation of the fast increasing impact of the gas turbine's swift progress in the commercial sector upon the size and nature of aviation's future fuel needs as a whole. At the same time they serve as a warning against underrating the still highly important role of piston-engined airliners, which are yet a long way from going out of business in civil air transport. The large investments made in the past, and continuing

to be made, in this well-proven and, for many purposes, admirably suited type of aircraft, would alone preclude its retirement from commercial service for many years to come, quite apart from the fact that not nearly sufficient numbers of turbo-props or jet airliners could be built fast enough for replacing their piston-engined predecessors. World demand for aviation gasoline is therefore likely to keep increasing at a modest rate for some time between now and 1960, before levelling off at around 110 million barrels p.a. and, after a few more years, beginning to decline gradually. So for the present, the oil industry must be prepared to meet still rising requirements for aviation gasoline, and simultaneously make long-term provisions to meet the rapid and sustained growth of demand for turbine fuel.

NEW TYPE 2-WHEEL PRIME MOVER



A new two-wheeled prime mover has been tested at the Minsk Automobile Plant in Russia. Designed to work with scrapers or special trailers it develops speed of 40 kms an hour. Together with the trailer and freight this unusual motovehicle weighs 35 tons, and has a carrying capacity of over 10 cubic metres. Photo shows the new MAZ-529 with a scraper.

MODELS AND THEIR Prices

CARS 92671

Plymouth Car, (Sundaram Motors Private Ltd.) Ex. Premier Automobiles Factory, Kurla	20,270 00
Plymouth Suburban	22,646 00
Hindustan Landmaster 1957 (Southern Automotive Corporation Private Ltd.) ex plant Uttarpara	11,161 62
Dodge kingsway sedan	20,371 00
Dodge Suburban (Addison & Co. (P) Ltd.) ex Bombay	22,899 00
Baby Hindustan 1956 (Addison & Co. (P) Ltd.) ex Madras including S.T. & Import charges	9,550 00
Standard Super Ten Saloon (Union Co. (Motors) Private Ltd.) on the road	10,022 12
Standard Estate Car (Union Co. (Motors) Private Ltd.) on the road	14,889 12
Studebaker 'Parkview' station Wagon 1956 model [Reliance Motors Ltd.] ex plant Calcutta	20,280 00
Studebaker 1956 Commander (V.S.T. Motors Private Ltd.) Including S.T. & Delivery Charges	22,239 86
Studebaker 1956 President Classic [V.S.T. Motors Private Ltd.]	24,499 78
The Fiat 1100 The Elegant [Sundaram Motors Private Ltd.] Ex Factory	9,755 00
Willys C.J. 3B Universal Jeep [Sundaram Motors Private Ltd.] ex plant Bombay	12,160 00
Willys Model 4 x 4-75 Station Wagon [Sundaram Motors Private Ltd.] ex plant Bombay	18,150 00
Jeep 1 ton truck	13,046 00

MOTOR CYCLES

Royal Enfield [The Madras Motors (Private) Ltd.]—	
"150 Ensign"	1,890 00
"350 Bullet" with spring frame	3,430 00
499 c.c. Model 'j2'	3,500 00
"500 Bullet" with spring frame	3,950 00
"500 Twin" with spring frame and with Magdyno or coil ignition	4,450 00
"700 Super Meteor" with spring frame and with Magdyno or coil ignition	4,650 00

Matchless 350 c.c. with rear suspension [Addison & Co. (P) Ltd.] ex Madras	3,675 00
Triumph Terrier [Addison & Co. (P) Ltd.] ex Madras	2,175 00
Triumph Tiger Club [Addison & Co. (P) Ltd.] ex Madras	2,325 00
The New Bina Peugeot 48 c.c. [The Union Co. (Motors) Private Ltd.] on the road	970 19
B.S.A. Motor cycles. [The Union Co. (Motors) Private Ltd.]—	
125 c.c. Bantam on the road	1,880 25
150 c.c. Bantam Major on the road	2,212 00
250 c.c. Model C. 11. G. on the road	2,736 50
350 c.c. Model B. 31. on the road	3,978 60
650 c.c. Plunger type on the road	4,629 81
50 Swinging Arm on the road	4,892 50
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 00

SCOOTERS

Lambretta, manufactured by Automobile Products of India Ltd. Distributors, South India Automotive Corporation Private Ltd., Madras. (At Vishakapatnam—Western Automobiles Ltd.) Prices are ex-Factory, Bhandup, Bombay.	
48 c.c. Scooterette	827 00
150 c.c. 'D' Model Standard Scooter	1500 00
150 c.c. 'LD' Model Deluxe Scooter	1795 00

VANS

Standard Delivery Van. [Union Co. (Motors) Private Ltd.] on the road	10,628 56
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TRUCKS & COMMERCIAL CHASSIS

[George Oakes Ltd.]	
Leyland Comet "203" WB Passenger Diesel Chassis including S.T. & dely. charges.	36,000 00
Leyland ECPO 2/2R-176 WB full forward control Passenger Chassis S.T. & dely. charges	35,500 00
Leyland ECOS 2/1R-163 WB goods chassis including S.T. & dely. charges	34,700 00
Leyland ECOS 2/2R-118 full forward Tipper chassis including S.T. & dely. charges	34,500 00

[Rane (Madras) Ltd.] Studebaker 1956 Diesel Truck Chassis.	
2E 38B-155 W.B. Chassis with Diesel Engine ex plant Calcutta	21,317 00
2E 38B-155 W.B. E.H.D. Chassis ex plant Calcutta.	16,208 00
Willys Model 4-75 Wheel Drive one ton truck chassis 118" W.B.	
[Sundaram Motors Private Ltd.] ex plant Bombay	13,935 00
Jeep Trailer ex plant Poona or Madras	1,800 00
[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	26,340 00
LP 312/42 165" W.B. Full Forward Control Truck Bus Chassis ex Works Jamshedpur	27,295 00
LP 312/48 190" W.B. Full Forward Control Bus Chassis ex Works Jamshedpur	28,085 00
L 312/36 142" W.B. 5-Ton Truck Chassis ex Works Jamshedpur	25,995 00
LK 312/36 142" W.B. 5-Ton Truck Chassis ex Works Jamshedpur	29,475 00
Fargo (at Sundaram Motors Private Ltd) Dodge (at Addison & Co (Private) Ltd) prices ex-factory Premier Automobiles Ltd., Kurla, Bombay :	

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C3D6-116" WB	11,615 00
C4D6-126" WB	12,662 60
C3PW6-126" WB	17,974 00
C4G6-155" WB	16,391 00
C4G6-153" WB	16,062 00
C4G6-171" WB	17,008 00
C4H6-153" WB	17,710 00
C4H6-153" WB	17,979 60
C4H6-171" WB	18,805 00
C4H6-193" WB F/F	18,116 00
C4H6-193" WB F/F	18,385 00
C4H6-193" WB W/S	18,479 00
C4H6-193" WB W/S	18,748 00

PETROL TRUCK WITH CAB AND PICKUP

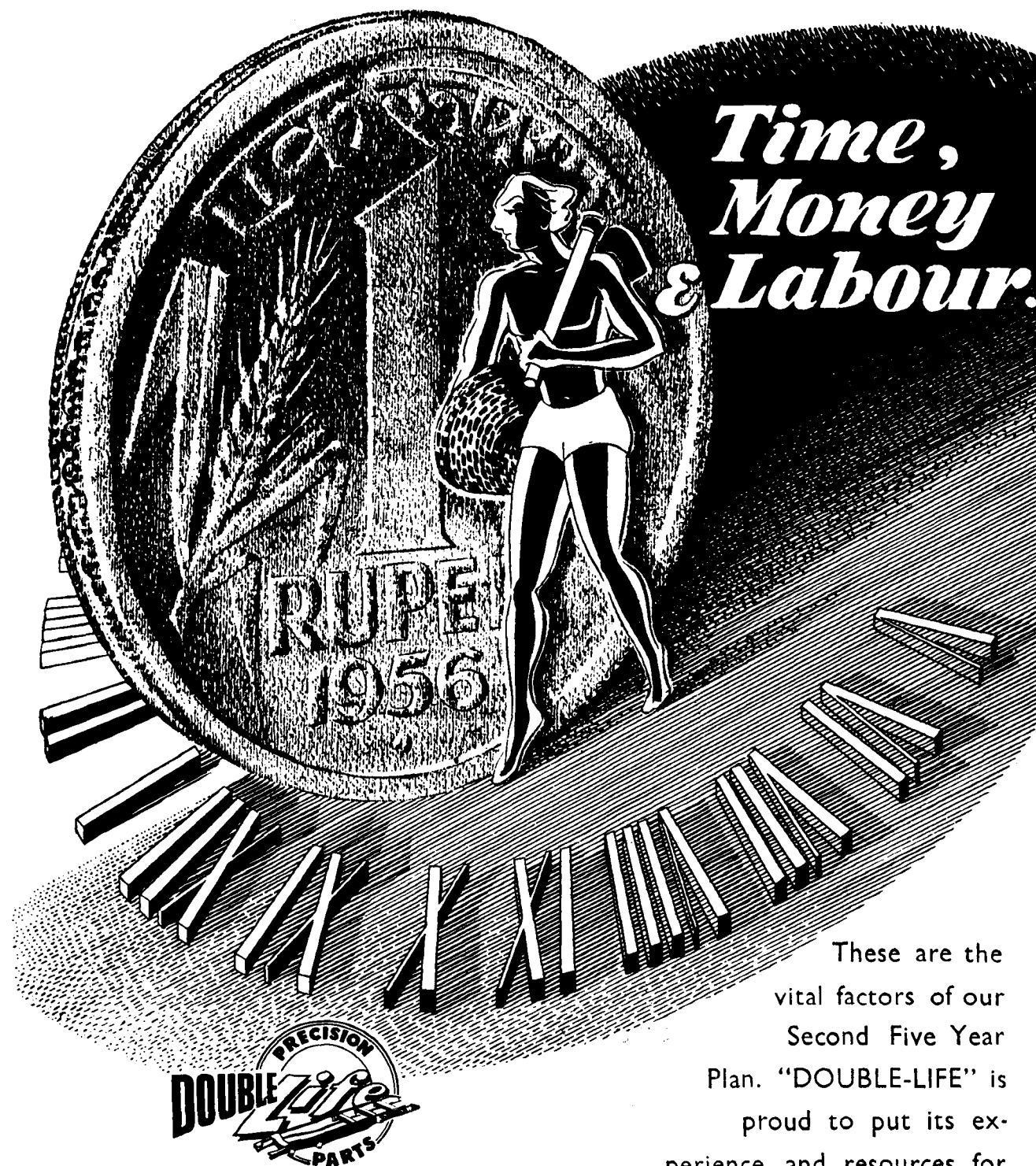
C3D6-116" WB	15,012 60
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DIESEL CONVERSION

C4H6-153" WB	22,668 00
C4H6-153" WB	22,937 00
C4H6-171" WB	22,903 00
C4H6-171" WB	23,172 00
C4H6-193" WB F/F	22,992 00
C4H6-193" WB F/F	23,261 00
C4H6-193" WB W/S	23,298 00
C4H6-193" WB W/S	23,567 00

DIESEL TRUCKS

105P6-165" WB	22,018 00
105P6-165" WB	22,287 00
105AP6-165" WB	22,820 00
105AP6-165" WB	23,089 00
87P6-190" WB	23,962 00
87P6-190" WB	23,617 00
87AP6-190" WB	24,410 00
87AP6-190" WB	24,752 00



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